Supplementals Figures

Title: Structural variation among assembled genomes facilitates development of rapid and low-cost NOR-linked markers and NOR-telomere junction mapping in Arabidopsis

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S. No.	Amplicons	Primer 1 (5'-3')	Primer 2 (5'-3')
1	c2_NM_0070	CAAGCATCATAGCATCTTGCTCACCAG	TGGATTTATATATATCTTAAATCCGTAAGTATTCTAAC
2	c2_NM_0072	GTGTCCCCTTCAATCCATTACAGTC	CTGATCCATATCCATTCTATATACCATGTCC
3	c2_NM_0081	GCCACAAACATTGCACTGGGC	TAGACTCCAAGTAGCTGTCTTTGTC
4	c2_NM_0082	CCCTTATAGCAACTACTGGAATTTTGCTG	CAGAACACTACACAATGCTAATACAGAAGG
5	c4_NM_0003	CATCTTGTAAACAACGATATCTCTTAAAGTTC	ATATACAATATAAATATATTTTTCTCAATTTCAAAAC
6	c4_NM_0006	GGCAAGTATGAATGAGAATAAACCATGACG	GAGGCAAGTTTCCTTATAACTGTAGAGAGC
7	c4_NM_0047	GTGTCAATTAATATTTTAACGAAAAGTTGCGATG	ATCGCAAATTTCCATTAAAATATTGATGGGG
8	c4_NM_0082.3	GGATTGGTTTTAACTTTTAAATGTGAACTAACG	GATCTTTGATGGAACAAAACCTACAAAGAC
9	c4_NM_0082.4	GTCCCATACTATTATATAGAGTACATTCATAAC	CTTTTAGGGTAACTTTCTCTGATGACTTGCC
10	Sha *NOR2-TEL2N* (C2F1 & C2R1)	CCTAAACCCTAAACCCTAAACCCAAGTCC	CTGGTGGAGGAATCCTGGTAGAGTC
11	Sha *NOR2-TEL2N* (C2F2 & C2R1)	CCGATTGAGAAAACAACTCTATGGAG	CTGGTGGAGGAATCCTGGTAGAGTC
12	Sha *NOR4-TEL4N*	CCCTAAACCCTAAACCCTAAACCCTAAA	GACATTTCAATGTATGTTGGTGCCAAGAG
13	Col-0 *NOR2-TEL2N*	CCCTAAACCCTAAACCCTAGCCTC	AGCGACAAAGGGCTGAATCTCAGTGG
14	Col-0 *NOR4-TEL4N*	CTAAACCCTAAACCCTAAACCCTAGTGTTCG	GACTTCCCCACGAAGGAGAAGCC
15	Sf-2 *NOR2-TEL2N*	CTAAACCCTAAACCCTAAACCCTAAACCATTCTC	GGTATTGTAAGTGGCAGAGTGGCCTTG

Figure S1: List of primers used in the study

Size ranges	Chromosome	Insertion		Deletion		Repeat expansion		Repeat contraction		Tandem expansion		Tandem contraction	
		Count	Total bp	Count	Total bp	Count	Total bp	Count	Total bp	Count	Total bp	Count	Total bp
20-50 bp	Chr1	722	21942	681	20383	103	3182	105	3389	0	0	0	0
	Chr2	491	14918	505	15494	56	1945	57	1864	0	0	1	32
	Chr3	562	17226	582	17807	53	1729	73	2512	0	0	0	0
	Chr4	483	14761	459	14023	52	1635	79	2584	0	0	0	0
	Chr5	629	18703	630	19139	87	2905	87	2759	0	0	1	20
50-500 bp	Chr1	353	55603	316	50369	146	27077	163	31154	0	0	0	0
	Chr2	232	35432	266	43289	90	18641	91	18743	0	0	0	0
	Chr3	253	40325	276	41319	102	21095	94	19123	0	0	0	0
	Chr4	229	37064	217	35567	117	21985	107	22888	0	0	1	451
	Chr5	294	50788	294	46993	148	30575	156	29088	0	0	0	0
500-10,000 bp	Chr1	150	366715	179	371385	91	210574	147	380604	30	113582	9	22470
	Chr2	138	327568	120	275501	65	155859	95	254253	14	46065	5	27166
	Chr3	138	294141	124	282121	73	173931	87	223040	27	107474	5	15281
	Chr4	118	260201	103	223900	76	177318	104	280663	29	106144	2	7202
	Chr5	156	349185	156	334183	92	218534	133	386680	34	166310	8	15997
10,000 – 50,000 bp	Chr1	4	49843	7	85096	3	45248	18	242451	6	85970	0	0
	Chr2	3	39763	8	112062	7	88854	13	170472	2	21631	1	10205
	Chr3	3	33486	7	94303	8	115301	13	176191	5	65620	0	0
	Chr4	6	71587	4	57418	2	26370	14	195403	5	72668	1	11018
	Chr5	8	106163	5	68075	3	43118	10	138958	6	65048	0	0

Figure S2: Summary of Chromosome-wise structural variants between Col-0 and Sha ecotypes

Figure S3: List of structural variants between Col-0 and Sha

Chromosome	Reference start	Reference stop	Type of structural variant_size
Chr1	20315352	20315352	Insertion_28bp
Chr1	20319814	20320109	Deletion_295bp
Chr1	20320389	20320413	Deletion_24bp
Chr1	20347311	20347311	Insertion_68bp
Chr1	20427671	20427671	Insertion_27bp
Chr1	20475429	20475429	Insertion_156bp
Chr1	20475917	20475917	Insertion_170bp
Chr1	20508837	20509421	Deletion_584bp
Chr1	20523263	20523263	Insertion_1840bp
Chr1	20531475	20531475	Insertion_8394bp
Chr1	20553999	20554041	Deletion_42bp
Chr1	20577860	20577860	Insertion_38bp
Chr1	20624863	20626082	Deletion_1219bp
Chr1	28132823	28132823	Insertion_44bp
Chr1	28151945	28151976	Deletion_31bp
Chr1	28268145	28268168	Deletion_23bp
Chr1	28276044	28276044	Insertion_27bp
Chr1	28355909	28355909	Insertion_24bp
Chr1	28374213	28374213	Insertion_260bp
Chr1	791466	791475	Insertion_40bp
Chr1	816714	816714	Insertion_38bp
Chr1	817338	817368	Deletion_30bp
Chr1	822678	822678	Insertion_91bp
Chr1	844617	845407	Deletion_790bp
Chr1	867193	867193	Insertion_38bp
Chr1	944431	944451	Deletion_20bp
Chr1	974686	974686	Insertion_26bp
Chr1	987397	987487	Deletion_90bp
Chr1	5965892	5966116	Deletion_224bp
Chr1	6038523	6038523	Insertion_41bp
Chr1	6088234	6088275	Deletion_41bp
Chr1	6128461	6128484	Deletion_23bp
Chr1	6139970	6140023	Deletion_53bp
Chr1	6140470	6141534	Deletion_1064bp
Chr1	6142086	6142117	Deletion_31bp
Chr1	3639043	3639080	Deletion_37bp
Chr1	3657036	3657036	Insertion_30bp
Chr1	3659075	3659075	Insertion_24bp
Chr1	3670306	3670306	Insertion_26bp
Chr1	3714482	3714482	Insertion_63bp
Chr1	6573315	6573315	Insertion_32bp
Chr1	6574192	6574211	Insertion_56bp
Chr1	6673872	6673872	Insertion_20bp
Chr1	6699321	6699321	Insertion_290bp
Chr1	6710598	6710837	Deletion_239bp

Chr1	6718843	6721678	Deletion_2835bp
Chr1	6722873	6723422	Deletion_549bp
Chr1	6735987	6735987	Insertion_220bp
Chr1	6738537	6738537	Insertion_21bp
Chr1	6221297	6221297	Insertion_426bp
Chr1	6262587	6263387	Deletion_800bp
Chr1	6330632	6330671	Deletion_39bp
Chr1	27144488	27144509	Deletion_21bp
Chr1	27147703	27147703	Insertion_20bp
Chr1	27160899	27160899	Insertion_104bp
Chr1	27171257	27171257	Insertion_35bp
Chr1	27178565	27178565	Insertion_26bp
Chr1	26245115	26245352	Deletion_237bp
Chr1	26323057	26323057	Insertion_34bp
Chr1	3423508	3423540	Deletion_32bp
Chr1	3452549	3452577	Deletion_28bp
Chr1	3473193	3473193	Insertion_33bp
Chr1	3474327	3474327	Insertion_25bp
Chr1	3497752	3498956	Deletion_1204bp
Chr1	3500214	3500214	Insertion_20bp
Chr1	3519829	3519849	Deletion_20bp
Chr1	3546915	3546973	Deletion_64bp
Chr1	3577748	3577789	Deletion_41bp
Chr1	3138197	3138281	Deletion_84bp
Chr1	3186018	3186052	Deletion_34bp
Chr1	3186590	3186590	Insertion_392bp
Chr1	3186746	3186746	Insertion_24bp
Chr1	3202877	3204091	Deletion_1214bp
Chr1	3224486	3224512	Deletion_26bp
Chr1	3252281	3252305	Deletion_24bp
Chr1	3263811	3264984	Deletion_1173bp
Chr1	99531	99531	Insertion_22bp
Chr1	128424	128424	Insertion_23bp
Chr1	206292	206292	Insertion_764bp
Chr1	213482	213482	Insertion_20bp
Chr1	230191	230221	Deletion_30bp
Chr1	29163740	29163740	Insertion_240bp
Chr1	29177901	29177901	Insertion_944bp
Chr1	29209284	29209307	Deletion_33bp
Chr1	29280595	29280595	Insertion_22bp
Chr1	29287307	29287340	Deletion_33bp
Chr1	29650454	29650454	Insertion_36bp
Chr1	29693648	29693684	Deletion_36bp
Chr1	29694415	29694415	Insertion_116bp
Chr1	29702504	29702504	Insertion_489bp
Chr1	29745086	29745134	Deletion_48bp
Chr1	29769734	29769734	Insertion_87bp
Chr1	29769773	29769773	Insertion_1604bp
Chr1	29772013	29772039	Deletion_26bp

Chr1	29774261	29775139	Deletion_878bp
Chr1	29779132	29779152	Deletion_20bp
Chr1	2531443	2534782	Deletion_3339bp
Chr1	2539194	2539231	Deletion_37bp
Chr1	2548497	2548497	Insertion_127bp
Chr1	2551740	2551760	Deletion_20bp
Chr1	2566118	2566154	Deletion_36bp
Chr1	2580047	2580047	Insertion_26bp
Chr1	2587353	2587395	Deletion_42bp
Chr1	2657424	2657921	Deletion_497bp
Chr1	2660268	2660268	Insertion_36bp
Chr1	4903554	4903581	Deletion_27bp
Chr1	28808029	28808050	Deletion_21bp
Chr1	28890713	28890744	Deletion_31bp
Chr1	28896533	28896533	Insertion_96bp
Chr1	28915110	28915110	Insertion_22bp
Chr1	28920287	28920297	Insertion_26bp
Chr1	28920619	28921011	Deletion_392bp
Chr1	28922807	28922807	Insertion_29bp
Chr1	28933056	28933079	Deletion_23bp
Chr1	28936257	28936257	Insertion_252bp
Chr1	3012345	3012345	Insertion_87bp
Chr1	3073047	3073094	Deletion_53bp
Chr1	3088763	3088786	Deletion_23bp
Chr1	1084953	1084953	Insertion_35bp
Chr1	1124412	1124412	Insertion_40bp
Chr1	1133653	1133685	Deletion_32bp
Chr1	28015636	28015723	Deletion_87bp
Chr1	28029411	28030263	Deletion_852bp
Chr1	28046656	28046695	Deletion_39bp
Chr1	28065639	28065704	Deletion_65bp
Chr1	29042277	29042316	Deletion_39bp
Chr1	29065740	29065740	Insertion_85bp
Chr1	29099460	29099460	Insertion_3786bp
Chr1	29135818	29135851	Deletion_33bp
Chr1	27293300	27293300	Insertion_286bp
Chr1	27293919	27293919	Insertion_40bp
Chr1	27299180	27299222	Deletion_42bp
Chr1	27301803	27301845	Deletion_42bp
Chr1	27308154	27308154	Insertion_20bp
Chr1	27308438	27308461	Deletion_23bp
Chr1	27343545	27343545	Insertion_31bp
Chr1	27353287	27353287	Insertion_437bp
Chr1	27355545	27355591	Deletion_46bp
Chr1	1340090	1340090	Insertion_4961bp
Chr1	1355769	1355769	Insertion_29bp
Chr1	1356044	1356044	Insertion_33bp
Chr1	1380011	1380011	Insertion_24bp
Chr1	1393447	1393447	Insertion_32bp

Chr1	1397326	1397385	Deletion_59bp
Chr1	697929	697929	Insertion_2084bp
Chr1	700294	700294	Insertion_29bp
Chr1	768166	768166	Insertion_886bp
Chr1	781616	781784	Deletion_168bp
Chr1	784829	785007	Deletion_178bp
Chr1	785879	785973	Deletion_94bp
Chr1	5471982	5472028	Deletion_46bp
Chr1	28444149	28444175	Deletion_26bp
Chr1	28444912	28444912	Insertion_26bp
Chr1	28481273	28481298	Deletion_25bp
Chr1	27860360	27860360	Insertion_28bp
Chr1	27878914	27878941	Deletion_27bp
Chr1	27880290	27880333	Deletion_43bp
Chr1	27916161	27916258	Deletion_97bp
Chr1	27952038	27952038	Insertion_37bp
Chr1	19090399	19090505	Deletion_106bp
Chr1	19108763	19109442	Deletion_679bp
Chr1	19111412	19111412	Insertion_25bp
Chr1	19181402	19181425	Deletion_23bp
Chr1	19188854	19188854	Insertion_66bp
Chr1	19189427	19189427	Insertion_24bp
Chr1	3892487	3892487	Insertion_34bp
Chr1	3897136	3897136	Insertion_21bp
Chr1	3899968	3899968	Insertion_49bp
Chr1	3925594	3925622	Deletion_28bp
Chr1	3932242	3932264	Deletion_22bp
Chr1	3932570	3932604	Deletion_34bp
Chr1	3933169	3933482	Deletion_313bp
Chr1	3935854	3936316	Deletion_462bp
Chr1	2874191	2874191	Insertion_32bp
Chr1	2899442	2899442	Insertion_30bp
Chr1	9890308	9890368	Deletion_60bp
Chr1	9911002	9911002	Insertion_4965bp
Chr1	20252106	20252139	Deletion_33bp
Chr1	17882880	17882943	Deletion_63bp
Chr1	17917535	17917540	Insertion_22bp
Chr1	17928360	17928399	Deletion_39bp
Chr1	17950215	17950215	Insertion_23bp
Chr1	17961532	17962212	Deletion_680bp
Chr1	17962375	17962375	Insertion_73bp
Chr1	2176761	2176781	Deletion_20bp
Chr1	2201263	2201289	Deletion_26bp
Chr1	5679257	5681872	Deletion_2615bp
Chr1	5699957	5701079	Deletion_1122bp
Chr1	5712055	5712076	Deletion_21bp
Chr1	5731815	5731815	Insertion_68bp
Chr1	5775229	5775290	Deletion_61bp
Chr1	1941366	1941366	Insertion_886bp

Chr1	1944126	1944126	Insertion_27bp
Chr1	1953149	1953170	Deletion_21bp
Chr1	1997209	1997254	Deletion_45bp
Chr1	10703557	10703557	Insertion_70bp
Chr1	10708377	10708377	Insertion_44bp
Chr1	10770139	10770139	Insertion_9566bp
Chr1	10777998	10777998	Insertion_3103bp
Chr1	10796066	10796090	Deletion_24bp
Chr1	10806721	10806721	Insertion_20bp
Chr1	26767258	26767258	Insertion_28bp
Chr1	26779629	26779692	Deletion_63bp
Chr1	4474557	4474557	Insertion_602bp
Chr1	4480444	4480465	Deletion_21bp
Chr1	4503941	4503978	Deletion_37bp
Chr1	4539830	4539863	Deletion_33bp
Chr1	4544559	4544566	Insertion_49bp
Chr1	4546304	4546358	Deletion_54bp
Chr1	1617631	1618122	Deletion_491bp
Chr1	1636125	1636125	Insertion_5938bp
Chr1	1644670	1644693	Deletion_23bp
Chr1	1679083	1679083	Insertion_23bp
Chr1	26335963	26335963	Insertion_33bp
Chr1	26336137	26336137	Insertion_34bp
Chr1	26366602	26371669	Deletion_5067bp
Chr1	26392787	26392838	Deletion_51bp
Chr1	26395101	26395129	Deletion_28bp
Chr1	26408687	26408709	Deletion_22bp
Chr1	10268674	10268704	Deletion_30bp
Chr1	10275966	10275966	Insertion_900bp
Chr1	10283346	10283372	Deletion_26bp
Chr1	10288567	10288567	Insertion_42bp
Chr1	10304234	10304234	Insertion_49bp
Chr1	10313217	10313253	Deletion_36bp
Chr1	10337201	10337201	Insertion_120bp
Chr1	27029642	27029642	Insertion_40bp
Chr1	27038806	27038835	Deletion_38bp
Chr1	27041787	27041823	Deletion_36bp
Chr1	27055830	27055830	Insertion_243bp
Chr1	27060584	27060584	Insertion_26bp
Chr1	27060914	27060914	Insertion_23bp
Chr1	270494	270540	Deletion_46bp
Chr1	309364	309364	Insertion_22bp
Chr1	313478	313478	Insertion_47bp
Chr1	349926	350014	Deletion_88bp
Chr1	21017072	21017716	Deletion_644bp
Chr1	21033378	21033400	Deletion_22bp
Chr1	21035032	21035064	Deletion_32bp
Chr1	21059961	21059991	Deletion_30bp
Chr1	11117867	11117867	Insertion_123bp

Chr1	11128967	11129008	Deletion_41bp
Chr1	11136068	11136068	Insertion_4961bp
Chr1	11188922	11188946	Deletion_24bp
Chr1	29529899	29529899	Insertion_33bp
Chr1	29531028	29531028	Insertion_51bp
Chr1	29531951	29531951	Insertion_106bp
Chr1	29537845	29537845	Insertion_50bp
Chr1	29588761	29588798	Deletion_37bp
Chr1	29596387	29596387	Insertion_338bp
Chr1	29602298	29602357	Deletion_59bp
Chr1	3981099	3981154	Deletion_55bp
Chr1	3982507	3982695	Deletion_188bp
Chr1	3328283	3328310	Deletion_27bp
Chr1	3328894	3333498	Deletion_4604bp
Chr1	3356647	3356647	Insertion_1725bp
Chr1	3360535	3361317	Deletion_782bp
Chr1	3377874	3377926	Deletion_52bp
Chr1	3380405	3380435	Deletion_30bp
Chr1	25159228	25159249	Deletion_21bp
Chr1	25180494	25180515	Deletion_21bp
Chr1	25181012	25181012	Insertion_27bp
Chr1	25182535	25182560	Deletion_25bp
Chr1	25193552	25193597	Deletion_45bp
Chr1	25197717	25197717	Insertion_26bp
Chr1	4644559	4644714	Deletion_155bp
Chr1	4660746	4660770	Deletion_24bp
Chr1	4673235	4673235	Insertion_6290bp
Chr1	4682373	4686136	Deletion_3763bp
Chr1	4691722	4691722	Insertion_20bp
Chr1	4692766	4692766	Insertion_29bp
Chr1	4709722	4709722	Insertion_31bp
Chr1	4721320	4721320	Insertion_41bp
Chr1	15478869	15479061	Deletion_192bp
Chr1	15481248	15481268	Deletion_20bp
Chr1	15487909	15488246	Deletion_337bp
Chr1	15491436	15491436	Insertion_25bp
Chr1	15492870	15492870	Insertion_30bp
Chr1	15512096	15512096	Insertion_529bp
Chr1	15513280	15513280	Insertion_639bp
Chr1	15518880	15518880	Insertion_43bp
Chr1	15521622	15521622	Insertion_29bp
Chr1	6395057	6395057	Insertion_80bp
Chr1	6413167	6413197	Deletion_30bp
Chr1	6431579	6431579	Insertion_740bp
Chr1	6453714	6453714	Insertion_31bp
Chr1	1884659	1884659	Insertion_32bp
Chr1	26470081	26470081	Insertion_20bp
Chr1	20838981	20838981	Insertion_53bp
Chr1	20839178	20839178	Insertion_2092bp

Chr1	20848981	20848981	Insertion_24bp
Chr1	20849923	20849923	Insertion_24bp
Chr1	20851955	20851955	Insertion_53bp
Chr1	20857525	20857525	Insertion_45bp
Chr1	20860324	20860324	Insertion_30bp
Chr1	20873735	20873755	Deletion_20bp
Chr1	2069548	2069578	Deletion_30bp
Chr1	2070698	2070698	Insertion_37bp
Chr1	2070807	2070830	Deletion_23bp
Chr1	2072890	2073421	Deletion_548bp
Chr1	1544096	1544096	Insertion_26bp
Chr1	1545630	1545630	Insertion_21bp
Chr1	29833711	29833711	Insertion_146bp
Chr1	29840354	29840416	Deletion_62bp
Chr1	29841058	29841317	Deletion_259bp
Chr1	10347102	10349354	Deletion_2252bp
Chr1	10356835	10356890	Deletion_55bp
Chr1	10400368	10400394	Deletion_26bp
Chr1	10405954	10405954	Insertion_24bp
Chr1	10416952	10416982	Deletion_30bp
Chr1	7662746	7662777	Deletion_31bp
Chr1	7675968	7675968	Insertion_115bp
Chr1	7676760	7676760	Insertion_24bp
Chr1	7683062	7683518	Deletion_456bp
Chr1	7688740	7688740	Insertion_29bp
Chr1	7689462	7689462	Insertion_23bp
Chr1	7719477	7719713	Deletion_236bp
Chr1	7724279	7724279	Insertion_4634bp
Chr1	7732143	7732143	Insertion_122bp
Chr1	7742399	7742459	Deletion_60bp
Chr1	7744891	7744891	Insertion_24bp
Chr1	7746543	7746543	Insertion_49bp
Chr1	7747273	7747273	Insertion_254bp
Chr1	7751608	7751625	Insertion_24bp
Chr1	13940856	13940856	Insertion_375bp
Chr1	13949231	13949231	Insertion_34bp
Chr1	13952373	13952373	Insertion_107bp
Chr1	13971701	13973014	Deletion_1313bp
Chr1	13993087	13993196	Deletion_109bp
Chr1	14010756	14010786	Deletion_30bp
Chr1	7306633	7306663	Deletion_30bp
Chr1	7344575	7344575	Insertion_52bp
Chr1	7352921	7365198	Deletion_12277bp
Chr1	29938640	29938685	Deletion_45bp
Chr1	29991219	29991219	Insertion_45bp
Chr1	8098891	8098891	Insertion_28bp
Chr1	8103762	8103784	Deletion_22bp
Chr1	8112756	8112756	Insertion_23bp
Chr1	8114058	8114058	Insertion_227bp

Chr1	8140483	8140655	Deletion_172bp
Chr1	30075959	30075959	Insertion_57bp
Chr1	30081127	30081127	Insertion_22bp
Chr1	30082330	30082330	Insertion_44bp
Chr1	30126985	30126985	Insertion_20bp
Chr1	8875464	8875498	Deletion_34bp
Chr1	8888423	8888423	Insertion_48bp
Chr1	8897423	8897423	Insertion_37bp
Chr1	8899283	8899585	Deletion_302bp
Chr1	8913443	8913443	Insertion_37bp
Chr1	8925033	8925033	Insertion_27bp
Chr1	18088050	18088050	Insertion_56bp
Chr1	18088336	18088366	Deletion_30bp
Chr1	18111009	18111172	Deletion_163bp
Chr1	18120140	18120161	Deletion_21bp
Chr1	18122805	18122830	Deletion_25bp
Chr1	18126922	18126922	Insertion_48bp
Chr1	18130502	18130547	Deletion_45bp
Chr1	6871224	6871224	Insertion_555bp
Chr1	6873665	6873689	Deletion_24bp
Chr1	6874402	6874402	Insertion_263bp
Chr1	6875688	6878161	Deletion_2473bp
Chr1	6912026	6912462	Deletion_436bp
Chr1	6924013	6924034	Deletion_21bp
Chr1	6941851	6941851	Insertion_408bp
Chr1	6945352	6945390	Deletion_38bp
Chr1	27430678	27430706	Deletion_28bp
Chr1	27430810	27430838	Deletion_28bp
Chr1	27497112	27497112	Insertion_25bp
Chr1	25503310	25503335	Deletion_25bp
Chr1	25503577	25503577	Insertion_48bp
Chr1	25543055	25543096	Deletion_41bp
Chr1	25573946	25574278	Deletion_332bp
Chr1	4977647	4977647	Insertion_22bp
Chr1	4993091	4993114	Deletion_23bp
Chr1	5000752	5000776	Deletion_24bp
Chr1	5031166	5031186	Deletion_20bp
Chr1	5044205	5045490	Deletion_1285bp
Chr1	7605068	7605068	Insertion_31bp
Chr1	10914896	10914941	Deletion_45bp
Chr1	10924445	10924468	Deletion_23bp
Chr1	10964193	10964233	Deletion_40bp
Chr1	10964779	10964779	Insertion_37bp
Chr1	10965938	10965938	Insertion_647bp
Chr1	10966708	10966708	Insertion_813bp
Chr1	6462582	6462582	Insertion_21bp
Chr1	6470016	6470016	Insertion_1702bp
Chr1	6474241	6474292	Deletion_51bp
Chr1	6478060	6478060	Insertion_26bp

Chr1	6480099	6480125	Deletion_26bp
Chr1	6498474	6498474	Insertion_26bp
Chr1	6507002	6507002	Insertion_66bp
Chr1	6515311	6515311	Insertion_87bp
Chr1	29381003	29381003	Insertion_32bp
Chr1	29389569	29389864	Deletion_295bp
Chr1	29408636	29408696	Deletion_60bp
Chr1	29422622	29422622	Insertion_63bp
Chr1	29429181	29429181	Insertion_24bp
Chr1	29443272	29443272	Insertion_20bp
Chr1	29443798	29443798	Insertion_28bp
Chr1	29444758	29444758	Insertion_28bp
Chr1	1589	1609	Deletion_20bp
Chr1	6745	6745	Insertion_32bp
Chr1	8693	8693	Insertion_71bp
Chr1	8879	8912	Deletion_33bp
Chr1	17010	18730	Deletion_1720bp
Chr1	20510	20510	Insertion_24bp
Chr1	22026	22026	Insertion_23bp
Chr1	22517	22562	Deletion_60bp
Chr1	55677	56578	Deletion_901bp
Chr1	63975	63975	Insertion_97bp
Chr1	70646	70646	Insertion_30bp
Chr1	72350	72350	Insertion_46bp
Chr1	19820358	19820358	Insertion_54bp
Chr1	19825713	19825735	Deletion_22bp
Chr1	19829655	19829655	Insertion_43bp
Chr1	19857323	19857323	Insertion_26bp
Chr1	19859588	19859624	Deletion_36bp
Chr1	28544900	28544900	Insertion_26bp
Chr1	28545102	28545122	Deletion_20bp
Chr1	28570857	28570892	Deletion_35bp
Chr1	28581369	28581506	Deletion_137bp
Chr1	28582415	28582415	Insertion_25bp
Chr1	28586719	28586755	Deletion_36bp
Chr1	28592767	28593098	Deletion_347bp
Chr1	28604294	28604328	Deletion_34bp
Chr1	9018377	9018409	Deletion_32bp
Chr1	9028165	9028189	Deletion_24bp
Chr1	9066255	9066276	Deletion_21bp
Chr1	9070449	9070510	Deletion_61bp
Chr1	9077615	9077772	Deletion_157bp
Chr1	9078675	9078855	Deletion_180bp
Chr1	13734289	13734289	Insertion_23bp
Chr1	13737676	13737714	Deletion_38bp
Chr1	13747778	13747803	Deletion_25bp
Chr1	13751590	13751590	Insertion_21bp
Chr1	11859501	11859522	Deletion_21bp
Chr1	7106316	7106353	Deletion_37bp

Chr1	7107609	7107815	Deletion_206bp
Chr1	25934892	25934892	Insertion_59bp
Chr1	23611969	23611969	Insertion_32bp
Chr1	23631037	23631037	Insertion_27bp
Chr1	23651607	23652016	Deletion_409bp
Chr1	23655557	23655557	Insertion_58bp
Chr1	23655959	23655959	Insertion_246bp
Chr1	4059875	4059875	Insertion_41bp
Chr1	4077158	4077158	Insertion_415bp
Chr1	4079864	4079864	Insertion_58bp
Chr1	4081058	4081079	Deletion_21bp
Chr1	4081654	4081654	Insertion_24bp
Chr1	4091004	4091117	Deletion_113bp
Chr1	4110095	4111022	Deletion_927bp
Chr1	4111535	4111557	Deletion_22bp
Chr1	4112901	4112901	Insertion_49bp
Chr1	4768279	4768279	Insertion_31bp
Chr1	4769165	4769165	Insertion_31bp
Chr1	4784072	4784072	Insertion_2193bp
Chr1	4785598	4785598	Insertion_28bp
Chr1	4787238	4787275	Deletion_37bp
Chr1	4790570	4790702	Deletion_132bp
Chr1	4796887	4796887	Insertion_976bp
Chr1	12062214	12062214	Insertion_8213bp
Chr1	12072139	12072139	Insertion_26bp
Chr1	12080721	12080721	Insertion_283bp
Chr1	12091712	12091779	Deletion_67bp
Chr1	12095173	12095173	Insertion_32bp
Chr1	372408	372664	Deletion_256bp
Chr1	380746	380785	Deletion_39bp
Chr1	390573	390664	Deletion_91bp
Chr1	25659906	25659906	Insertion_121bp
Chr1	25692126	25692165	Deletion_39bp
Chr1	25697138	25697138	Insertion_152bp
Chr1	25697626	25697919	Deletion_293bp
Chr1	28953492	28953492	Insertion_4509bp
Chr1	28953781	28953781	Insertion_257bp
Chr1	28959086	28959086	Insertion_32bp
Chr1	9575391	9575391	Insertion_8532bp
Chr1	9585139	9585139	Insertion_55bp
Chr1	9612121	9612144	Deletion_23bp
Chr1	25098563	25098619	Deletion_56bp
Chr1	7987645	7987671	Deletion_26bp
Chr1	8005180	8005202	Deletion_22bp
Chr1	8011808	8011808	Insertion_1715bp
Chr1	8016435	8016584	Deletion_149bp
Chr1	8040654	8040654	Insertion_22bp
Chr1	8052960	8053392	Deletion_432bp
Chr1	27799788	27799788	Insertion_29bp

Chr1	27802160	27802185	Deletion_25bp
Chr1	27802724	27802822	Deletion_98bp
Chr1	6975018	6975041	Deletion_23bp
Chr1	7012018	7012039	Deletion_21bp
Chr1	30355046	30355046	Insertion_31bp
Chr1	30368760	30368760	Insertion_54bp
Chr1	30371300	30371300	Insertion_35bp
Chr1	30381110	30381148	Deletion_38bp
Chr1	30389655	30389680	Deletion_25bp
Chr1	30390902	30390902	Insertion_69bp
Chr1	30411253	30411274	Deletion_21bp
Chr1	30412519	30412544	Deletion_25bp
Chr1	18968180	18968180	Insertion_67bp
Chr1	18970005	18970031	Deletion_26bp
Chr1	18970118	18970184	Deletion_66bp
Chr1	18970924	18970946	Deletion_22bp
Chr1	18990545	18990598	Deletion_53bp
Chr1	19026874	19027854	Deletion_980bp
Chr1	10019171	10019171	Insertion_420bp
Chr1	10019420	10019440	Deletion_20bp
Chr1	10043323	10043358	Deletion_35bp
Chr1	10067049	10067049	Insertion_30bp
Chr1	28638833	28638833	Insertion_6089bp
Chr1	28670615	28670615	Insertion_27bp
Chr1	11706677	11706700	Deletion_23bp
Chr1	11726633	11726679	Deletion_46bp
Chr1	11735584	11735584	Insertion_683bp
Chr1	11740687	11740687	Insertion_415bp
Chr1	11750429	11750429	Insertion_22bp
Chr1	13863907	13863957	Deletion_50bp
Chr1	13885952	13886646	Deletion_694bp
Chr1	13900903	13900936	Deletion_33bp
Chr1	13906757	13906757	Insertion_20bp
Chr1	13907162	13912015	Deletion_4853bp
Chr1	17570417	17570417	Insertion_480bp
Chr1	17571189	17571212	Deletion_23bp
Chr1	17584882	17584882	Insertion_29bp
Chr1	17619350	17619379	Deletion_29bp
Chr1	17619596	17619618	Deletion_22bp
Chr1	15609022	15609043	Deletion_21bp
Chr1	15620392	15620457	Deletion_65bp
Chr1	15635778	15635778	Insertion_27bp
Chr1	15641529	15641529	Insertion_45bp
Chr1	15642439	15642439	Insertion_31bp
Chr1	9236702	9236809	Deletion_107bp
Chr1	9237312	9237312	Insertion_35bp
Chr1	9253150	9253150	Insertion_21bp
Chr1	9282954	9282954	Insertion_425bp
Chr1	25223098	25223123	Deletion_25bp

Chr1	25261954	25261954	Insertion_249bp
Chr1	15921492	15921492	Insertion_21bp
Chr1	15923101	15923206	Deletion_105bp
Chr1	15924308	15924308	Insertion_30bp
Chr1	15924480	15924480	Insertion_78bp
Chr1	15936556	15936584	Deletion_28bp
Chr1	15948071	15948071	Insertion_32bp
Chr1	15952152	15952202	Deletion_50bp
Chr1	15954869	15954880	Insertion_80bp
Chr1	15955266	15955299	Deletion_33bp
Chr1	15961036	15961036	Insertion_73bp
Chr1	15972460	15972490	Deletion_30bp
Chr1	26053753	26053885	Deletion_132bp
Chr1	26079910	26079910	Insertion_72bp
Chr1	26097968	26097989	Deletion_21bp
Chr1	20774151	20774151	Insertion_21bp
Chr1	20815560	20815677	Deletion_117bp
Chr1	20815693	20816419	Deletion_726bp
Chr1	14246900	14246959	Deletion_59bp
Chr1	14255818	14255818	Insertion_368bp
Chr1	14273738	14273738	Insertion_49bp
Chr1	14275499	14275520	Deletion_21bp
Chr1	2359522	2359577	Deletion_55bp
Chr1	2376985	2377015	Deletion_30bp
Chr1	9317504	9317504	Insertion_3749bp
Chr1	9349578	9349578	Insertion_48bp
Chr1	18692235	18693238	Deletion_1003bp
Chr1	18694752	18694969	Deletion_217bp
Chr1	18698577	18698577	Insertion_28bp
Chr1	28707980	28707980	Insertion_25bp
Chr1	28722832	28722832	Insertion_22bp
Chr1	18569819	18569819	Insertion_1462bp
Chr1	18570035	18570035	Insertion_30bp
Chr1	18586894	18586894	Insertion_36bp
Chr1	18588657	18588657	Insertion_263bp
Chr1	18590124	18590151	Deletion_27bp
Chr1	18597924	18597924	Insertion_44bp
Chr1	18599486	18599506	Deletion_20bp
Chr1	18599956	18600041	Deletion_85bp
Chr1	11592461	11592461	Insertion_1270bp
Chr1	11595841	11595841	Insertion_20bp
Chr1	11609861	11609861	Insertion_21bp
Chr1	11610792	11610941	Deletion_149bp
Chr1	11618360	11618414	Deletion_54bp
Chr1	11618437	11618437	Insertion_20bp
Chr1	11622754	11622776	Deletion_22bp
Chr1	11639331	11639355	Deletion_24bp
Chr1	11641967	11641967	Insertion_159bp
Chr1	11646588	11646588	Insertion_25bp

Chr1	26661315	26661315	Insertion_26bp
Chr1	26667100	26667123	Deletion_23bp
Chr1	26667971	26667971	Insertion_285bp
Chr1	26682617	26682617	Insertion_21bp
Chr1	5351822	5356640	Deletion_4818bp
Chr1	5359302	5359302	Insertion_40bp
Chr1	9755443	9755443	Insertion_21bp
Chr1	27527471	27527800	Deletion_329bp
Chr1	27547039	27547192	Deletion_158bp
Chr1	25963729	25963729	Insertion_49bp
Chr1	25975949	25976993	Deletion_1044bp
Chr1	25977524	25977741	Deletion_217bp
Chr1	25978872	25978872	Insertion_645bp
Chr1	25991142	25991142	Insertion_30bp
Chr1	25994973	25995054	Deletion_81bp
Chr1	25999300	25999300	Insertion_597bp
Chr1	26006944	26006944	Insertion_373bp
Chr1	26015428	26015428	Insertion_28bp
Chr1	6840189	6840213	Deletion_24bp
Chr1	25779688	25780237	Deletion_549bp
Chr1	25784764	25784764	Insertion_37bp
Chr1	18189614	18189694	Deletion_80bp
Chr1	18214649	18214672	Deletion_23bp
Chr1	18221936	18221936	Insertion_75bp
Chr1	18222053	18222053	Insertion_15073bp
Chr1	18234353	18234353	Insertion_52bp
Chr1	5090568	5090601	Deletion_33bp
Chr1	5100442	5100442	Insertion_20bp
Chr1	5100531	5100531	Insertion_20bp
Chr1	5101938	5101950	Insertion_22bp
Chr1	5134232	5134274	Deletion_42bp
Chr1	1811122	1811122	Insertion_56bp
Chr1	1819778	1819778	Insertion_49bp
Chr1	30190911	30190943	Deletion_32bp
Chr1	30200250	30200354	Deletion_104bp
Chr1	30211404	30211424	Deletion_20bp
Chr1	30214043	30214072	Deletion_29bp
Chr1	30223078	30223078	Insertion_38bp
Chr1	18249214	18249214	Insertion_2112bp
Chr1	18261491	18261529	Deletion_38bp
Chr1	5256865	5256865	Insertion_43bp
Chr1	5265970	5265994	Deletion_24bp
Chr1	5297390	5297427	Deletion_37bp
Chr1	17209036	17209070	Deletion_34bp
Chr1	17231747	17231834	Deletion_87bp
Chr1	17234131	17234131	Insertion_52bp
Chr1	17246181	17246245	Deletion_64bp
Chr1	17257404	17257461	Deletion_57bp
Chr1	17258610	17258750	Deletion_140bp

Chr1	17258995	17258995	Insertion_57bp
Chr1	17259659	17259687	Deletion_28bp
Chr1	17262548	17262548	Insertion_35bp
Chr1	5198813	5198813	Insertion_344bp
Chr1	5199100	5199122	Deletion_22bp
Chr1	5228080	5228080	Insertion_31bp
Chr1	7453213	7453213	Insertion_42bp
Chr1	7459550	7459608	Deletion_58bp
Chr1	7465702	7465737	Deletion_35bp
Chr1	7471102	7471123	Deletion_21bp
Chr1	7477344	7477344	Insertion_33bp
Chr1	7479410	7479410	Insertion_3682bp
Chr1	18790104	18790848	Deletion_744bp
Chr1	18790928	18792862	Deletion_1934bp
Chr1	18792941	18792994	Deletion_53bp
Chr1	18804116	18804116	Insertion_903bp
Chr1	18804368	18804368	Insertion_22bp
Chr1	18816980	18816980	Insertion_22bp
Chr1	18819542	18819542	Insertion_64bp
Chr1	18819793	18819793	Insertion_845bp
Chr1	18830210	18830210	Insertion_26bp
Chr1	18845984	18845984	Insertion_48bp
Chr1	9147528	9148462	Deletion_934bp
Chr1	9175565	9189567	Deletion_14002bp
Chr1	5898931	5899902	Deletion_971bp
Chr1	5911855	5911855	Insertion_23bp
Chr1	5923355	5923355	Insertion_23bp
Chr1	13781167	13781167	Insertion_30bp
Chr1	13784836	13784995	Deletion_159bp
Chr1	13797446	13800270	Deletion_2838bp
Chr1	13810212	13810212	Insertion_26bp
Chr1	10880005	10880026	Deletion_21bp
Chr1	21859417	21859417	Insertion_40bp
Chr1	21876633	21876633	Insertion_34bp
Chr1	21900015	21900038	Deletion_23bp
Chr1	21902507	21902507	Insertion_392bp
Chr1	18475789	18475789	Insertion_22bp
Chr1	18486614	18486947	Deletion_333bp
Chr1	18488458	18488478	Deletion_20bp
Chr1	18489085	18489117	Deletion_32bp
Chr1	18492063	18492063	Insertion_24bp
Chr1	18494064	18494064	Insertion_24bp
Chr1	10569301	10569301	Insertion_21bp
Chr1	10199550	10199550	Insertion_512bp
Chr1	10212010	10212010	Insertion_22bp
Chr1	10222978	10222978	Insertion_39bp
Chr1	10229208	10229208	Insertion_31bp
Chr1	10235718	10235718	Insertion_26bp
Chr1	10235809	10235838	Deletion_29bp

Chr1	18647260	18647285	Deletion_25bp
Chr1	18657771	18657771	Insertion_85bp
Chr1	2420882	2420882	Insertion_57bp
Chr1	8927587	8933224	Deletion_5637bp
Chr1	13302056	13302080	Deletion_24bp
Chr1	13308374	13308374	Insertion_52bp
Chr1	13309404	13309404	Insertion_38bp
Chr1	13320596	13320616	Deletion_20bp
Chr1	13323199	13323219	Deletion_20bp
Chr1	13329492	13329512	Deletion_20bp
Chr1	8627932	8627932	Insertion_35bp
Chr1	8644354	8648100	Deletion_3746bp
Chr1	8648699	8648730	Deletion_31bp
Chr1	8649247	8649282	Deletion_35bp
Chr1	8654219	8654255	Deletion_36bp
Chr1	3091371	3091371	Insertion_36bp
Chr1	8723117	8723117	Insertion_41bp
Chr1	8730656	8730656	Insertion_34bp
Chr1	8755423	8755423	Insertion_42bp
Chr1	8766596	8766624	Deletion_28bp
Chr1	14457717	14458441	Deletion_724bp
Chr1	14462975	14462975	Insertion_24bp
Chr1	14467528	14467528	Insertion_37bp
Chr1	14468632	14468657	Deletion_25bp
Chr1	14475246	14475246	Insertion_80bp
Chr1	14481116	14481116	Insertion_501bp
Chr1	14483205	14483243	Deletion_38bp
Chr1	14499298	14499298	Insertion_24bp
Chr1	28392713	28392713	Insertion_68bp
Chr1	28409675	28409675	Insertion_20bp
Chr1	28418940	28418969	Deletion_29bp
Chr1	25800400	25800400	Insertion_23bp
Chr1	25811230	25811230	Insertion_23bp
Chr1	25823834	25823856	Deletion_22bp
Chr1	25839589	25839589	Insertion_5257bp
Chr1	25845339	25845339	Insertion_37bp
Chr1	25847026	25847026	Insertion_39bp
Chr1	25850227	25850227	Insertion_2125bp
Chr1	25864976	25865159	Deletion_183bp
Chr1	26624821	26624919	Deletion_98bp
Chr1	27601275	27601275	Insertion_882bp
Chr1	27603227	27603227	Insertion_383bp
Chr1	27603747	27603777	Deletion_30bp
Chr1	27637636	27637636	Insertion_27bp
Chr1	18349832	18349857	Deletion_25bp
Chr1	7220738	7220738	Insertion_29bp
Chr1	24568634	24568690	Deletion_56bp
Chr1	24586073	24586073	Insertion_145bp
Chr1	24586130	24586130	Insertion_73bp

Chr1	24595424	24595424	Insertion_1059bp
Chr1	12624736	12624760	Deletion_24bp
Chr1	12652322	12652358	Deletion_36bp
Chr1	19581538	19581538	Insertion_28bp
Chr1	19593380	19593521	Insertion_282bp
Chr1	19594047	19594047	Insertion_511bp
Chr1	19597328	19597328	Insertion_45bp
Chr1	20169930	20169954	Deletion_24bp
Chr1	20172061	20172808	Deletion_747bp
Chr1	20174334	20175153	Deletion_819bp
Chr1	20179272	20179292	Deletion_20bp
Chr1	20206636	20206856	Deletion_220bp
Chr1	10655852	10655885	Deletion_33bp
Chr1	10687588	10687618	Deletion_30bp
Chr1	17381655	17381655	Insertion_67bp
Chr1	17398266	17398266	Insertion_36bp
Chr1	17409648	17409701	Deletion_53bp
Chr1	17413283	17413313	Deletion_30bp
Chr1	1729450	1729483	Deletion_33bp
Chr1	1729916	1729949	Deletion_33bp
Chr1	1730739	1730739	Insertion_32bp
Chr1	1738862	1738886	Deletion_24bp
Chr1	1740478	1740478	Insertion_25bp
Chr1	1771084	1771177	Deletion_93bp
Chr1	5807780	5807800	Deletion_20bp
Chr1	5816758	5816758	Insertion_249bp
Chr1	5819065	5819065	Insertion_5428bp
Chr1	5831449	5831504	Deletion_55bp
Chr1	2223097	2223119	Deletion_22bp
Chr1	2233819	2235165	Deletion_1346bp
Chr1	2268108	2275436	Deletion_7328bp
Chr1	477516	477545	Deletion_29bp
Chr1	486941	486941	Insertion_20bp
Chr1	505763	505785	Deletion_22bp
Chr1	17741114	17741114	Insertion_763bp
Chr1	17742922	17742922	Insertion_66bp
Chr1	17756287	17757453	Deletion_1166bp
Chr1	17757900	17758140	Deletion_240bp
Chr1	17759815	17759915	Deletion_100bp
Chr1	27663703	27663703	Insertion_35bp
Chr1	27666078	27666078	Insertion_22bp
Chr1	14196648	14196690	Deletion_42bp
Chr1	14208752	14208752	Insertion_26bp
Chr1	19960922	19960942	Deletion_20bp
Chr1	19974775	19974775	Insertion_31bp
Chr1	19975710	19975710	Insertion_30bp
Chr1	19982473	19982473	Insertion_2015bp
Chr1	20003400	20003595	Deletion_195bp
Chr1	20005215	20005215	Insertion_29bp

Chr1	21626630	21626630	Insertion_37bp
Chr1	19762798	19762798	Insertion_38bp
Chr1	19763051	19763051	Insertion_1662bp
Chr1	19769025	19769573	Deletion_548bp
Chr1	10158933	10158933	Insertion_23bp
Chr1	10170678	10170678	Insertion_22bp
Chr1	10174695	10174695	Insertion_20bp
Chr1	10119793	10119851	Deletion_58bp
Chr1	10122225	10122258	Deletion_33bp
Chr1	10141396	10141428	Deletion_32bp
Chr1	10144336	10144336	Insertion_24bp
Chr1	14908048	14908228	Deletion_180bp
Chr1	14913981	14914629	Deletion_648bp
Chr1	14914746	14915186	Deletion_440bp
Chr1	18056365	18056365	Insertion_629bp
Chr1	30257979	30258046	Deletion_67bp
Chr1	30275175	30275175	Insertion_34bp
Chr1	8266786	8266786	Insertion_84bp
Chr1	8267022	8267022	Insertion_30bp
Chr1	8276260	8276286	Deletion_26bp
Chr1	8278327	8278352	Deletion_25bp
Chr1	8283242	8283242	Insertion_33bp
Chr1	8283905	8283905	Insertion_240bp
Chr1	13242198	13242198	Insertion_20bp
Chr1	13244322	13244331	Insertion_574bp
Chr1	13250310	13250310	Insertion_36bp
Chr1	13251622	13251681	Deletion_59bp
Chr1	13252905	13252905	Insertion_180bp
Chr1	13260424	13260424	Insertion_37bp
Chr1	13263331	13263331	Insertion_25bp
Chr1	13273686	13273686	Insertion_44bp
Chr1	9523422	9523446	Deletion_24bp
Chr1	11365245	11365275	Deletion_30bp
Chr1	11368730	11368759	Deletion_29bp
Chr1	11370220	11370220	Insertion_38bp
Chr1	11384093	11384093	Insertion_288bp
Chr1	11385950	11385950	Insertion_26bp
Chr1	11391119	11391143	Deletion_24bp
Chr1	11394695	11394695	Insertion_33bp
Chr1	11407229	11407336	Deletion_107bp
Chr1	11408289	11408458	Deletion_169bp
Chr1	20007278	20007278	Insertion_57bp
Chr1	20010479	20010479	Insertion_114bp
Chr1	20016013	20016354	Deletion_341bp
Chr1	20017361	20017361	Insertion_32bp
Chr1	20025052	20025076	Deletion_24bp
Chr1	20042435	20042435	Insertion_100bp
Chr1	18522314	18522343	Deletion_29bp
Chr1	18540106	18540106	Insertion_28bp

Chr1	18548077	18548389	Deletion_312bp
Chr1	18549373	18549434	Deletion_61bp
Chr1	18549501	18549539	Deletion_38bp
Chr1	18551574	18551574	Insertion_44bp
Chr1	24460850	24460904	Deletion_54bp
Chr1	24484066	24484066	Insertion_26bp
Chr1	24498758	24498850	Deletion_92bp
Chr1	27078308	27078330	Deletion_22bp
Chr1	27094253	27094280	Deletion_27bp
Chr1	27097143	27097143	Insertion_27bp
Chr1	27100235	27100235	Insertion_54bp
Chr1	27117491	27118192	Deletion_701bp
Chr1	25596251	25596262	Insertion_283bp
Chr1	25613693	25613693	Insertion_23bp
Chr1	10488031	10488031	Insertion_32bp
Chr1	10495976	10496002	Deletion_26bp
Chr1	23395300	23395300	Insertion_32bp
Chr1	23404784	23404827	Deletion_43bp
Chr1	23408832	23408853	Deletion_21bp
Chr1	23414954	23415296	Deletion_342bp
Chr1	23418541	23418541	Insertion_47bp
Chr1	16620596	16620596	Insertion_31bp
Chr1	16626483	16626483	Insertion_23bp
Chr1	16630465	16630465	Insertion_137bp
Chr1	16632486	16632617	Deletion_131bp
Chr1	16633542	16633542	Insertion_51bp
Chr1	16642531	16642586	Deletion_55bp
Chr1	16646261	16646329	Deletion_68bp
Chr1	16659693	16664329	Deletion_4636bp
Chr1	2745787	2745787	Insertion_47bp
Chr1	14101805	14101805	Insertion_1538bp
Chr1	14108369	14108389	Deletion_20bp
Chr1	14110883	14110978	Deletion_95bp
Chr1	14111130	14111165	Deletion_35bp
Chr1	14111850	14111884	Deletion_34bp
Chr1	14113378	14113378	Insertion_27bp
Chr1	14115068	14115068	Insertion_105bp
Chr1	14116844	14116844	Insertion_25bp
Chr1	14120826	14120826	Insertion_184bp
Chr1	14121928	14121928	Insertion_91bp
Chr1	14122110	14122110	Insertion_24bp
Chr1	14122786	14122835	Deletion_49bp
Chr1	14127045	14127066	Deletion_21bp
Chr1	14127637	14127637	Insertion_26bp
Chr1	14138596	14138628	Deletion_32bp
Chr1	14139755	14139755	Insertion_39bp
Chr1	5151640	5151660	Deletion_20bp
Chr1	5152000	5152021	Deletion_21bp
Chr1	5160475	5160815	Deletion_340bp

Chr1	5172639	5172659	Deletion_20bp
Chr1	5172681	5172681	Insertion_641bp
Chr1	20056458	20056481	Deletion_23bp
Chr1	20085154	20090250	Deletion_5096bp
Chr1	9816253	9816275	Deletion_22bp
Chr1	9821429	9821429	Insertion_20bp
Chr1	9834133	9834179	Deletion_46bp
Chr1	9840458	9840770	Deletion_312bp
Chr1	9845419	9845424	Insertion_107bp
Chr1	24298748	24299574	Deletion_826bp
Chr1	24324309	24324362	Deletion_53bp
Chr1	24327606	24328144	Deletion_538bp
Chr1	24328291	24328578	Deletion_287bp
Chr1	24331067	24331067	Insertion_67bp
Chr1	24333206	24333235	Deletion_29bp
Chr1	22632834	22632865	Deletion_31bp
Chr1	22660531	22660559	Deletion_28bp
Chr1	23363783	23363783	Insertion_31bp
Chr1	23368533	23368842	Deletion_309bp
Chr1	23372522	23372572	Deletion_50bp
Chr1	23376638	23376686	Deletion_48bp
Chr1	23385082	23385082	Insertion_47bp
Chr1	23386106	23386106	Insertion_31bp
Chr1	19283071	19283071	Insertion_35bp
Chr1	30315746	30315746	Insertion_44bp
Chr1	22187210	22187210	Insertion_134bp
Chr1	2818855	2818855	Insertion_4963bp
Chr1	23068422	23068466	Deletion_44bp
Chr1	23070398	23070426	Deletion_28bp
Chr1	23074328	23074359	Deletion_31bp
Chr1	23074697	23074697	Insertion_20bp
Chr1	23076611	23076625	Insertion_24bp
Chr1	23093927	23093980	Deletion_53bp
Chr1	23097736	23097768	Deletion_32bp
Chr1	23097996	23098062	Deletion_66bp
Chr1	23103964	23104002	Deletion_38bp
Chr1	25359065	25359065	Insertion_75bp
Chr1	25368961	25368961	Insertion_39bp
Chr1	25379879	25380262	Deletion_383bp
Chr1	25381464	25381527	Deletion_63bp
Chr1	25391231	25391231	Insertion_4793bp
Chr1	18758990	18759019	Deletion_29bp
Chr1	18760978	18761740	Deletion_762bp
Chr1	18762764	18762798	Deletion_34bp
Chr1	18780525	18780525	Insertion_463bp
Chr1	17516483	17516514	Deletion_31bp
Chr1	17516560	17516596	Deletion_36bp
Chr1	17528662	17536139	Deletion_7477bp
Chr1	24395988	24395999	Insertion_21bp

Chr1	24406242	24406242	Insertion_754bp
Chr1	24428981	24428981	Insertion_58bp
Chr1	24733062	24733062	Insertion_61bp
Chr1	24741321	24741321	Insertion_27bp
Chr1	24741852	24741884	Deletion_32bp
Chr1	24743376	24743428	Deletion_52bp
Chr1	24744924	24745349	Deletion_425bp
Chr1	24755493	24755493	Insertion_42bp
Chr1	24764420	24764440	Deletion_20bp
Chr1	440295	440346	Deletion_51bp
Chr1	440721	440721	Insertion_24bp
Chr1	447849	448038	Deletion_194bp
Chr1	448275	448315	Deletion_40bp
Chr1	463834	463834	Insertion_20bp
Chr1	473871	473871	Insertion_5109bp
Chr1	25030466	25030466	Insertion_20bp
Chr1	25035028	25035028	Insertion_542bp
Chr1	25035820	25035870	Deletion_50bp
Chr1	25063368	25063368	Insertion_55bp
Chr1	1441514	1444533	Deletion_3019bp
Chr1	1460266	1460293	Deletion_27bp
Chr1	1466799	1466799	Insertion_30bp
Chr1	1470991	1470991	Insertion_93bp
Chr1	25298451	25298451	Insertion_263bp
Chr1	25306819	25306819	Insertion_2101bp
Chr1	7851402	7851402	Insertion_20bp
Chr1	27571783	27571783	Insertion_193bp
Chr1	27572962	27572998	Deletion_36bp
Chr1	559288	559288	Insertion_43bp
Chr1	563316	563388	Deletion_72bp
Chr1	563439	563463	Deletion_24bp
Chr1	576238	576262	Deletion_24bp
Chr1	13529814	13529814	Insertion_854bp
Chr1	13532049	13532049	Insertion_48bp
Chr1	13544126	13544126	Insertion_24bp
Chr1	13544852	13544852	Insertion_24bp
Chr1	13545799	13545799	Insertion_29bp
Chr1	7416165	7416165	Insertion_53bp
Chr1	15578933	15579004	Deletion_71bp
Chr1	15582051	15582051	Insertion_728bp
Chr1	4568417	4568437	Deletion_20bp
Chr1	12023762	12023827	Deletion_65bp
Chr1	12024982	12025002	Deletion_20bp
Chr1	12037345	12037345	Insertion_30bp
Chr1	12044497	12044518	Deletion_21bp
Chr1	12045849	12045849	Insertion_30bp
Chr1	26551575	26552198	Deletion_623bp
Chr1	26572290	26572290	Insertion_44bp
Chr1	26578342	26578342	Insertion_38bp

Chr1	26581333	26581365	Deletion_32bp
Chr1	11454713	11454739	Deletion_26bp
Chr1	11461854	11461854	Insertion_67bp
Chr1	11471704	11471704	Insertion_34bp
Chr1	11472290	11472795	Deletion_505bp
Chr1	11475538	11475580	Deletion_42bp
Chr1	11478361	11478507	Deletion_146bp
Chr1	21180936	21180966	Deletion_30bp
Chr1	21181043	21181043	Insertion_158bp
Chr1	21195546	21195546	Insertion_887bp
Chr1	21200836	21200836	Insertion_36bp
Chr1	21201498	21201498	Insertion_62bp
Chr1	21209003	21209003	Insertion_34bp
Chr1	21218107	21218552	Deletion_445bp
Chr1	18910527	18910527	Insertion_27bp
Chr1	18923701	18923701	Insertion_2381bp
Chr1	18931523	18931523	Insertion_22bp
Chr1	18421364	18421364	Insertion_23bp
Chr1	17059783	17059783	Insertion_22bp
Chr1	17082799	17082799	Insertion_2421bp
Chr1	22041955	22041955	Insertion_717bp
Chr1	22058177	22058177	Insertion_5081bp
Chr1	14326765	14326765	Insertion_21bp
Chr1	14340818	14340818	Insertion_32bp
Chr1	10081720	10081747	Deletion_27bp
Chr1	7254949	7257228	Deletion_2279bp
Chr1	5397154	5397154	Insertion_37bp
Chr1	5410654	5410681	Deletion_27bp
Chr1	5415381	5415411	Deletion_30bp
Chr1	4140918	4140938	Deletion_20bp
Chr1	4141467	4141487	Deletion_20bp
Chr1	1194311	1195119	Deletion_808bp
Chr1	1195822	1195850	Deletion_28bp
Chr1	1217654	1217675	Deletion_21bp
Chr1	1220886	1220886	Insertion_36bp
Chr1	27756814	27756814	Insertion_26bp
Chr1	27757379	27757379	Insertion_5521bp
Chr1	27767572	27767572	Insertion_20bp
Chr1	27952836	27952870	Deletion_34bp
Chr1	27972062	27972095	Deletion_33bp
Chr1	27973546	27973580	Deletion_34bp
Chr1	27975783	27975794	Insertion_22bp
Chr1	12310313	12310333	Deletion_20bp
Chr1	12310693	12310693	Insertion_121bp
Chr1	12320262	12320284	Deletion_22bp
Chr1	12321157	12321157	Insertion_34bp
Chr1	12327927	12330052	Deletion_2125bp
Chr1	12336046	12336046	Insertion_89bp
Chr1	5084036	5084083	Deletion_47bp

Chr1	27733881	27733881	Insertion_647bp
Chr1	5836458	5836458	Insertion_27bp
Chr1	5843680	5843680	Insertion_51bp
Chr1	5862950	5863512	Deletion_562bp
Chr1	22245759	22245759	Insertion_731bp
Chr1	22246460	22246460	Insertion_65bp
Chr1	22251687	22251687	Insertion_96bp
Chr1	22253096	22253096	Insertion_28bp
Chr1	22270314	22270345	Deletion_31bp
Chr1	7809822	7809822	Insertion_26bp
Chr1	3830600	3830632	Deletion_32bp
Chr1	3857729	3857901	Deletion_172bp
Chr1	3858714	3858714	Insertion_45bp
Chr1	26831632	26831666	Deletion_34bp
Chr1	26838464	26838523	Deletion_59bp
Chr1	1477106	1477137	Deletion_31bp
Chr1	30161621	30161621	Insertion_29bp
Chr1	30168495	30168522	Deletion_27bp
Chr1	2473926	2473926	Insertion_21bp
Chr1	12219650	12220419	Deletion_769bp
Chr1	12228466	12228670	Deletion_204bp
Chr1	12230321	12230321	Insertion_42bp
Chr1	12231313	12231313	Insertion_541bp
Chr1	29313141	29313163	Deletion_22bp
Chr1	29314128	29314174	Deletion_46bp
Chr1	29318848	29318848	Insertion_29bp
Chr1	29320709	29320709	Insertion_21bp
Chr1	17279217	17279217	Insertion_70bp
Chr1	17279646	17279691	Deletion_45bp
Chr1	17287340	17287340	Insertion_21bp
Chr1	17289337	17290081	Deletion_757bp
Chr1	17292157	17292177	Deletion_20bp
Chr1	17305544	17305544	Insertion_21bp
Chr1	13830089	13830209	Deletion_120bp
Chr1	13851089	13851089	Insertion_21bp
Chr1	23769063	23769092	Deletion_29bp
Chr1	8164235	8164235	Insertion_35bp
Chr1	24884607	24884695	Deletion_88bp
Chr1	24898106	24898106	Insertion_25bp
Chr1	24898942	24898965	Deletion_23bp
Chr1	24907539	24908609	Deletion_1070bp
Chr1	24917323	24917368	Deletion_45bp
Chr1	24918696	24918696	Insertion_35bp
Chr1	21318582	21318582	Insertion_5840bp
Chr1	21344737	21344771	Deletion_34bp
Chr1	25340966	25340966	Insertion_69bp
Chr1	25343344	25343902	Deletion_558bp
Chr1	23931215	23931215	Insertion_281bp
Chr1	23932637	23932637	Insertion_290bp

Chr1	23933302	23933380	Deletion_78bp
Chr1	23939965	23939965	Insertion_27bp
Chr1	23940955	23940955	Insertion_1741bp
Chr1	12916782	12916782	Insertion_25bp
Chr1	12932043	12932043	Insertion_78bp
Chr1	12942677	12947053	Deletion_4376bp
Chr1	12957790	12957923	Deletion_133bp
Chr1	12959481	12959576	Deletion_95bp
Chr1	22995550	22995570	Deletion_20bp
Chr1	23002201	23002201	Insertion_49bp
Chr1	23024344	23024344	Insertion_29bp
Chr1	24083780	24083815	Deletion_35bp
Chr1	7035192	7037290	Deletion_2098bp
Chr1	7037707	7037732	Deletion_25bp
Chr1	7037774	7037802	Deletion_28bp
Chr1	7053925	7053925	Insertion_44bp
Chr1	7065261	7075764	Deletion_10503bp
Chr1	25461371	25461391	Deletion_20bp
Chr1	25475448	25475448	Insertion_25bp
Chr1	25481616	25481667	Deletion_51bp
Chr1	4347637	4347637	Insertion_47bp
Chr1	4349487	4349528	Deletion_41bp
Chr1	4355896	4355896	Insertion_87bp
Chr1	29489682	29489682	Insertion_4634bp
Chr1	29512612	29512612	Insertion_47bp
Chr1	29514772	29514772	Insertion_24bp
Chr1	7195996	7195996	Insertion_31bp
Chr1	7198847	7198929	Deletion_82bp
Chr1	13028113	13028188	Deletion_75bp
Chr1	13031649	13031874	Deletion_225bp
Chr1	13034866	13034866	Insertion_20bp
Chr1	13039446	13039468	Deletion_22bp
Chr1	13043493	13043552	Deletion_59bp
Chr1	13047653	13047697	Deletion_44bp
Chr1	13047992	13047992	Insertion_223bp
Chr1	13056270	13056270	Insertion_40bp
Chr1	19544113	19544113	Insertion_23bp
Chr1	19549541	19550188	Deletion_647bp
Chr1	19554488	19554488	Insertion_1497bp
Chr1	19555794	19555849	Deletion_55bp
Chr1	19557628	19557628	Insertion_599bp
Chr1	19573341	19573341	Insertion_38bp
Chr1	19577688	19578122	Deletion_434bp
Chr1	1260468	1260501	Deletion_33bp
Chr1	1260861	1260915	Deletion_54bp
Chr1	12511254	12511254	Insertion_25bp
Chr1	12530444	12530465	Deletion_21bp
Chr1	26693855	26693890	Deletion_35bp
Chr1	26694396	26694430	Deletion_34bp

Chr1	26697612	26697639	Deletion_27bp
Chr1	26698521	26698798	Deletion_277bp
Chr1	26708998	26708998	Insertion_24bp
Chr1	26722384	26722384	Insertion_244bp
Chr1	4275176	4275176	Insertion_22bp
Chr1	12165059	12165059	Insertion_800bp
Chr1	12176070	12176104	Deletion_34bp
Chr1	12176439	12176484	Deletion_45bp
Chr1	12183405	12183990	Deletion_585bp
Chr1	12192772	12192772	Insertion_22bp
Chr1	12196034	12196034	Insertion_25bp
Chr1	12198072	12198102	Deletion_30bp
Chr1	12198661	12198661	Insertion_4961bp
Chr1	12199025	12199025	Insertion_37bp
Chr1	10632283	10632283	Insertion_53bp
Chr1	10637961	10637961	Insertion_1134bp
Chr1	13102944	13102944	Insertion_45bp
Chr1	13108922	13108971	Deletion_49bp
Chr1	13116205	13116205	Insertion_21bp
Chr1	24011425	24011447	Deletion_22bp
Chr1	11928908	11929017	Deletion_117bp
Chr1	11929367	11929367	Insertion_31bp
Chr1	18880036	18880036	Insertion_128bp
Chr1	18889162	18889162	Insertion_57bp
Chr1	18893115	18893141	Deletion_26bp
Chr1	18899079	18899079	Insertion_2508bp
Chr1	20951373	20951373	Insertion_25bp
Chr1	20957422	20957452	Deletion_30bp
Chr1	2702135	2702159	Deletion_24bp
Chr1	23801472	23801472	Insertion_29bp
Chr1	7916317	7916317	Insertion_84bp
Chr1	7916959	7916986	Deletion_27bp
Chr1	7917941	7917991	Deletion_50bp
Chr1	12705068	12705094	Deletion_26bp
Chr1	12711140	12711712	Deletion_572bp
Chr1	23575018	23575068	Deletion_50bp
Chr1	23579372	23579372	Insertion_34bp
Chr1	23596519	23596519	Insertion_569bp
Chr1	5428562	5428596	Deletion_34bp
Chr1	5449197	5449197	Insertion_48bp
Chr1	21558184	21558223	Deletion_39bp
Chr1	21563875	21563875	Insertion_2598bp
Chr1	5624951	5624951	Insertion_21bp
Chr1	5629222	5629242	Deletion_20bp
Chr1	5629581	5629613	Deletion_35bp
Chr1	5633769	5633948	Deletion_179bp
Chr1	5644509	5644509	Insertion_30bp
Chr1	5648486	5648486	Insertion_549bp
Chr1	5651217	5651239	Deletion_22bp

Chr1	8538826	8538826	Insertion_586bp
Chr1	28002725	28002745	Deletion_20bp
Chr1	12416675	12416675	Insertion_57bp
Chr1	12440202	12440958	Deletion_756bp
Chr1	12444301	12444327	Deletion_26bp
Chr1	20734369	20734397	Deletion_28bp
Chr1	20746719	20746719	Insertion_32bp
Chr1	20754752	20754752	Insertion_446bp
Chr1	20757377	20757377	Insertion_21bp
Chr1	26035499	26035520	Deletion_21bp
Chr1	26043541	26043571	Deletion_30bp
Chr1	16161661	16161683	Deletion_22bp
Chr1	16162730	16163152	Deletion_422bp
Chr1	16164077	16164239	Deletion_162bp
Chr1	16170192	16170221	Deletion_47bp
Chr1	16173504	16173504	Insertion_40bp
Chr1	16173540	16173540	Insertion_4985bp
Chr1	16174475	16175690	Deletion_1220bp
Chr1	16177779	16177779	Insertion_42bp
Chr1	16178484	16178484	Insertion_157bp
Chr1	16185993	16186081	Deletion_88bp
Chr1	16193555	16193577	Deletion_22bp
Chr1	16198557	16198557	Insertion_478bp
Chr1	16206104	16206104	Insertion_97bp
Chr1	16206271	16206271	Insertion_485bp
Chr1	16212399	16212458	Deletion_59bp
Chr1	16730080	16730324	Deletion_244bp
Chr1	16731685	16731723	Deletion_38bp
Chr1	16732724	16732724	Insertion_20bp
Chr1	16738510	16738882	Deletion_372bp
Chr1	16745088	16745088	Insertion_20bp
Chr1	16747815	16747860	Deletion_45bp
Chr1	16753759	16753759	Insertion_1374bp
Chr1	7618368	7618368	Insertion_32bp
Chr1	2498335	2498335	Insertion_33bp
Chr1	2513173	2513224	Deletion_51bp
Chr1	1921014	1921014	Insertion_770bp
Chr1	17455048	17455048	Insertion_30bp
Chr1	17465374	17465374	Insertion_69bp
Chr1	30135109	30135142	Deletion_33bp
Chr1	30136066	30136086	Deletion_20bp
Chr1	30144929	30144929	Insertion_23bp
Chr1	30156216	30156243	Deletion_27bp
Chr1	12974995	12975132	Deletion_137bp
Chr1	12994709	12994778	Deletion_69bp
Chr1	12999073	12999073	Insertion_546bp
Chr1	12999565	12999565	Insertion_126bp
Chr1	13002969	13002969	Insertion_24bp
Chr1	10968987	10968987	Insertion_117bp

Chr1	10970803	10970840	Deletion_37bp
Chr1	10980701	10980701	Insertion_32bp
Chr1	10983787	10983787	Insertion_576bp
Chr1	10990360	10990360	Insertion_21bp
Chr1	10991831	10991831	Insertion_32bp
Chr1	9102853	9102853	Insertion_26bp
Chr1	9104492	9104492	Insertion_5709bp
Chr1	9115657	9115657	Insertion_27bp
Chr1	662800	662837	Deletion_37bp
Chr1	664729	664772	Deletion_43bp
Chr1	10597550	10599586	Deletion_2036bp
Chr1	10602357	10602357	Insertion_26bp
Chr1	10603308	10603379	Deletion_71bp
Chr1	9795166	9795247	Deletion_81bp
Chr1	9800542	9800812	Deletion_270bp
Chr1	23875075	23875075	Insertion_24bp
Chr1	23876147	23877268	Deletion_1121bp
Chr1	23880374	23880374	Insertion_436bp
Chr1	23883327	23883327	Insertion_36bp
Chr1	23883539	23883539	Insertion_651bp
Chr1	25723130	25723130	Insertion_135bp
Chr1	25728889	25728889	Insertion_26bp
Chr1	25745943	25745943	Insertion_61bp
Chr1	7758896	7758896	Insertion_36bp
Chr1	7761197	7762112	Deletion_915bp
Chr1	7766014	7766028	Insertion_308bp
Chr1	9656986	9657011	Deletion_25bp
Chr1	19467666	19467688	Deletion_36bp
Chr1	19490963	19490991	Deletion_28bp
Chr1	7164091	7164091	Insertion_51bp
Chr1	8979832	8979832	Insertion_9977bp
Chr1	8980109	8980109	Insertion_38bp
Chr1	8987895	8987895	Insertion_21bp
Chr1	8989218	8989244	Deletion_26bp
Chr1	8991114	8991140	Deletion_26bp
Chr1	8991285	8991306	Deletion_21bp
Chr1	9000542	9000591	Deletion_49bp
Chr1	8212202	8212202	Insertion_12488bp
Chr1	8224916	8224916	Insertion_51bp
Chr1	8226990	8226990	Insertion_21bp
Chr1	8230024	8230024	Insertion_217bp
Chr1	8230185	8230185	Insertion_150bp
Chr1	29606319	29606592	Deletion_273bp
Chr1	29609014	29609034	Insertion_35bp
Chr1	29611554	29612406	Deletion_852bp
Chr1	29617249	29617249	Insertion_2445bp
Chr1	29624800	29624829	Deletion_29bp
Chr1	29625275	29625275	Insertion_28bp
Chr1	9768720	9768720	Insertion_173bp

Chr1	9775124	9775124	Insertion_23bp
Chr1	21162627	21162647	Deletion_20bp
Chr1	21176613	21177209	Deletion_596bp
Chr1	21178215	21178215	Insertion_684bp
Chr1	29363487	29363487	Insertion_34bp
Chr1	19431081	19431081	Insertion_30bp
Chr1	19431390	19431390	Insertion_237bp
Chr1	19434006	19434006	Insertion_403bp
Chr1	19434364	19434364	Insertion_27bp
Chr1	19441077	19441107	Deletion_30bp
Chr1	24802330	24802330	Insertion_20bp
Chr1	24804057	24804097	Deletion_40bp
Chr1	15850105	15850127	Deletion_22bp
Chr1	15856026	15856026	Insertion_24bp
Chr1	15860327	15860327	Insertion_36bp
Chr1	15867760	15867787	Deletion_27bp
Chr1	15870467	15870467	Insertion_22bp
Chr1	15870629	15870697	Deletion_68bp
Chr1	15871369	15871657	Deletion_288bp
Chr1	9429371	9429396	Deletion_25bp
Chr1	9883963	9884097	Deletion_134bp
Chr1	16778134	16778134	Insertion_1945bp
Chr1	16801277	16801277	Insertion_93bp
Chr1	11550443	11551013	Deletion_581bp
Chr1	11563075	11563075	Insertion_3694bp
Chr1	11573619	11573647	Deletion_28bp
Chr1	11578417	11578458	Deletion_41bp
Chr1	23542170	23542228	Deletion_58bp
Chr1	23542472	23542499	Deletion_27bp
Chr1	6160619	6160619	Insertion_25bp
Chr1	17776462	17776462	Insertion_22bp
Chr1	17776565	17776573	Deletion_44bp
Chr1	2110955	2110955	Insertion_86bp
Chr1	23680174	23680217	Deletion_43bp
Chr1	23681451	23681487	Deletion_36bp
Chr1	23686159	23686345	Deletion_192bp
Chr1	23691198	23691223	Deletion_25bp
Chr1	23695418	23695418	Insertion_49bp
Chr1	23702795	23702795	Insertion_45bp
Chr1	7890223	7890223	Insertion_24bp
Chr1	15070175	15070175	Insertion_20bp
Chr1	15080355	15080737	Deletion_382bp
Chr1	15082369	15082543	Deletion_174bp
Chr1	15084490	15084490	Insertion_174bp
Chr1	24443212	24443212	Insertion_271bp
Chr1	10518262	10518262	Insertion_23bp
Chr1	10526539	10526539	Insertion_28bp
Chr1	28789712	28789735	Deletion_23bp
Chr1	28792669	28792669	Insertion_30bp

Chr1	8418829	8418849	Deletion_20bp
Chr1	14167104	14167366	Deletion_262bp
Chr1	14168345	14168345	Insertion_24bp
Chr1	14189590	14189590	Insertion_222bp
Chr1	21131757	21132095	Deletion_338bp
Chr1	21135332	21135418	Deletion_86bp
Chr1	21136209	21136209	Insertion_70bp
Chr1	21153457	21153493	Deletion_36bp
Chr1	21507773	21508035	Deletion_262bp
Chr1	8195993	8195993	Insertion_21bp
Chr1	19891921	19891921	Insertion_36bp
Chr1	19892229	19892268	Deletion_39bp
Chr1	19902036	19902036	Insertion_863bp
Chr1	23738382	23738382	Insertion_48bp
Chr1	23747383	23747383	Insertion_140bp
Chr1	14024945	14024945	Insertion_1096bp
Chr1	14030959	14030959	Insertion_20bp
Chr1	14038244	14038268	Deletion_24bp
Chr1	14039826	14041227	Deletion_1401bp
Chr1	14044384	14045932	Deletion_1548bp
Chr1	14046508	14046537	Deletion_29bp
Chr1	14051044	14051044	Insertion_26bp
Chr1	14052547	14052686	Deletion_139bp
Chr1	2304676	2304676	Insertion_50bp
Chr1	2316871	2316916	Deletion_45bp
Chr1	24373316	24373337	Deletion_21bp
Chr1	24388383	24388383	Insertion_21bp
Chr1	17543316	17543316	Insertion_29bp
Chr1	17561170	17561210	Deletion_40bp
Chr1	17563199	17563853	Deletion_654bp
Chr1	17565669	17565730	Deletion_61bp
Chr1	10839997	10840942	Deletion_945bp
Chr1	29993686	29993719	Deletion_33bp
Chr1	29994713	29994713	Insertion_105bp
Chr1	30012475	30012475	Insertion_4630bp
Chr1	8074117	8074146	Deletion_29bp
Chr1	8074267	8074267	Insertion_779bp
Chr1	19061962	19064592	Deletion_2630bp
Chr1	19064759	19064796	Deletion_37bp
Chr1	19080615	19080615	Insertion_20bp
Chr1	19085100	19086843	Deletion_1743bp
Chr1	23215902	23215996	Deletion_94bp
Chr1	23222041	23222041	Insertion_886bp
Chr1	23223380	23223380	Insertion_214bp
Chr1	23223757	23223757	Insertion_202bp
Chr1	23030970	23030970	Insertion_100bp
Chr1	13438470	13438493	Deletion_23bp
Chr1	13441979	13442487	Deletion_508bp
Chr1	13443338	13443338	Insertion_72bp

Chr1	13445106	13445106	Insertion_20bp
Chr1	26529156	26529156	Insertion_31bp
Chr1	21227875	21227875	Insertion_1136bp
Chr1	21230951	21231005	Deletion_54bp
Chr1	21244319	21249199	Deletion_4880bp
Chr1	5873279	5873531	Deletion_252bp
Chr1	15450636	15450708	Deletion_72bp
Chr1	15456121	15456142	Deletion_21bp
Chr1	25434600	25434600	Insertion_43bp
Chr1	25445714	25445714	Insertion_290bp
Chr1	3773945	3773972	Deletion_27bp
Chr1	3774272	3775239	Deletion_967bp
Chr1	3780760	3785721	Deletion_4961bp
Chr1	17118586	17118613	Deletion_27bp
Chr1	22131973	22131973	Insertion_38bp
Chr1	22132778	22132816	Deletion_38bp
Chr1	22137096	22137096	Insertion_24bp
Chr1	22140774	22140774	Insertion_156bp
Chr1	22503029	22503050	Deletion_21bp
Chr1	22503523	22503879	Deletion_356bp
Chr1	22510862	22510882	Deletion_20bp
Chr1	22513043	22513119	Deletion_76bp
Chr1	22513946	22513968	Deletion_22bp
Chr1	22521357	22521430	Deletion_73bp
Chr1	22524287	22524287	Insertion_30bp
Chr1	22524456	22524456	Insertion_21bp
Chr1	23976864	23976864	Insertion_20bp
Chr1	23977030	23977030	Insertion_113bp
Chr1	23977077	23977077	Insertion_78bp
Chr1	23984629	23984629	Insertion_131bp
Chr1	23989281	23989303	Deletion_22bp
Chr1	16896133	16896188	Deletion_55bp
Chr1	24610546	24610546	Insertion_153bp
Chr1	24610698	24610698	Insertion_20bp
Chr1	24611431	24611711	Deletion_280bp
Chr1	22954095	22954136	Deletion_41bp
Chr1	22972012	22972520	Deletion_508bp
Chr1	22972632	22974863	Deletion_2231bp
Chr1	9203159	9203198	Deletion_39bp
Chr1	22012361	22012400	Deletion_39bp
Chr1	14059405	14059436	Deletion_31bp
Chr1	14065508	14065577	Deletion_69bp
Chr1	14072897	14072958	Deletion_61bp
Chr1	25656359	25656359	Insertion_146bp
Chr1	20926175	20926221	Deletion_46bp
Chr1	20929629	20929653	Deletion_24bp
Chr1	11218027	11218027	Insertion_321bp
Chr1	11219174	11219174	Insertion_26bp
Chr1	30342870	30342870	Insertion_22bp

Chr1	30344697	30344697	Insertion_23bp
Chr1	30348904	30348946	Deletion_42bp
Chr1	17983570	17983632	Deletion_62bp
Chr1	6795318	6795524	Deletion_206bp
Chr1	6809688	6809688	Insertion_729bp
Chr1	13415624	13415658	Deletion_34bp
Chr1	13422102	13422140	Deletion_38bp
Chr1	20711947	20711947	Insertion_32bp
Chr1	23559385	23559385	Insertion_28bp
Chr1	23562171	23562197	Deletion_26bp
Chr1	1520189	1520220	Deletion_31bp
Chr1	24190602	24190633	Deletion_31bp
Chr1	24201231	24201231	Insertion_248bp
Chr1	24206753	24206775	Deletion_22bp
Chr1	17629734	17629754	Deletion_20bp
Chr1	17639360	17639469	Deletion_109bp
Chr1	18858453	18858473	Deletion_20bp
Chr1	19910311	19910311	Insertion_49bp
Chr1	19925812	19925812	Insertion_191bp
Chr1	19716330	19716330	Insertion_25bp
Chr1	19724756	19736584	Deletion_11828bp
Chr1	14304713	14304713	Insertion_35bp
Chr1	14308820	14308941	Deletion_121bp
Chr1	26906072	26906094	Deletion_22bp
Chr1	22931647	22932549	Deletion_902bp
Chr1	18320494	18320531	Deletion_37bp
Chr1	8322344	8322374	Deletion_30bp
Chr1	12882271	12882291	Deletion_20bp
Chr1	12886409	12886409	Insertion_21bp
Chr1	19637956	19637956	Insertion_26bp
Chr1	16459306	16459306	Insertion_44bp
Chr1	17417509	17417540	Deletion_31bp
Chr1	17434402	17434402	Insertion_159bp
Chr1	4612399	4612428	Deletion_29bp
Chr1	4618694	4618694	Insertion_57bp
Chr1	4618776	4618776	Insertion_78bp
Chr1	4620009	4620053	Deletion_44bp
Chr1	11009854	11009893	Deletion_39bp
Chr1	11015051	11015051	Insertion_42bp
Chr1	11016724	11016750	Deletion_26bp
Chr1	4313583	4313583	Insertion_20bp
Chr1	12338474	12338474	Insertion_74bp
Chr1	12448459	12448459	Insertion_37bp
Chr1	12465962	12465987	Deletion_25bp
Chr1	12475264	12475264	Insertion_52bp
Chr1	12478093	12478133	Deletion_40bp
Chr1	12480107	12480107	Insertion_24bp
Chr1	12482700	12482720	Deletion_20bp
Chr1	12483077	12483574	Deletion_497bp

Chr1	12483948	12483970	Deletion_22bp
Chr1	12485041	12485041	Insertion_22bp
Chr1	8713349	8713406	Deletion_57bp
Chr1	8713912	8713982	Deletion_70bp
Chr1	13012692	13012692	Insertion_47bp
Chr1	13012973	13012973	Insertion_28bp
Chr1	19688540	19688540	Insertion_180bp
Chr1	19693216	19693476	Deletion_260bp
Chr1	19693675	19693675	Insertion_22bp
Chr1	8375386	8375386	Insertion_90bp
Chr1	8380911	8380911	Insertion_37bp
Chr1	8383466	8383490	Deletion_24bp
Chr1	8389371	8389371	Insertion_102bp
Chr1	1234173	1234173	Insertion_49bp
Chr1	18955608	18956631	Deletion_1023bp
Chr1	17094256	17094283	Deletion_27bp
Chr1	17094837	17094900	Deletion_63bp
Chr1	17095732	17095732	Insertion_1492bp
Chr1	17104217	17104217	Insertion_51bp
Chr1	17106495	17106559	Deletion_64bp
Chr1	17114326	17114326	Insertion_867bp
Chr1	17115436	17115436	Insertion_24bp
Chr1	9854464	9854464	Insertion_54bp
Chr1	23477121	23477180	Deletion_59bp
Chr1	16439986	16439986	Insertion_24bp
Chr1	8499815	8499815	Insertion_28bp
Chr1	8502084	8502084	Insertion_445bp
Chr1	13353160	13353160	Insertion_301bp
Chr1	13359324	13359324	Insertion_76bp
Chr1	21367862	21367888	Deletion_26bp
Chr1	21375547	21375547	Insertion_2037bp
Chr1	21376319	21376319	Insertion_52bp
Chr1	8476447	8476447	Insertion_27bp
Chr1	4177738	4177738	Insertion_23bp
Chr1	11661380	11661668	Deletion_288bp
Chr1	11666522	11666558	Deletion_36bp
Chr1	13478391	13478391	Insertion_90bp
Chr1	13478646	13478646	Insertion_1014bp
Chr1	13479537	13479537	Insertion_92bp
Chr1	13482736	13490415	Deletion_7679bp
Chr1	13495422	13495988	Deletion_566bp
Chr1	13497505	13497576	Deletion_77bp
Chr1	13500480	13500564	Deletion_84bp
Chr1	13504156	13504156	Insertion_25bp
Chr1	13504262	13504262	Insertion_450bp
Chr1	13516669	13516669	Insertion_74bp
Chr1	13517346	13517370	Deletion_24bp
Chr1	13517763	13517763	Insertion_21bp
Chr1	13518895	13518915	Deletion_20bp

Chr1	19347183	19347183	Insertion_42bp
Chr1	19354842	19354842	Insertion_718bp
Chr1	5240331	5240331	Insertion_23bp
Chr1	5242236	5242236	Insertion_23bp
Chr1	1160225	1161226	Deletion_1001bp
Chr1	1162828	1162828	Insertion_26bp
Chr1	1172669	1172669	Insertion_34bp
Chr1	21482530	21482530	Insertion_24bp
Chr1	10587120	10587120	Insertion_98bp
Chr1	10591414	10591414	Insertion_30bp
Chr1	8298733	8298819	Deletion_86bp
Chr1	8309115	8309115	Insertion_44bp
Chr1	10440756	10441048	Deletion_292bp
Chr1	10443974	10444078	Deletion_104bp
Chr1	10444780	10444949	Deletion_169bp
Chr1	10452750	10452772	Deletion_22bp
Chr1	17854657	17854657	Insertion_55bp
Chr1	17854979	17857962	Deletion_2983bp
Chr1	16362233	16362233	Insertion_32bp
Chr1	16373826	16373826	Insertion_25bp
Chr1	16374535	16375137	Deletion_602bp
Chr1	16381126	16381126	Insertion_20bp
Chr1	4599033	4599140	Deletion_107bp
Chr1	21914655	21914682	Deletion_27bp
Chr1	21918435	21918984	Deletion_549bp
Chr1	626404	626505	Deletion_101bp
Chr1	634457	634535	Deletion_78bp
Chr1	639266	639304	Deletion_38bp
Chr1	8839886	8839886	Insertion_738bp
Chr1	8853418	8853418	Insertion_22bp
Chr1	24266236	24266236	Insertion_33bp
Chr1	24272591	24276441	Deletion_3860bp
Chr1	8558786	8558786	Insertion_24bp
Chr1	18386401	18387487	Deletion_1086bp
Chr1	5610380	5610428	Deletion_48bp
Chr1	25878649	25878649	Insertion_23bp
Chr1	23434665	23436006	Deletion_1341bp
Chr1	23440619	23440641	Deletion_22bp
Chr1	23449524	23449546	Deletion_22bp
Chr1	23451049	23451049	Insertion_40bp
Chr1	25126647	25126683	Deletion_36bp
Chr1	6952421	6952595	Deletion_174bp
Chr1	17862925	17863408	Deletion_483bp
Chr1	17863562	17863562	Insertion_48bp
Chr1	17872508	17872542	Deletion_34bp
Chr1	7525610	7525610	Insertion_31bp
Chr1	7536518	7536559	Deletion_41bp
Chr1	19931651	19931674	Deletion_23bp
Chr1	19932392	19932414	Deletion_22bp

Chr1	19941534	19941534	Insertion_2048bp
Chr1	19943461	19943461	Insertion_44bp
Chr1	22546605	22546631	Deletion_26bp
Chr1	22546752	22546752	Insertion_62bp
Chr1	16471965	16471965	Insertion_480bp
Chr1	16474459	16474494	Deletion_35bp
Chr1	16475366	16475366	Insertion_21bp
Chr1	16475730	16475730	Insertion_54bp
Chr1	16476352	16476352	Insertion_21bp
Chr1	17339672	17339741	Deletion_69bp
Chr1	17345597	17345619	Deletion_22bp
Chr1	17347813	17347813	Insertion_9478bp
Chr1	17348631	17348631	Insertion_70bp
Chr1	19649872	19649872	Insertion_40bp
Chr1	15200531	15200722	Deletion_191bp
Chr1	7822623	7822688	Deletion_65bp
Chr1	26880885	26880974	Deletion_89bp
Chr1	26883975	26883975	Insertion_41bp
Chr1	26886683	26886683	Insertion_36bp
Chr1	26887404	26888353	Deletion_949bp
Chr1	26889922	26889922	Insertion_81bp
Chr1	11033667	11033667	Insertion_33bp
Chr1	8356431	8356470	Deletion_39bp
Chr1	15416675	15416675	Insertion_24bp
Chr1	15421855	15421855	Insertion_67bp
Chr1	16601397	16601666	Deletion_269bp
Chr1	16601836	16601866	Deletion_30bp
Chr1	16603535	16603560	Deletion_25bp
Chr1	16603847	16603847	Insertion_20bp
Chr1	16607765	16607765	Insertion_30bp
Chr1	16613775	16613775	Insertion_29bp
Chr1	16613904	16613904	Insertion_28bp
Chr1	16615671	16615671	Insertion_37bp
Chr1	17438643	17438664	Deletion_21bp
Chr1	17439627	17439627	Insertion_33bp
Chr1	17448413	17448435	Deletion_22bp
Chr1	17449427	17449427	Insertion_20bp
Chr1	21112452	21112452	Insertion_28bp
Chr1	21114574	21114574	Insertion_20bp
Chr1	21115083	21115083	Insertion_34bp
Chr1	22219562	22219596	Deletion_34bp
Chr1	7953425	7953453	Deletion_28bp
Chr1	7954444	7954444	Insertion_32bp
Chr1	22387102	22387124	Deletion_22bp
Chr1	22391338	22391373	Deletion_35bp
Chr1	23198866	23198866	Insertion_260bp
Chr1	23199412	23199412	Insertion_33bp
Chr1	26583563	26583563	Insertion_40bp
Chr1	11095718	11095743	Deletion_25bp

Chr1	12581574	12581574	Insertion_419bp
Chr1	12583998	12584020	Deletion_22bp
Chr1	12584165	12584165	Insertion_77bp
Chr1	12591579	12591579	Insertion_106bp
Chr1	12594565	12601791	Deletion_7226bp
Chr1	12602277	12602277	Insertion_119bp
Chr1	2855648	2855686	Deletion_38bp
Chr1	2855934	2855959	Deletion_25bp
Chr1	21448551	21448551	Insertion_43bp
Chr1	21450127	21455991	Deletion_5864bp
Chr1	11937042	11937042	Insertion_39bp
Chr1	9554616	9554658	Deletion_42bp
Chr1	9301025	9301086	Deletion_61bp
Chr1	7508426	7508451	Deletion_25bp
Chr1	7509434	7509470	Deletion_36bp
Chr1	7518767	7518793	Deletion_26bp
Chr1	7521033	7521033	Insertion_27bp
Chr1	7521676	7521676	Insertion_102bp
Chr1	7498060	7498162	Deletion_102bp
Chr1	7505553	7505553	Insertion_59bp
Chr1	22330152	22330152	Insertion_51bp
Chr1	24831369	24831422	Deletion_59bp
Chr1	24831624	24832636	Deletion_1012bp
Chr1	17313962	17313983	Deletion_21bp
Chr1	17316402	17316426	Deletion_24bp
Chr1	17325651	17325727	Deletion_76bp
Chr1	17489065	17489137	Deletion_72bp
Chr1	22984572	22984572	Insertion_32bp
Chr1	2773226	2773257	Deletion_31bp
Chr1	2777180	2777453	Deletion_273bp
Chr1	18634351	18634379	Deletion_28bp
Chr1	22099476	22099476	Insertion_39bp
Chr1	22105927	22105955	Deletion_28bp
Chr1	22106112	22106112	Insertion_28bp
Chr1	88271	88271	Insertion_20bp
Chr1	90179	90210	Deletion_31bp
Chr1	90264	90306	Deletion_42bp
Chr1	90398	90433	Deletion_35bp
Chr1	29457362	29457362	Insertion_23bp
Chr1	29465403	29465403	Insertion_46bp
Chr1	13151832	13151832	Insertion_23bp
Chr1	13152490	13152543	Deletion_53bp
Chr1	26543259	26543283	Deletion_36bp
Chr1	16822219	16822219	Insertion_34bp
Chr1	16823192	16823192	Insertion_25bp
Chr1	16826991	16827025	Deletion_34bp
Chr1	16829372	16829372	Insertion_101bp
Chr1	16830057	16830386	Deletion_329bp
Chr1	16830798	16830844	Deletion_58bp

Chr1	28532946	28532946	Insertion_27bp
Chr1	28537485	28537590	Deletion_105bp
Chr1	7392265	7393396	Deletion_1131bp
Chr1	7397694	7397730	Deletion_36bp
Chr1	1293803	1293803	Insertion_22bp
Chr1	17193232	17193232	Insertion_40bp
Chr1	17193320	17193320	Insertion_24bp
Chr1	17197931	17197953	Deletion_22bp
Chr1	264450	264471	Deletion_21bp
Chr1	11347175	11347213	Deletion_38bp
Chr1	11348698	11348698	Insertion_296bp
Chr1	11350762	11350877	Deletion_115bp
Chr1	11351514	11352402	Deletion_888bp
Chr1	11364338	11364380	Deletion_42bp
Chr1	23892866	23892866	Insertion_29bp
Chr1	23894046	23894067	Deletion_21bp
Chr1	14426709	14426757	Deletion_48bp
Chr1	14430082	14430136	Deletion_54bp
Chr1	21977295	21977295	Insertion_145bp
Chr1	21978406	21978406	Insertion_99bp
Chr1	9406702	9406702	Insertion_52bp
Chr1	9407523	9407523	Insertion_88bp
Chr1	22811396	22811419	Deletion_23bp
Chr1	22817684	22817684	Insertion_688bp
Chr1	22910658	22910658	Insertion_23bp
Chr1	16910795	16910816	Deletion_21bp
Chr1	16915445	16915467	Deletion_22bp
Chr1	14156682	14156682	Insertion_24bp
Chr1	14157857	14157885	Deletion_28bp
Chr1	14159824	14159824	Insertion_30bp
Chr1	11071964	11071964	Insertion_24bp
Chr1	11076490	11076490	Insertion_768bp
Chr1	11077001	11077001	Insertion_27bp
Chr1	11082212	11082212	Insertion_298bp
Chr1	4382008	4382008	Insertion_54bp
Chr1	4383643	4383643	Insertion_38bp
Chr1	12867020	12867048	Deletion_28bp
Chr1	20163815	20163844	Deletion_29bp
Chr1	20164868	20164868	Insertion_84bp
Chr1	20166468	20166468	Insertion_24bp
Chr1	20166671	20167554	Deletion_883bp
Chr1	12382426	12382462	Deletion_36bp
Chr1	12385700	12385700	Insertion_119bp
Chr1	22411810	22411834	Deletion_24bp
Chr1	22412577	22412577	Insertion_239bp
Chr1	22415671	22415671	Insertion_28bp
Chr1	22416141	22416141	Insertion_76bp
Chr1	24844530	24844566	Deletion_36bp
Chr1	24845034	24845034	Insertion_21bp

Chr1	24846913	24846913	Insertion_822bp
Chr1	21711206	21711206	Insertion_33bp
Chr1	21717798	21718044	Deletion_246bp
Chr1	25407656	25407695	Deletion_39bp
Chr1	25410956	25410982	Deletion_26bp
Chr1	23146407	23146407	Insertion_30bp
Chr1	23148801	23148801	Insertion_1092bp
Chr1	22159593	22159641	Deletion_48bp
Chr1	16931471	16931471	Insertion_25bp
Chr1	11758400	11758400	Insertion_36bp
Chr1	16510634	16510634	Insertion_177bp
Chr1	16520924	16520963	Deletion_39bp
Chr1	19043637	19043673	Deletion_36bp
Chr1	19043993	19043993	Insertion_45bp
Chr1	29909973	29910029	Deletion_56bp
Chr1	29910573	29910573	Insertion_25bp
Chr1	29910995	29910995	Insertion_20bp
Chr1	11966790	11966816	Deletion_26bp
Chr1	11967934	11967982	Deletion_48bp
Chr1	12016038	12020187	Deletion_4149bp
Chr1	11321616	11321616	Insertion_70bp
Chr1	11321789	11321812	Deletion_23bp
Chr1	11325281	11325311	Deletion_30bp
Chr1	11325689	11325720	Deletion_31bp
Chr1	4329220	4329258	Deletion_38bp
Chr1	4329886	4334392	Deletion_4506bp
Chr1	12853937	12855992	Deletion_2055bp
Chr1	12859312	12859334	Deletion_22bp
Chr1	16814898	16814898	Insertion_31bp
Chr1	16816613	16816613	Insertion_22bp
Chr1	22763891	22763891	Insertion_64bp
Chr1	23282741	23282741	Insertion_57bp
Chr1	23289828	23289828	Insertion_30bp
Chr1	19403590	19403590	Insertion_62bp
Chr1	19405295	19405616	Deletion_321bp
Chr1	27790278	27790278	Insertion_275bp
Chr1	27790493	27790493	Insertion_56bp
Chr1	27796007	27796007	Insertion_57bp
Chr1	16862101	16862101	Insertion_41bp
Chr1	5665260	5665287	Deletion_27bp
Chr1	4044192	4044192	Insertion_29bp
Chr1	4045078	4045124	Deletion_46bp
Chr1	26731643	26731643	Insertion_433bp
Chr1	26736801	26736833	Deletion_32bp
Chr1	23509843	23509865	Deletion_22bp
Chr1	1706911	1706911	Insertion_29bp
Chr1	23481378	23481378	Insertion_34bp
Chr1	16582207	16582207	Insertion_24bp
Chr1	16588975	16589001	Deletion_26bp

Chr1	16589508	16589508	Insertion_9482bp
Chr1	16591931	16592489	Deletion_558bp
Chr1	13342699	13342699	Insertion_27bp
Chr1	19319185	19319185	Insertion_640bp
Chr1	19322378	19322378	Insertion_30bp
Chr1	19327774	19328204	Deletion_430bp
Chr1	19330868	19330868	Insertion_285bp
Chr1	22402531	22402531	Insertion_341bp
Chr1	22406733	22406733	Insertion_88bp
Chr1	15810269	15810278	Insertion_196bp
Chr1	15811558	15811583	Deletion_25bp
Chr1	15817042	15817062	Deletion_20bp
Chr1	8562459	8562459	Insertion_24bp
Chr1	16705313	16705358	Deletion_45bp
Chr1	11434047	11434047	Insertion_59bp
Chr1	23243912	23243946	Deletion_34bp
Chr1	24181382	24181382	Insertion_20bp
Chr1	25583242	25583282	Deletion_40bp
Chr1	25583295	25583295	Insertion_25bp
Chr1	25590542	25590542	Insertion_42bp
Chr1	12264327	12264577	Deletion_250bp
Chr1	19870334	19870334	Insertion_46bp
Chr1	19665417	19665840	Deletion_423bp
Chr1	19665947	19666674	Deletion_727bp
Chr1	15676718	15676748	Deletion_30bp
Chr1	15677540	15677540	Insertion_26bp
Chr1	15677558	15677558	Insertion_360bp
Chr1	15682435	15682435	Insertion_1958bp
Chr1	15683420	15683420	Insertion_164bp
Chr1	15685548	15685548	Insertion_59bp
Chr1	15687494	15687494	Insertion_31bp
Chr1	15688280	15688280	Insertion_289bp
Chr1	15690997	15691028	Deletion_31bp
Chr1	15692590	15692635	Deletion_45bp
Chr1	15694168	15694168	Insertion_24bp
Chr1	15694200	15694214	Insertion_36bp
Chr1	21519348	21519348	Insertion_286bp
Chr1	422264	422264	Insertion_20bp
Chr1	21416981	21417005	Deletion_24bp
Chr1	16161620	16161664	Deletion_44bp
Chr1	16163206	16163592	Deletion_386bp
Chr1	19218937	19218937	Insertion_215bp
Chr1	19220904	19220904	Insertion_2695bp
Chr1	19226339	19226608	Deletion_269bp
Chr1	19227171	19227171	Insertion_39bp
Chr1	21107368	21107399	Deletion_31bp
Chr1	13057861	13057861	Insertion_30bp
Chr1	13058389	13058409	Deletion_20bp
Chr1	24702794	24702800	Insertion_21bp

Chr1	24703364	24703364	Insertion_24bp
Chr1	24703681	24703681	Insertion_32bp
Chr1	24704986	24706025	Deletion_1039bp
Chr1	24706542	24706542	Insertion_20bp
Chr1	23279291	23279335	Deletion_44bp
Chr1	19251567	19251860	Deletion_293bp
Chr1	16130785	16130785	Insertion_30bp
Chr1	16130987	16131578	Deletion_591bp
Chr1	16136686	16136686	Insertion_23bp
Chr1	22888508	22888533	Deletion_25bp
Chr1	22888565	22888591	Deletion_26bp
Chr1	24005018	24005018	Insertion_237bp
Chr1	23320909	23321690	Deletion_781bp
Chr1	23322308	23322551	Deletion_243bp
Chr1	21731633	21732232	Deletion_599bp
Chr1	22836523	22836523	Insertion_20bp
Chr1	22841931	22841931	Insertion_33bp
Chr1	12249351	12249351	Insertion_431bp
Chr1	16967528	16967528	Insertion_26bp
Chr1	22573449	22573482	Deletion_33bp
Chr1	16573806	16573806	Insertion_27bp
Chr1	24670530	24670530	Insertion_20bp
Chr1	22575795	22575851	Deletion_56bp
Chr1	22577011	22577060	Deletion_49bp
Chr1	22578062	22579289	Deletion_1227bp
Chr1	29306860	29306860	Insertion_20bp
Chr1	29647987	29648039	Deletion_52bp
Chr1	20098458	20098481	Deletion_23bp
Chr1	1724129	1724155	Deletion_26bp
Chr1	7964668	7964706	Deletion_38bp
Chr1	7969346	7974598	Deletion_5252bp
Chr1	7976441	7976495	Deletion_54bp
Chr1	7982280	7982280	Insertion_686bp
Chr1	1250027	1250207	Deletion_180bp
Chr1	1251935	1251965	Deletion_30bp
Chr1	3768643	3768666	Deletion_23bp
Chr1	18373552	18373552	Insertion_1003bp
Chr1	1148569	1148569	Insertion_32bp
Chr1	14541704	14541704	Insertion_44bp
Chr1	11064469	11067157	Deletion_2688bp
Chr1	11067200	11067256	Deletion_56bp
Chr1	16307789	16307856	Deletion_67bp
Chr1	16311071	16316912	Deletion_5841bp
Chr1	15426779	15426779	Insertion_21bp
Chr1	16983020	16983044	Deletion_24bp
Chr1	21702301	21702301	Insertion_5439bp
Chr1	13200125	13200206	Deletion_81bp
Chr1	13200860	13200860	Insertion_39bp
Chr1	13201249	13201353	Deletion_104bp

Chr1	22727187	22727269	Deletion_82bp
Chr1	22729497	22729497	Insertion_33bp
Chr1	19954418	19954438	Deletion_20bp
Chr1	24938930	24938961	Deletion_31bp
Chr1	24939440	24939440	Insertion_41bp
Chr1	24940698	24940698	Insertion_2402bp
Chr1	24942088	24942140	Deletion_52bp
Chr1	24942790	24942864	Deletion_74bp
Chr1	22779922	22779978	Deletion_56bp
Chr1	22781407	22781439	Deletion_32bp
Chr1	15735466	15735493	Deletion_27bp
Chr1	15736302	15736302	Insertion_35bp
Chr1	15736608	15736639	Deletion_31bp
Chr1	15738261	15738955	Deletion_694bp
Chr1	15743010	15743010	Insertion_161bp
Chr1	26863725	26863725	Insertion_40bp
Chr1	26869823	26869833	Insertion_95bp
Chr1	26870874	26870874	Insertion_289bp
Chr1	26871387	26871418	Deletion_31bp
Chr1	16938527	16938527	Insertion_58bp
Chr1	11004795	11004833	Deletion_38bp
Chr1	22091286	22091286	Insertion_133bp
Chr1	22093184	22093184	Insertion_27bp
Chr1	22093368	22093368	Insertion_59bp
Chr1	11953556	11953556	Insertion_30bp
Chr1	11953644	11953644	Insertion_60bp
Chr1	11954215	11954231	Insertion_152bp
Chr1	17839971	17839994	Deletion_23bp
Chr1	22798358	22798358	Insertion_31bp
Chr1	23172563	23172809	Deletion_246bp
Chr1	23174135	23174135	Insertion_251bp
Chr1	16139129	16139133	Insertion_1361bp
Chr1	16142373	16142373	Insertion_28bp
Chr1	16144712	16144712	Insertion_94bp
Chr1	16216853	16216853	Insertion_20bp
Chr1	16220175	16220175	Insertion_20bp
Chr1	8581156	8581237	Deletion_81bp
Chr1	8583233	8583451	Deletion_218bp
Chr1	8586191	8586213	Deletion_22bp
Chr1	8589129	8589162	Deletion_33bp
Chr1	30287613	30287639	Deletion_26bp
Chr1	523888	523928	Deletion_40bp
Chr1	529057	529086	Deletion_29bp
Chr1	529542	529542	Insertion_81bp
Chr1	24106881	24106881	Insertion_32bp
Chr1	25009544	25009544	Insertion_61bp
Chr1	25010650	25013379	Deletion_2729bp
Chr1	19903847	19903847	Insertion_24bp
Chr1	24767831	24767859	Deletion_28bp

Chr1	24769939	24769939	Insertion_30bp
Chr1	24772178	24773043	Deletion_865bp
Chr1	24776751	24776751	Insertion_37bp
Chr1	22370508	22370508	Insertion_23bp
Chr1	12736834	12736920	Deletion_86bp
Chr1	12738308	12740004	Deletion_1696bp
Chr1	12741889	12741889	Insertion_53bp
Chr1	16392624	16393981	Deletion_1357bp
Chr1	16394166	16394207	Deletion_41bp
Chr1	16397294	16397294	Insertion_275bp
Chr1	12358456	12358456	Insertion_20bp
Chr1	12359439	12359439	Insertion_75bp
Chr1	12362428	12362428	Insertion_424bp
Chr1	12362818	12362818	Insertion_53bp
Chr1	12363231	12363231	Insertion_40bp
Chr1	16673525	16673525	Insertion_338bp
Chr1	16675375	16684349	Deletion_8974bp
Chr1	11531865	11531865	Insertion_29bp
Chr1	11536701	11536725	Deletion_24bp
Chr1	22069224	22069850	Deletion_626bp
Chr1	22071664	22071664	Insertion_48bp
Chr1	21952627	21952627	Insertion_48bp
Chr1	23311935	23311935	Insertion_34bp
Chr1	11340132	11340132	Insertion_29bp
Chr1	7645982	7646009	Deletion_27bp
Chr1	27651951	27651951	Insertion_74bp
Chr1	24279434	24279493	Deletion_59bp
Chr1	24282626	24282626	Insertion_64bp
Chr1	24285819	24285819	Insertion_113bp
Chr1	24286308	24286308	Insertion_1356bp
Chr1	24290283	24290645	Deletion_362bp
Chr1	4194343	4194343	Insertion_30bp
Chr1	4194535	4194535	Insertion_32bp
Chr1	20685658	20685658	Insertion_30bp
Chr1	6753062	6753092	Deletion_30bp
Chr1	27559334	27559386	Deletion_52bp
Chr1	27561567	27561599	Deletion_32bp
Chr1	15223830	15223830	Insertion_21bp
Chr1	23493408	23493408	Insertion_238bp
Chr1	23494281	23494281	Insertion_193bp
Chr1	23494888	23494924	Deletion_36bp
Chr1	23495210	23495210	Insertion_44bp
Chr1	23495937	23495937	Insertion_38bp
Chr1	26158802	26158823	Deletion_21bp
Chr1	24130985	24130985	Insertion_54bp
Chr1	16352182	16352182	Insertion_24bp
Chr1	23112445	23112467	Deletion_22bp
Chr1	23116626	23116626	Insertion_24bp
Chr1	23118236	23123214	Deletion_4978bp

Chr1	17647931	17647931	Insertion_36bp
Chr1	24964244	24964244	Insertion_22bp
Chr1	24964520	24964520	Insertion_63bp
Chr1	22714568	22714589	Deletion_21bp
Chr1	16839466	16839466	Insertion_163bp
Chr1	16842309	16842309	Insertion_22bp
Chr1	16842894	16842915	Deletion_21bp
Chr1	16845334	16845355	Deletion_21bp
Chr1	8579752	8579752	Insertion_22bp
Chr1	23517736	23517736	Insertion_30bp
Chr1	23521840	23521840	Insertion_42bp
Chr1	16231594	16231631	Deletion_37bp
Chr1	13653150	13653269	Deletion_119bp
Chr1	13659267	13667557	Deletion_8290bp
Chr1	13668897	13668938	Deletion_41bp
Chr1	13672064	13672113	Deletion_49bp
Chr1	12127576	12127576	Insertion_131bp
Chr1	12287820	12289539	Deletion_1719bp
Chr1	12290832	12290832	Insertion_414bp
Chr1	11586028	11586028	Insertion_21bp
Chr1	21432142	21432142	Insertion_24bp
Chr1	12660468	12660468	Insertion_31bp
Chr1	7638117	7638117	Insertion_40bp
Chr1	23259691	23259737	Deletion_46bp
Chr1	16268959	16268988	Deletion_29bp
Chr1	16269240	16269263	Deletion_23bp
Chr1	16271321	16271363	Deletion_52bp
Chr1	16273619	16273619	Insertion_59bp
Chr1	23458846	23458885	Deletion_39bp
Chr1	16508218	16508244	Deletion_26bp
Chr1	13407452	13407452	Insertion_45bp
Chr1	13407737	13408253	Deletion_516bp
Chr1	19390633	19391081	Deletion_448bp
Chr1	30352962	30352994	Deletion_32bp
Chr1	15789204	15792166	Deletion_2962bp
Chr1	15795660	15800791	Deletion_5131bp
Chr1	15806827	15807141	Deletion_314bp
Chr1	21661614	21661642	Deletion_28bp
Chr1	15908084	15908084	Insertion_32bp
Chr1	15908280	15909274	Deletion_994bp
Chr1	15911525	15911536	Insertion_311bp
Chr1	11287972	11288024	Deletion_52bp
Chr1	11982590	11982610	Deletion_20bp
Chr1	29468804	29468835	Deletion_31bp
Chr1	29470756	29470756	Insertion_121bp
Chr1	17008311	17008338	Deletion_27bp
Chr1	8415192	8415214	Deletion_22bp
Chr1	17691473	17691473	Insertion_78bp
Chr1	24049725	24049725	Insertion_72bp

Chr1	12762851	12762876	Deletion_25bp
Chr1	12764547	12764571	Deletion_24bp
Chr1	12765605	12765605	Insertion_63bp
Chr1	12767467	12767467	Insertion_33bp
Chr1	2763686	2763686	Insertion_21bp
Chr1	2768860	2768860	Insertion_27bp
Chr1	6455592	6455703	Deletion_111bp
Chr1	6456722	6456722	Insertion_301bp
Chr1	6457278	6457325	Deletion_47bp
Chr1	9083520	9083558	Deletion_38bp
Chr1	12279700	12279700	Insertion_36bp
Chr1	12280078	12280078	Insertion_536bp
Chr1	12280154	12280198	Deletion_88bp
Chr1	12280359	12280359	Insertion_24bp
Chr1	24344444	24344488	Deletion_44bp
Chr1	15430759	15430780	Deletion_21bp
Chr1	13470951	13471544	Deletion_593bp
Chr1	18427812	18427812	Insertion_45bp
Chr1	18430978	18430978	Insertion_239bp
Chr1	18431066	18431066	Insertion_49bp
Chr1	24809485	24809511	Deletion_26bp
Chr1	24882002	24882037	Deletion_35bp
Chr1	12148963	12149005	Deletion_42bp
Chr1	11251722	11251758	Deletion_36bp
Chr1	11253968	11253968	Insertion_32bp
Chr1	24172322	24172322	Insertion_23bp
Chr1	4242356	4242356	Insertion_31bp
Chr1	23131163	23131206	Deletion_43bp
Chr1	14927874	14928033	Deletion_159bp
Chr1	14929327	14929378	Deletion_51bp
Chr1	22738145	22738145	Insertion_29bp
Chr1	20699801	20700047	Deletion_246bp
Chr1	6146907	6146934	Deletion_27bp
Chr1	21402016	21402038	Deletion_22bp
Chr1	21402150	21402150	Insertion_46bp
Chr1	21402655	21402655	Insertion_104bp
Chr1	21402963	21402991	Deletion_28bp
Chr1	22359764	22359788	Deletion_24bp
Chr1	22362914	22363243	Deletion_329bp
Chr1	16965003	16965023	Deletion_20bp
Chr1	16965211	16965211	Insertion_51bp
Chr1	18632138	18633794	Deletion_1656bp
Chr1	17827282	17827306	Deletion_24bp
Chr1	8572449	8572449	Insertion_35bp
Chr1	24723529	24723529	Insertion_134bp
Chr1	15893756	15893777	Deletion_21bp
Chr1	26859293	26859293	Insertion_91bp
Chr1	26860638	26860638	Insertion_22bp
Chr1	22492575	22492575	Insertion_22bp

Chr1	12970001	12970001	Insertion_30bp
Chr1	12971219	12971219	Insertion_41bp
Chr1	24701408	24701436	Deletion_28bp
Chr1	15526517	15526567	Deletion_50bp
Chr1	15527593	15527617	Deletion_24bp
Chr1	15897044	15897044	Insertion_20bp
Chr1	24851595	24851595	Insertion_25bp
Chr1	24852203	24852203	Insertion_44bp
Chr1	18010554	18010583	Deletion_29bp
Chr1	22076293	22076293	Insertion_32bp
Chr1	22076504	22076535	Deletion_31bp
Chr1	23330742	23330742	Insertion_42bp
Chr1	23332074	23332106	Deletion_32bp
Chr1	7829861	7829891	Deletion_30bp
Chr1	13067753	13067753	Insertion_28bp
Chr1	13068978	13068978	Insertion_50bp
Chr1	25428305	25428305	Insertion_405bp
Chr1	17329155	17329253	Deletion_98bp
Chr1	17330113	17330113	Insertion_26bp
Chr1	17331813	17331813	Insertion_24bp
Chr1	12017217	12017217	Insertion_46bp
Chr1	12019167	12019167	Insertion_27bp
Chr1	12019433	12019433	Insertion_20bp
Chr1	22624626	22624626	Insertion_114bp
Chr1	23825031	23825051	Deletion_20bp
Chr1	23844036	23844858	Deletion_822bp
Chr1	11671266	11671266	Insertion_1552bp
Chr1	21384078	21384120	Deletion_42bp
Chr1	21386246	21386246	Insertion_716bp
Chr1	11068615	11068615	Insertion_75bp
Chr1	24946264	24947640	Deletion_1376bp
Chr1	1898584	1898584	Insertion_37bp
Chr1	1899329	1899329	Insertion_60bp
Chr1	12813072	12813072	Insertion_50bp
Chr1	12815687	12815687	Insertion_169bp
Chr1	12816748	12816748	Insertion_41bp
Chr1	13462875	13462911	Deletion_36bp
Chr1	21691683	21691719	Deletion_36bp
Chr1	11418426	11418451	Deletion_25bp
Chr1	11420502	11420522	Deletion_20bp
Chr1	26856592	26856592	Insertion_23bp
Chr1	21394102	21394150	Deletion_48bp
Chr1	21394255	21394255	Insertion_366bp
Chr1	21398341	21399085	Deletion_744bp
Chr1	21399706	21399732	Deletion_26bp
Chr1	13209655	13209703	Deletion_48bp
Chr1	13210464	13210464	Insertion_21bp
Chr1	13211027	13211264	Deletion_237bp
Chr1	13211357	13214177	Deletion_2820bp

Chr1	13215153	13216191	Deletion_1038bp
Chr1	15670695	15670695	Insertion_55bp
Chr1	15672898	15673320	Deletion_422bp
Chr1	11027615	11027615	Insertion_28bp
Chr1	8837049	8837049	Insertion_52bp
Chr1	16445862	16445862	Insertion_242bp
Chr1	7913256	7913431	Deletion_175bp
Chr1	7915168	7915211	Deletion_43bp
Chr1	5055646	5055646	Insertion_50bp
Chr1	5055970	5056354	Deletion_384bp
Chr1	29472342	29472342	Insertion_207bp
Chr1	29472521	29472521	Insertion_210bp
Chr1	29474305	29474305	Insertion_302bp
Chr1	29474552	29479486	Deletion_4934bp
Chr1	13156286	13156286	Insertion_1093bp
Chr1	24046828	24046828	Insertion_32bp
Chr1	26326240	26326260	Deletion_20bp
Chr1	22562031	22562076	Deletion_45bp
Chr1	25580291	25580291	Insertion_111bp
Chr1	21741695	21741715	Deletion_20bp
Chr1	21741774	21744195	Deletion_2421bp
Chr1	21744478	21744478	Insertion_25bp
Chr1	7907732	7909822	Deletion_2090bp
Chr1	21126480	21126480	Insertion_93bp
Chr1	21126695	21126695	Insertion_42bp
Chr1	17653890	17653890	Insertion_51bp
Chr1	2321576	2321576	Insertion_25bp
Chr1	24550221	24550221	Insertion_27bp
Chr1	22599145	22599145	Insertion_32bp
Chr1	11442910	11442910	Insertion_25bp
Chr1	23722129	23722155	Deletion_26bp
Chr1	23723245	23723345	Deletion_100bp
Chr1	23723693	23724070	Deletion_377bp
Chr1	20835508	20835508	Insertion_59bp
Chr1	21680865	21680905	Deletion_40bp
Chr1	21681520	21682488	Deletion_968bp
Chr1	22768764	22768786	Deletion_22bp
Chr1	10429066	10429066	Insertion_20bp
Chr1	24251762	24251762	Insertion_25bp
Chr1	16700930	16700930	Insertion_30bp
Chr1	24875988	24875988	Insertion_80bp
Chr1	24876692	24876692	Insertion_26bp
Chr1	16566972	16566972	Insertion_21bp
Chr1	16567755	16567781	Deletion_26bp
Chr1	23341032	23341032	Insertion_2099bp
Chr1	12729596	12729641	Deletion_45bp
Chr1	12731170	12731170	Insertion_169bp
Chr1	24920939	24920965	Deletion_26bp
Chr1	21313465	21313465	Insertion_53bp

Chr1	20918333	20918333	Insertion_56bp
Chr1	20918369	20918389	Deletion_20bp
Chr1	21947132	21947172	Deletion_40bp
Chr1	23164570	23164570	Insertion_29bp
Chr1	27703959	27703959	Insertion_29bp
Chr1	1189554	1189578	Deletion_24bp
Chr1	14742141	14742300	Deletion_159bp
Chr1	11501223	11501269	Deletion_46bp
Chr1	11501357	11501478	Deletion_121bp
Chr1	11902874	11902874	Insertion_26bp
Chr1	15240273	15240302	Deletion_29bp
Chr1	19957092	19957092	Insertion_71bp
Chr1	15100844	15100844	Insertion_41bp
Chr1	17685081	17685081	Insertion_38bp
Chr1	18157750	18157750	Insertion_31bp
Chr1	17005289	17005289	Insertion_2003bp
Chr1	17007455	17007455	Insertion_24bp
Chr1	15094750	15094750	Insertion_42bp
Chr1	5675245	5675281	Deletion_36bp
Chr1	18157750	18157750	Insertion_31bp
Chr1	29481796	29481822	Deletion_26bp
Chr1	12157352	12157352	Insertion_30bp
Chr1	21221105	21221169	Deletion_64bp
Chr1	17833669	17833669	Insertion_20bp
Chr1	26897095	26897128	Deletion_33bp
Chr1	26897849	26898138	Deletion_289bp
Chr1	19944287	19944323	Deletion_36bp
Chr1	19944808	19944835	Deletion_34bp
Chr1	22059772	22060108	Deletion_336bp
Chr1	17687471	17687499	Deletion_28bp
Chr1	22496753	22496782	Deletion_29bp
Chr1	22063570	22063609	Deletion_39bp
Chr1	11335776	11335776	Insertion_1206bp
Chr1	15098313	15098313	Insertion_410bp
Chr1	5656257	5656391	Deletion_134bp
Chr1	1725021	1725021	Insertion_20bp
Chr1	17435134	17435134	Insertion_28bp
Chr1	16728382	16728403	Deletion_21bp
Chr1	14743646	14743646	Insertion_318bp
Chr1	14744525	14744684	Deletion_159bp
Chr1	8683708	8683708	Insertion_47bp
Chr1	22787579	22787625	Deletion_46bp
Chr1	24997405	24997405	Insertion_34bp
Chr1	8697143	8697180	Deletion_37bp
Chr1	17801414	17801414	Insertion_155bp
Chr1	17802137	17802137	Insertion_23bp
Chr1	3828655	3828993	Deletion_338bp
Chr1	3829088	3829127	Deletion_39bp
Chr1	18157412	18157434	Deletion_22bp

Chr1	24681732	24681732	Insertion_28bp
Chr1	23026375	23026375	Insertion_30bp
Chr1	1714950	1714950	Insertion_58bp
Chr1	22127020	22127020	Insertion_29bp
Chr1	22778032	22778060	Deletion_28bp
Chr1	16511065	16511117	Deletion_52bp
Chr1	1011239	1011239	Insertion_32bp
Chr1	1727427	1727427	Insertion_23bp
Chr1	11226897	11226930	Deletion_33bp
Chr1	24542234	24542234	Insertion_124bp
Chr1	22558994	22559016	Deletion_22bp
Chr1	13203981	13204012	Deletion_31bp
Chr1	11931788	11931788	Insertion_181bp
Chr1	24725633	24725633	Insertion_32bp
Chr1	24725909	24725909	Insertion_27bp
Chr1	23822919	23822919	Insertion_172bp
Chr1	30294515	30294515	Insertion_37bp
Chr1	16520169	16520228	Deletion_59bp
Chr1	15199092	15199112	Deletion_20bp
Chr1	3807098	3807098	Insertion_27bp
Chr1	3807973	3807973	Insertion_249bp
Chr1	22614532	22614565	Deletion_33bp
Chr1	1246160	1246160	Insertion_136bp
Chr1	15320205	15320205	Insertion_21bp
Chr1	15320319	15320319	Insertion_54bp
Chr1	15228241	15228241	Insertion_49bp
Chr1	26980727	26980749	Deletion_22bp
Chr1	13088266	13088334	Deletion_68bp
Chr1	15320616	15320616	Insertion_21bp
Chr1	15194676	15194696	Deletion_20bp
Chr1	23056900	23056922	Deletion_22bp
Chr1	16360489	16360531	Deletion_42bp
Chr1	15199634	15199654	Deletion_20bp
Chr1	15201325	15201370	Deletion_45bp
Chr1	14666138	14666218	Deletion_80bp
Chr1	14669152	14669173	Deletion_21bp
Chr1	11318039	11318076	Deletion_37bp
Chr1	13593258	13593279	Deletion_21bp
Chr1	9848581	9848581	Insertion_52bp
Chr1	12253933	12253933	Insertion_39bp
Chr1	12254242	12254306	Deletion_64bp
Chr1	5777557	5777557	Insertion_29bp
Chr1	11809678	11809694	Insertion_23bp
Chr1	25024582	25024582	Insertion_46bp
Chr1	21065062	21065062	Insertion_35bp
Chr1	21066253	21066273	Deletion_20bp
Chr1	13466925	13466925	Insertion_40bp
Chr1	1183937	1183999	Deletion_62bp
Chr1	27118065	27118065	Insertion_32bp

Chr1	15094727	15094727	Insertion_56bp
Chr1	15055806	15055826	Deletion_20bp
Chr1	16805008	16805008	Insertion_31bp
Chr1	11171413	11171460	Deletion_47bp
Chr1	15120023	15120023	Insertion_92bp
Chr1	15120964	15120984	Deletion_20bp
Chr1	24338905	24338933	Deletion_28bp
Chr1	15732210	15732232	Deletion_22bp
Chr1	11934244	11934244	Insertion_39bp
Chr1	8496953	8497005	Deletion_52bp
Chr1	18002076	18002076	Insertion_36bp
Chr1	11874327	11874327	Insertion_35bp
Chr1	7507158	7507158	Insertion_28bp
Chr1	15230606	15230626	Deletion_20bp
Chr1	21462346	21462371	Deletion_25bp
Chr1	15131851	15131851	Insertion_91bp
Chr1	15132321	15132321	Insertion_196bp
Chr1	9081634	9082920	Deletion_1286bp
Chr1	13589966	13589966	Insertion_32bp
Chr1	15172255	15172255	Insertion_50bp
Chr1	24042713	24042747	Deletion_34bp
Chr1	14809023	14809230	Deletion_207bp
Chr1	15127921	15127921	Insertion_84bp
Chr1	15742649	15742673	Deletion_24bp
Chr1	15743010	15743010	Insertion_161bp
Chr1	8494627	8494627	Insertion_25bp
Chr1	5235441	5235441	Insertion_43bp
Chr1	27426275	27426298	Deletion_23bp
Chr1	27426628	27426628	Insertion_31bp
Chr1	8677465	8677465	Insertion_276bp
Chr1	15263252	15263290	Deletion_38bp
Chr1	13387299	13387499	Deletion_200bp
Chr1	15171717	15171742	Deletion_25bp
Chr1	15172601	15173080	Deletion_479bp
Chr1	15173533	15173566	Deletion_33bp
Chr1	12502724	12502724	Insertion_23bp
Chr1	15152215	15152215	Insertion_68bp
Chr1	15153332	15153332	Insertion_33bp
Chr1	15153440	15153440	Insertion_39bp
Chr1	13742530	13742556	Deletion_26bp
Chr1	16012938	16012938	Insertion_55bp
Chr1	16017134	16017134	Insertion_87bp
Chr1	20476568	20476637	Deletion_69bp
Chr1	14591374	14591374	Insertion_32bp
Chr1	14591760	14591760	Insertion_28bp
Chr1	14592155	14592155	Insertion_28bp
Chr1	16019011	16019011	Insertion_20bp
Chr1	12619711	12619731	Deletion_20bp
Chr1	15042083	15042083	Insertion_47bp

Chr1	15044742	15044764	Deletion_22bp
Chr1	13374723	13374760	Deletion_37bp
Chr1	15785949	15786019	Deletion_70bp
Chr1	13260415	13260415	Insertion_37bp
Chr1	25640161	25640187	Deletion_26bp
Chr1	15070175	15070175	Insertion_20bp
Chr1	15070364	15070364	Insertion_41bp
Chr1	15072538	15072569	Deletion_31bp
Chr1	7985226	7985226	Insertion_28bp
Chr1	7985421	7985421	Insertion_56bp
Chr1	15040480	15040480	Insertion_47bp
Chr1	500834	500834	Insertion_52bp
Chr1	13841202	13841233	Deletion_31bp
Chr1	13788650	13788672	Deletion_22bp
Chr1	20313836	20313836	Insertion_47bp
Chr1	20315352	20315352	Insertion_28bp
Chr1	16509991	16510056	Deletion_65bp
Chr1	19678561	19678594	Deletion_33bp
Chr1	7282598	7282598	Insertion_26bp
Chr1	6539686	6539710	Deletion_24bp
Chr1	6540873	6541122	Insertion_260bp
Chr1	13577946	13577984	Deletion_38bp
Chr1	4010077	4010140	Deletion_63bp
Chr1	15450147	15450195	Deletion_48bp
Chr1	23727429	23727454	Deletion_25bp
Chr1	11459594	11459663	Deletion_69bp
Chr1	21777431	21777431	Insertion_57bp
Chr1	16512907	16516640	Tandem_expansion_3946bp
Chr1	16517324	16518984	Repeat_contraction_72bp
Chr1	257709	258936	Repeat_contraction_1111bp
Chr1	270200	270251	Deletion_27bp
Chr1	352664	352777	Repeat_expansion_311bp
Chr1	423060	424181	Repeat_contraction_169bp
Chr1	426792	429233	Repeat_contraction_80bp
Chr1	430604	435098	Repeat_contraction_965bp
Chr1	477349	477467	Repeat_expansion_23bp
Chr1	521776	523415	Repeat_contraction_247bp
Chr1	535722	536066	Repeat_expansion_2403bp
Chr1	551573	552631	Repeat_contraction_474bp
Chr1	609518	610060	Repeat_expansion_30bp
Chr1	624842	626165	Repeat_contraction_93bp
Chr1	789330	789861	Repeat_contraction_294bp
Chr1	1009465	1009502	Insertion_38bp
Chr1	1142105	1142452	Repeat_contraction_49bp
Chr1	1143049	1143292	Repeat_expansion_119bp
Chr1	1147500	1147670	Repeat_contraction_21bp
Chr1	1176860	1176976	Repeat_contraction_44bp
Chr1	1178330	1178778	Repeat_contraction_48bp
Chr1	1184220	1185527	Repeat_expansion_1612bp

Chr1	1186313	1186445	Repeat_contraction_60bp
Chr1	1192300	1192331	Insertion_49bp
Chr1	1226205	1226506	Repeat_contraction_64bp
Chr1	1245476	1245649	Repeat_contraction_27bp
Chr1	1258309	1258602	Repeat_expansion_26bp
Chr1	1286689	1288801	Repeat_expansion_1253bp
Chr1	1299616	1300252	Repeat_contraction_50bp
Chr1	1476471	1476714	Deletion_219bp
Chr1	1504090	1506083	Repeat_contraction_21bp
Chr1	1704922	1706439	Repeat_contraction_1019bp
Chr1	1724779	1724862	Repeat_expansion_41bp
Chr1	1725721	1726687	Repeat_contraction_266bp
Chr1	1727039	1727300	Repeat_contraction_25bp
Chr1	1728673	1729167	Repeat_expansion_413bp
Chr1	1774050	1774173	Repeat_expansion_22bp
Chr1	1822857	1823492	Repeat_expansion_91bp
Chr1	1823845	1824245	Repeat_contraction_33bp
Chr1	1935503	1935631	Tandem_expansion_2203bp
Chr1	2029760	2031716	Deletion_1940bp
Chr1	2109620	2109746	Repeat_expansion_21bp
Chr1	2129967	2130141	Repeat_expansion_32bp
Chr1	2292601	2293928	Repeat_contraction_198bp
Chr1	2299354	2299534	Repeat_expansion_967bp
Chr1	2319434	2319869	Repeat_contraction_23bp
Chr1	2322070	2322713	Repeat_expansion_4301bp
Chr1	2409856	2412187	Tandem_contraction_3131bp
Chr1	2493365	2493690	Repeat_contraction_135bp
Chr1	2703541	2704390	Repeat_contraction_26bp
Chr1	2705772	2705900	Repeat_expansion_32bp
Chr1	2711396	2711747	Repeat_expansion_38bp
Chr1	2751137	2752071	Repeat_expansion_23bp
Chr1	2762189	2762223	Deletion_29bp
Chr1	2769531	2769760	Repeat_expansion_21bp
Chr1	2784130	2800695	Repeat_contraction_12244bp
Chr1	2854240	2854510	Repeat_contraction_27bp
Chr1	3090045	3090304	Deletion_237bp
Chr1	3303742	3303946	Tandem_expansion_2820bp
Chr1	3412944	3414842	Repeat_contraction_1216bp
Chr1	3759707	3762989	Repeat_contraction_330bp
Chr1	3769977	3771861	Repeat_contraction_853bp
Chr1	3804538	3806970	Repeat_expansion_126bp
Chr1	3808782	3809324	Repeat_contraction_24bp
Chr1	3823799	3824647	Repeat_contraction_38bp
Chr1	3825613	3827748	Repeat_contraction_957bp
Chr1	3861319	3861741	Repeat_contraction_310bp
Chr1	4171445	4171511	Repeat_expansion_986bp
Chr1	4197031	4198863	Repeat_expansion_2292bp
Chr1	4259789	4262429	Tandem_contraction_2803bp
Chr1	4289075	4290226	Repeat_contraction_43bp

Chr1	4290843	4294620	Repeat_expansion_662bp
Chr1	4297156	4298431	Repeat_expansion_59bp
Chr1	4299491	4304346	Repeat_expansion_1295bp
Chr1	4326276	4326767	Repeat_contraction_94bp
Chr1	4373951	4374147	Repeat_expansion_104bp
Chr1	4461239	4461317	Repeat_expansion_2650bp
Chr1	4551746	4552153	Repeat_expansion_32bp
Chr1	4581811	4583568	Repeat_expansion_219bp
Chr1	4584237	4584477	Repeat_expansion_64bp
Chr1	4586991	4587586	Repeat_contraction_20bp
Chr1	4603547	4604496	Repeat_contraction_62bp
Chr1	4742074	4743095	Tandem_contraction_1096bp
Chr1	4824309	4825627	Repeat_contraction_35bp
Chr1	4827102	4827968	Repeat_contraction_36bp
Chr1	5048928	5049129	Repeat_expansion_98bp
Chr1	5089126	5089337	Repeat_contraction_26bp
Chr1	5090190	5090461	Repeat_expansion_109bp
Chr1	5176583	5176669	Repeat_expansion_709bp
Chr1	5187160	5187551	Repeat_contraction_221bp
Chr1	5298257	5298296	Insertion_47bp
Chr1	5369785	5374697	Repeat_expansion_1973bp
Chr1	5391408	5393244	Repeat_contraction_1235bp
Chr1	5393969	5395937	Repeat_contraction_171bp
Chr1	5428097	5428535	Repeat_contraction_327bp
Chr1	5453059	5453154	Repeat_expansion_1243bp
Chr1	5459812	5464406	Repeat_expansion_163bp
Chr1	5464849	5465284	Repeat_contraction_40bp
Chr1	5562582	5562669	Repeat_contraction_20bp
Chr1	5595933	5596490	Repeat_expansion_63bp
Chr1	5611143	5611478	Repeat_expansion_316bp
Chr1	5623479	5623544	Repeat_expansion_29bp
Chr1	5653685	5655089	Repeat_expansion_69bp
Chr1	5657668	5659279	Repeat_contraction_1337bp
Chr1	5865935	5866118	Repeat_expansion_69bp
Chr1	5868713	5869869	Repeat_expansion_77bp
Chr1	5939572	5940524	Repeat_contraction_32bp
Chr1	6173266	6173566	Repeat_contraction_79bp
Chr1	6196835	6197645	Deletion_771bp
Chr1	6379728	6379891	Tandem_contraction_1207bp
Chr1	6455054	6455341	Repeat_contraction_198bp
Chr1	6538379	6543536	Repeat_contraction_4657bp
Chr1	6742480	6744238	Repeat_contraction_1241bp
Chr1	6759615	6773374	Repeat_contraction_6074bp
Chr1	6965991	6966102	Repeat_expansion_155bp
Chr1	7023545	7025790	Repeat_contraction_1878bp
Chr1	7026364	7028045	Deletion_1681bp
Chr1	7031343	7031778	Repeat_contraction_38bp
Chr1	7076484	7076880	Repeat_expansion_126bp
Chr1	7077785	7078087	Repeat_contraction_172bp

Chr1	7166039	7166401	Repeat_expansion_22bp
Chr1	7199113	7200355	Repeat_contraction_187bp
Chr1	7241377	7241487	Repeat_expansion_22bp
Chr1	7282498	7282598	Repeat_expansion_22bp
Chr1	7492694	7492745	Deletion_32bp
Chr1	7505805	7507010	Repeat_expansion_421bp
Chr1	7507507	7508249	Repeat_expansion_36bp
Chr1	7537036	7537114	Deletion_29bp
Chr1	7538364	7539731	Repeat_contraction_43bp
Chr1	7543786	7544963	Repeat_contraction_763bp
Chr1	7609012	7609904	Repeat_expansion_92bp
Chr1	7643340	7643950	Repeat_contraction_28bp
Chr1	7753752	7754116	Repeat_expansion_30bp
Chr1	7781825	7782064	Repeat_contraction_28bp
Chr1	7813298	7813378	Repeat_expansion_21bp
Chr1	7831006	7835658	Repeat_expansion_151bp
Chr1	7839450	7840356	Repeat_contraction_46bp
Chr1	7840898	7841861	Repeat_expansion_20bp
Chr1	7896274	7896334	Repeat_expansion_35bp
Chr1	7902456	7903439	Repeat_contraction_443bp
Chr1	7915583	7915864	Repeat_expansion_86bp
Chr1	7956032	7963577	Repeat_contraction_2136bp
Chr1	7984354	7986421	Repeat_contraction_1213bp
Chr1	8053855	8054196	Repeat_contraction_21bp
Chr1	8177493	8177696	Repeat_expansion_180bp
Chr1	8199407	8199558	Repeat_expansion_73bp
Chr1	8239371	8239802	Repeat_expansion_159bp
Chr1	8296912	8297738	Repeat_expansion_20bp
Chr1	8312004	8312124	Repeat_expansion_80bp
Chr1	8329768	8330087	Repeat_contraction_25bp
Chr1	8331381	8332448	Repeat_contraction_920bp
Chr1	8370169	8375150	Repeat_contraction_956bp
Chr1	8408728	8409653	Repeat_expansion_142bp
Chr1	8448034	8448042	Insertion_10819bp
Chr1	8487841	8487870	Insertion_5240bp
Chr1	8488385	8490426	Deletion_2031bp
Chr1	8490646	8492845	Deletion_2196bp
Chr1	8493524	8494536	Repeat_expansion_140bp
Chr1	8495133	8495755	Repeat_contraction_234bp
Chr1	8498472	8498807	Repeat_contraction_40bp
Chr1	8546422	8547045	Repeat_expansion_634bp
Chr1	8561490	8562431	Repeat_contraction_192bp
Chr1	8570769	8571354	Repeat_contraction_36bp
Chr1	8580368	8580399	Insertion_25bp
Chr1	8660436	8660702	Repeat_expansion_1084bp
Chr1	8661123	8661504	Repeat_contraction_32bp
Chr1	8675258	8676981	Repeat_contraction_659bp
Chr1	8681977	8682119	Repeat_contraction_21bp
Chr1	8689330	8691951	Repeat_contraction_364bp

Chr1	8698236	8698812	Repeat_expansion_172bp
Chr1	8767138	8781940	Repeat_contraction_11003bp
Chr1	8978747	8978868	Repeat_contraction_22bp
Chr1	9080120	9080428	Repeat_contraction_155bp
Chr1	9082952	9083176	Repeat_contraction_61bp
Chr1	9202578	9202966	Repeat_contraction_289bp
Chr1	9223564	9223702	Repeat_expansion_26bp
Chr1	9235912	9236129	Repeat_expansion_35bp
Chr1	9289973	9292419	Repeat_contraction_1590bp
Chr1	9304027	9307895	Repeat_contraction_1055bp
Chr1	9368343	9373849	Repeat_contraction_5002bp
Chr1	9380673	9385574	Repeat_contraction_1271bp
Chr1	9412343	9413088	Repeat_expansion_40bp
Chr1	9439342	9446668	Repeat_contraction_501bp
Chr1	9476001	9480635	Deletion_4638bp
Chr1	9492545	9493433	Repeat_expansion_27bp
Chr1	9554195	9554361	Repeat_expansion_795bp
Chr1	9567618	9571643	Tandem_contraction_4243bp
Chr1	9667485	9691258	Repeat_contraction_14743bp
Chr1	9758840	9758987	Deletion_98bp
Chr1	9849049	9849251	Repeat_expansion_181bp
Chr1	9865345	9867413	Deletion_2069bp
Chr1	10003478	10014972	Repeat_contraction_2155bp
Chr1	10107733	10108385	Tandem_contraction_740bp
Chr1	10151307	10151648	Repeat_expansion_29bp
Chr1	10152756	10156792	Deletion_4026bp
Chr1	10197042	10197958	Repeat_contraction_121bp
Chr1	10339008	10339183	Repeat_expansion_20bp
Chr1	10329690	10340327	Tandem_expansion_13458bp
Chr1	10329478	10330413	Tandem_expansion_938bp
Chr1	10329976	10342637	Repeat_contraction_12054bp
Chr1	10431193	10432985	Repeat_contraction_45bp
Chr1	10434632	10435281	Repeat_contraction_104bp
Chr1	10435748	10437245	Repeat_expansion_169bp
Chr1	10437613	10438175	Repeat_expansion_26bp
Chr1	10456751	10456854	Repeat_expansion_619bp
Chr1	10527897	10532125	Deletion_4227bp
Chr1	10592075	10595372	Tandem_expansion_3401bp
Chr1	10624653	10624914	Repeat_expansion_202bp
Chr1	10654353	10654368	Insertion_221bp
Chr1	10696665	10696673	Insertion_4933bp
Chr1	10851267	10851655	Repeat_contraction_206bp
Chr1	10897163	10897579	Repeat_expansion_549bp
Chr1	11005625	11006677	Repeat_expansion_80bp
Chr1	11027877	11028926	Repeat_expansion_380bp
Chr1	11030974	11033535	Repeat_contraction_1458bp
Chr1	11048698	11056357	Repeat_contraction_2706bp
Chr1	11067933	11068192	Repeat_expansion_100bp
Chr1	11088751	11090919	Repeat_expansion_319bp

Chr1	11103565	11105998	Deletion_2432bp
Chr1	11204412	11204605	Deletion_175bp
Chr1	11228615	11230807	Repeat_contraction_1933bp
Chr1	11237831	11239610	Repeat_expansion_1524bp
Chr1	11241437	11245136	Repeat_expansion_158bp
Chr1	11283130	11287688	Repeat_contraction_1889bp
Chr1	11296816	11311072	Repeat_contraction_12268bp
Chr1	11311502	11317602	Repeat_contraction_321bp
Chr1	11318876	11321381	Repeat_contraction_26bp
Chr1	11333591	11334471	Repeat_expansion_37bp
Chr1	11336457	11338006	Repeat_expansion_652bp
Chr1	11421140	11424121	Repeat_contraction_808bp
Chr1	11427662	11430672	Repeat_contraction_404bp
Chr1	11496053	11498401	Repeat_expansion_74bp
Chr1	11501851	11527728	Repeat_expansion_1509bp
Chr1	11531561	11531621	Deletion_60bp
Chr1	11538995	11539101	Repeat_contraction_33bp
Chr1	11544211	11544366	Repeat_contraction_24bp
Chr1	11583826	11583940	Repeat_contraction_22bp
Chr1	11646918	11651355	Repeat_contraction_835bp
Chr1	11669184	11670244	Repeat_contraction_928bp
Chr1	11674600	11674831	Repeat_contraction_82bp
Chr1	11676569	11677305	Repeat_expansion_57bp
Chr1	11685407	11688966	Repeat_contraction_1061bp
Chr1	11689812	11693277	Repeat_contraction_919bp
Chr1	11756875	11756997	Repeat_contraction_62bp
Chr1	11784825	11785245	Repeat_expansion_176bp
Chr1	11887154	11901704	Deletion_14519bp
Chr1	11902977	11903076	Repeat_expansion_152bp
Chr1	11930433	11930903	Repeat_contraction_290bp
Chr1	11934844	11935221	Repeat_expansion_2968bp
Chr1	11935955	11936480	Repeat_expansion_1119bp
Chr1	11957876	11959088	Repeat_contraction_1100bp
Chr1	11972623	11975868	Repeat_contraction_232bp
Chr1	11978167	11978261	Repeat_expansion_24bp
Chr1	11987779	11988935	Repeat_contraction_633bp
Chr1	12002078	12004654	Repeat_expansion_5475bp
Chr1	12022218	12022583	Repeat_expansion_387bp
Chr1	12059532	12060012	Repeat_contraction_156bp
Chr1	12124045	12124094	Deletion_32bp
Chr1	12136087	12144319	Repeat_contraction_5121bp
Chr1	12149267	12150415	Repeat_expansion_773bp
Chr1	12155756	12156872	Repeat_contraction_1049bp
Chr1	12159089	12162105	Repeat_contraction_480bp
Chr1	12233241	12239222	Tandem_expansion_6038bp
Chr1	12239222	12241187	Repeat_expansion_6837bp
Chr1	12254656	12255846	Repeat_expansion_4650bp
Chr1	12265665	12265936	Repeat_expansion_21bp
Chr1	12273045	12276648	Deletion_3596bp

Chr1	12281043	12281173	Repeat_expansion_32bp
Chr1	12295834	12299275	Repeat_contraction_336bp
Chr1	12297684	12300776	Tandem_expansion_3233bp
Chr1	12337392	12337467	Repeat_expansion_28bp
Chr1	12354907	12355369	Repeat_expansion_31bp
Chr1	12364136	12365992	Deletion_1856bp
Chr1	12378687	12380661	Repeat_contraction_1057bp
Chr1	12399875	12400400	Repeat_contraction_39bp
Chr1	12400744	12416052	Repeat_contraction_13452bp
Chr1	12446230	12448091	Repeat_contraction_1335bp
Chr1	12466382	12471836	Repeat_expansion_655bp
Chr1	12493240	12493421	Repeat_contraction_29bp
Chr1	12494765	12502052	Repeat_contraction_1451bp
Chr1	12531299	12531370	Tandem_expansion_4679bp
Chr1	12660087	12660224	Repeat_expansion_683bp
Chr1	12664479	12673168	Repeat_contraction_8349bp
Chr1	12674441	12684935	Deletion_10481bp
Chr1	12713487	12728828	Repeat_contraction_13642bp
Chr1	12729296	12729353	Repeat_expansion_140bp
Chr1	12735535	12736283	Repeat_expansion_1112bp
Chr1	12747258	12747544	Repeat_contraction_157bp
Chr1	12750267	12762642	Repeat_contraction_8912bp
Chr1	12850335	12851574	Repeat_contraction_28bp
Chr1	12866930	12866931	Insertion_20bp
Chr1	12878991	12880455	Repeat_expansion_185bp
Chr1	12897698	12898667	Repeat_expansion_9208bp
Chr1	12900113	12900176	Repeat_expansion_4973bp
Chr1	12967837	12969676	Repeat_expansion_92bp
Chr1	12974125	12974324	Repeat_expansion_71bp
Chr1	13003208	13005247	Repeat_contraction_1931bp
Chr1	13057376	13057445	Repeat_expansion_484bp
Chr1	13078322	13087816	Repeat_expansion_98bp
Chr1	13117974	13140007	Repeat_contraction_4435bp
Chr1	13154156	13154163	Insertion_903bp
Chr1	13159601	13163382	Repeat_contraction_2163bp
Chr1	13166134	13168949	Repeat_expansion_66bp
Chr1	13171143	13193289	Repeat_contraction_7604bp
Chr1	13204078	13205374	Repeat_contraction_396bp
Chr1	13206007	13207594	Repeat_expansion_180bp
Chr1	13216976	13225032	Repeat_contraction_2137bp
Chr1	13283477	13284504	Repeat_contraction_805bp
Chr1	13340316	13340328	Insertion_6511bp
Chr1	13340889	13341071	Repeat_expansion_2144bp
Chr1	13350988	13351113	Repeat_expansion_22bp
Chr1	13370259	13370867	Repeat_expansion_1415bp
Chr1	13371434	13386698	Repeat_contraction_14958bp
Chr1	13390500	13396413	Repeat_contraction_5604bp
Chr1	13397714	13402897	Repeat_contraction_3859bp
Chr1	13408310	13408387	Deletion_31bp

Chr1	13430086	13430371	Repeat_expansion_199bp
Chr1	13456583	13457060	Repeat_expansion_48bp
Chr1	13460117	13460659	Repeat_expansion_117bp
Chr1	13464070	13466869	Repeat_expansion_555bp
Chr1	13473078	13474377	Repeat_expansion_17506bp
Chr1	13520559	13520563	Insertion_5055bp
Chr1	13590496	13591205	Repeat_contraction_328bp
Chr1	13595450	13595792	Repeat_contraction_29bp
Chr1	13597202	13597730	Repeat_expansion_61bp
Chr1	13611495	13612290	Repeat_expansion_68bp
Chr1	13614572	13616034	Repeat_contraction_28bp
Chr1	13616692	13624557	Repeat_contraction_1401bp
Chr1	13761368	13761377	Insertion_3408bp
Chr1	13818566	13823888	Deletion_5327bp
Chr1	13851320	13852503	Repeat_expansion_7655bp
Chr1	14012066	14012678	Deletion_605bp
Chr1	14059032	14059087	Repeat_expansion_2025bp
Chr1	14082538	14094069	Deletion_11486bp
Chr1	14149683	14150044	Repeat_expansion_32bp
Chr1	14190337	14191722	Deletion_1377bp
Chr1	14234815	14235743	Repeat_contraction_55bp
Chr1	14292120	14292121	Tandem_contraction_3486bp
Chr1	14312341	14312346	Insertion_11463bp
Chr1	14430460	14450454	Repeat_contraction_19405bp
Chr1	14502061	14505646	Repeat_expansion_3419bp
Chr1	14509093	14509431	Repeat_expansion_355bp
Chr1	14926952	14927390	Repeat_expansion_8956bp
Chr1	15084861	15084888	Insertion_4450bp
Chr1	15110462	15111082	Repeat_contraction_116bp
Chr1	15112292	15119556	Repeat_expansion_590bp
Chr1	15121227	15123207	Repeat_expansion_214bp
Chr1	15123972	15125599	Repeat_expansion_57bp
Chr1	15126111	15127707	Repeat_expansion_334bp
Chr1	15128353	15128989	Repeat_contraction_115bp
Chr1	15130149	15131394	Repeat_expansion_309bp
Chr1	15132344	15135006	Repeat_expansion_227bp
Chr1	15242127	15242517	Repeat_contraction_23bp
Chr1	15125616	15136027	Repeat_contraction_218bp
Chr1	15148730	15148968	Deletion_192bp
Chr1	15199498	15206657	Tandem_expansion_7157bp
Chr1	15253125	15255929	Repeat_contraction_204bp
Chr1	15257099	15262487	Repeat_expansion_942bp
Chr1	15263431	15268511	Repeat_contraction_509bp
Chr1	15174205	15177092	Repeat_expansion_14294bp
Chr1	15424400	15430712	Repeat_contraction_3916bp
Chr1	15424344	15434100	Tandem_expansion_10308bp
Chr1	15430702	15436694	Repeat_contraction_3485bp
Chr1	15437032	15437416	Tandem_expansion_6701bp
Chr1	15457818	15476735	Repeat_contraction_14791bp

Chr1	15563396	15572122	Deletion_8725bp
Chr1	15606126	15606553	Repeat_contraction_223bp
Chr1	15663195	15665056	Repeat_contraction_565bp
Chr1	15666063	15668129	Repeat_contraction_222bp
Chr1	15734614	15742569	Repeat_contraction_6726bp
Chr1	15096166	15098714	Repeat_expansion_114bp
Chr1	15101696	15102128	Repeat_expansion_273bp
Chr1	15102978	15105458	Repeat_contraction_463bp
Chr1	15096033	15097074	Repeat_contraction_311bp
Chr1	18157006	18157782	Repeat_expansion_47bp
Chr1	18155043	18158188	Tandem_expansion_13382bp
Chr1	18156115	18156144	Insertion_6879bp
Chr1	18155118	18157749	Tandem_expansion_18744bp
Chr1	15198648	15201589	Tandem_expansion_4602bp
Chr1	15290077	15291274	Tandem_expansion_1232bp
Chr1	14813578	14814240	Repeat_contraction_23bp
Chr1	15194784	15198428	Repeat_expansion_512bp
Chr1	15192977	15201601	Tandem_expansion_11915bp
Chr1	15200125	15200183	Repeat_expansion_412bp
Chr1	15318767	15321001	Tandem_expansion_2693bp
Chr1	15697413	15701631	Repeat_contraction_3084bp
Chr1	15808096	15809315	Tandem_contraction_2173bp
Chr1	15894549	15895311	Repeat_contraction_32bp
Chr1	15901465	15904634	Repeat_contraction_2097bp
Chr1	15916960	15917003	Insertion_468bp
Chr1	15980765	15980899	Repeat_expansion_69bp
Chr1	15981943	15981981	Deletion_24bp
Chr1	16021390	16029490	Repeat_contraction_395bp
Chr1	16147151	16154050	Repeat_contraction_1380bp
Chr1	16160213	16164970	Tandem_expansion_18163bp
Chr1	16213761	16214204	Repeat_expansion_314bp
Chr1	16223000	16227882	Repeat_contraction_2159bp
Chr1	16264597	16266585	Repeat_expansion_528bp
Chr1	16281464	16303855	Repeat_contraction_19872bp
Chr1	16324363	16327303	Repeat_contraction_215bp
Chr1	16334597	16335881	Repeat_contraction_758bp
Chr1	16351897	16351959	Deletion_20bp
Chr1	16360011	16361174	Deletion_1158bp
Chr1	16383167	16386544	Repeat_contraction_2341bp
Chr1	16400031	16401002	Repeat_expansion_542bp
Chr1	16411844	16424682	Repeat_contraction_9167bp
Chr1	16466787	16467784	Repeat_contraction_213bp
Chr1	16485245	16485399	Repeat_contraction_50bp
Chr1	16504998	16505534	Tandem_expansion_1921bp
Chr1	16509682	16509684	Insertion_975bp
Chr1	16523436	16549653	Repeat_contraction_9132bp
Chr1	16550501	16563639	Repeat_expansion_9905bp
Chr1	16564091	16564775	Repeat_contraction_21bp
Chr1	16576453	16577633	Repeat_expansion_23bp

Chr1	16578551	16579689	Repeat_expansion_2510bp
Chr1	16592508	16593336	Repeat_contraction_202bp
Chr1	16595419	16599081	Deletion_3620bp
Chr1	16667899	16667933	Insertion_1699bp
Chr1	16689925	16699085	Repeat_contraction_8219bp
Chr1	16713785	16714522	Repeat_expansion_59bp
Chr1	16717497	16727367	Repeat_contraction_6527bp
Chr1	16729006	16729142	Repeat_expansion_2470bp
Chr1	16767641	16768850	Repeat_contraction_730bp
Chr1	16804120	16804343	Repeat_expansion_575bp
Chr1	16805426	16805478	Repeat_expansion_736bp
Chr1	16816613	16818294	Tandem_expansion_2225bp
Chr1	16816613	16818294	Tandem_expansion_2230bp
Chr1	16816613	16818294	Tandem_expansion_2228bp
Chr1	16816613	16818294	Tandem_expansion_2232bp
Chr1	16818294	16819243	Repeat_contraction_40bp
Chr1	16836383	16836402	Insertion_26bp
Chr1	16838931	16839073	Deletion_116bp
Chr1	16846427	16846453	Insertion_30bp
Chr1	16850490	16858041	Repeat_contraction_4700bp
Chr1	16868224	16885492	Repeat_contraction_16767bp
Chr1	16907782	16908650	Repeat_contraction_51bp
Chr1	16935865	16935985	Tandem_expansion_2225bp
Chr1	16966802	16967369	Repeat_contraction_217bp
Chr1	16974550	16975546	Repeat_contraction_38bp
Chr1	16984531	16992529	Repeat_contraction_5071bp
Chr1	16993753	17000964	Repeat_expansion_13448bp
Chr1	17008206	17008282	Repeat_expansion_25bp
Chr1	17011765	17013430	Repeat_expansion_90bp
Chr1	17016997	17021225	Repeat_expansion_287bp
Chr1	17022664	17032602	Repeat_contraction_5252bp
Chr1	17035063	17050019	Repeat_contraction_10953bp
Chr1	17090827	17093216	Repeat_expansion_4905bp
Chr1	17116317	17116796	Repeat_contraction_75bp
Chr1	17117367	17117425	Repeat_expansion_3884bp
Chr1	17141038	17147050	Repeat_contraction_435bp
Chr1	17186870	17191158	Repeat_expansion_79bp
Chr1	17204266	17208942	Repeat_contraction_2078bp
Chr1	17267040	17273827	Repeat_contraction_256bp
Chr1	17332441	17333504	Repeat_contraction_216bp
Chr1	17352081	17352249	Repeat_contraction_43bp
Chr1	17368856	17369800	Repeat_contraction_710bp
Chr1	17416350	17416990	Repeat_expansion_51bp
Chr1	17436339	17436847	Repeat_expansion_79bp
Chr1	17452095	17452304	Repeat_expansion_21bp
Chr1	17479418	17479889	Repeat_expansion_166bp
Chr1	17541865	17542750	Repeat_contraction_91bp
Chr1	17568305	17568401	Repeat_contraction_21bp
Chr1	17620861	17622152	Repeat_contraction_1232bp

Chr1	17623624	17627669	Repeat_expansion_39bp
Chr1	17647607	17647644	Deletion_21bp
Chr1	17652120	17652230	Repeat_expansion_247bp
Chr1	17877382	17878629	Repeat_expansion_42bp
Chr1	17840656	17840847	Repeat_expansion_39bp
Chr1	17830857	17831636	Repeat_contraction_60bp
Chr1	17818993	17827075	Repeat_expansion_6566bp
Chr1	17818108	17818297	Repeat_expansion_207bp
Chr1	17812127	17813883	Repeat_contraction_1604bp
Chr1	17795719	17796246	Repeat_contraction_44bp
Chr1	17760161	17761329	Repeat_contraction_1044bp
Chr1	17705761	17710805	Repeat_expansion_959bp
Chr1	17685917	17686327	Repeat_contraction_359bp
Chr1	17667334	17682356	Repeat_contraction_10306bp
Chr1	17662945	17666253	Repeat_contraction_1015bp
Chr1	17979228	17979412	Repeat_expansion_61bp
Chr1	17997368	17997482	Repeat_expansion_54bp
Chr1	18002166	18009570	Repeat_contraction_2899bp
Chr1	18010110	18010419	Repeat_contraction_160bp
Chr1	18013161	18018429	Repeat_contraction_5021bp
Chr1	18064929	18065384	Repeat_contraction_26bp
Chr1	18067259	18067807	Repeat_contraction_35bp
Chr1	18071411	18072215	Repeat_contraction_136bp
Chr1	18079390	18080442	Repeat_contraction_337bp
Chr1	18154459	18165288	Repeat_contraction_9010bp
Chr1	18172483	18173164	Repeat_contraction_71bp
Chr1	18297475	18301314	Repeat_expansion_122bp
Chr1	18321369	18321400	Insertion_51bp
Chr1	18375443	18375727	Repeat_expansion_21bp
Chr1	18377034	18377267	Repeat_expansion_2157bp
Chr1	18456764	18461464	Repeat_expansion_4311bp
Chr1	18560079	18561631	Repeat_expansion_26bp
Chr1	18564687	18564733	Insertion_48bp
Chr1	18626691	18628354	Repeat_contraction_1238bp
Chr1	18645392	18645499	Repeat_expansion_550bp
Chr1	18744763	18748100	Repeat_contraction_2549bp
Chr1	18788468	18789025	Repeat_contraction_21bp
Chr1	18846384	18854888	Deletion_8500bp
Chr1	18873305	18873340	Insertion_126bp
Chr1	18942069	18942192	Deletion_86bp
Chr1	18962540	18966737	Deletion_4206bp
Chr1	19030706	19030740	Insertion_8544bp
Chr1	19054390	19056565	Repeat_contraction_2090bp
Chr1	19087234	19090516	Tandem_expansion_7062bp
Chr1	19087234	19090565	Tandem_expansion_7060bp
Chr1	19191931	19198679	Repeat_contraction_2120bp
Chr1	19211779	19211816	Insertion_73bp
Chr1	19216228	19216286	Deletion_26bp
Chr1	19239022	19240982	Repeat_contraction_402bp

Chr1	19246335	19249448	Repeat_contraction_3030bp
Chr1	19308273	19309656	Repeat_contraction_56bp
Chr1	19315581	19315632	Deletion_43bp
Chr1	19336075	19345786	Repeat_contraction_8866bp
Chr1	19367859	19368969	Repeat_contraction_302bp
Chr1	19369544	19370277	Repeat_contraction_29bp
Chr1	19391719	19394452	Repeat_contraction_684bp
Chr1	19446280	19450766	Repeat_contraction_4213bp
Chr1	19452044	19452910	Repeat_expansion_2435bp
Chr1	19461336	19467635	Repeat_contraction_2098bp
Chr1	19496106	19498169	Repeat_contraction_1877bp
Chr1	19498504	19498594	Repeat_expansion_23bp
Chr1	19537739	19540938	Repeat_contraction_2182bp
Chr1	19640893	19640938	Insertion_25bp
Chr1	19641731	19642220	Repeat_contraction_212bp
Chr1	19675200	19680347	Repeat_contraction_2557bp
Chr1	19698700	19706880	Repeat_contraction_1093bp
Chr1	19738169	19739614	Repeat_expansion_21bp
Chr1	19740615	19745287	Repeat_contraction_3546bp
Chr1	19795595	19796325	Repeat_contraction_128bp
Chr1	19877583	19878994	Repeat_expansion_174bp
Chr1	19909125	19909710	Repeat_contraction_86bp
Chr1	19943625	19943777	Repeat_expansion_476bp
Chr1	19956589	19956940	Repeat_contraction_178bp
Chr1	19958062	19958353	Repeat_expansion_842bp
Chr1	20005970	20006196	Repeat_expansion_71bp
Chr1	20093820	20098412	Repeat_contraction_361bp
Chr1	20106456	20106915	Repeat_contraction_277bp
Chr1	20120821	20134168	Repeat_contraction_11829bp
Chr1	20139704	20139975	Repeat_expansion_42bp
Chr1	20141799	20142812	Repeat_contraction_749bp
Chr1	20144395	20150440	Repeat_contraction_3244bp
Chr1	20152741	20154392	Repeat_contraction_99bp
Chr1	20627399	20628159	Repeat_contraction_228bp
Chr1	20703041	20705186	Repeat_expansion_6372bp
Chr1	20726612	20726859	Repeat_contraction_40bp
Chr1	20734085	20734178	Repeat_expansion_32bp
Chr1	20816698	20817326	Repeat_contraction_215bp
Chr1	20818292	20830183	Repeat_contraction_5038bp
Chr1	20913828	20915035	Repeat_contraction_683bp
Chr1	20972074	20974313	Deletion_2227bp
Chr1	20978255	20980833	Repeat_contraction_1422bp
Chr1	21061994	21062373	Repeat_contraction_43bp
Chr1	21063204	21063499	Repeat_expansion_309bp
Chr1	21071600	21072571	Repeat_expansion_2840bp
Chr1	21074990	21075724	Repeat_expansion_219bp
Chr1	21108316	21111398	Repeat_contraction_2569bp
Chr1	21124507	21126201	Repeat_contraction_83bp
Chr1	21154142	21155154	Repeat_expansion_1078bp

Chr1	21219169	21219302	Repeat_contraction_60bp
Chr1	21222249	21223462	Repeat_contraction_104bp
Chr1	21224925	21225411	Repeat_expansion_32bp
Chr1	21267591	21269458	Repeat_contraction_438bp
Chr1	16869715	16871500	Repeat_contraction_510bp
Chr1	21311678	21311918	Repeat_expansion_34bp
Chr1	21314149	21317065	Repeat_contraction_63bp
Chr1	21346161	21359092	Repeat_contraction_4974bp
Chr1	21381597	21384035	Repeat_expansion_1234bp
Chr1	21387096	21393270	Repeat_contraction_1193bp
Chr1	21400649	21401358	Repeat_expansion_22bp
Chr1	21406739	21407340	Repeat_contraction_388bp
Chr1	21418181	21430010	Repeat_contraction_10950bp
Chr1	21430294	21431085	Repeat_expansion_440bp
Chr1	21436035	21437175	Repeat_contraction_952bp
Chr1	21462679	21463835	Repeat_contraction_693bp
Chr1	21469072	21472272	Repeat_contraction_2373bp
Chr1	21508588	21510109	Repeat_contraction_527bp
Chr1	21522436	21533533	Repeat_contraction_9290bp
Chr1	21536808	21537894	Repeat_expansion_2762bp
Chr1	21579980	21584813	Repeat_contraction_1547bp
Chr1	21607327	21620551	Repeat_contraction_5524bp
Chr1	21660289	21660742	Repeat_expansion_266bp
Chr1	21671653	21672610	Repeat_expansion_776bp
Chr1	21679342	21679531	Repeat_contraction_43bp
Chr1	21683216	21684224	Repeat_contraction_166bp
Chr1	21688220	21688999	Repeat_expansion_88bp
Chr1	21690320	21690949	Repeat_contraction_64bp
Chr1	21693933	21701101	Repeat_contraction_4754bp
Chr1	21708745	21710843	Repeat_expansion_736bp
Chr1	21744867	21745082	Repeat_contraction_72bp
Chr1	21830249	21831595	Repeat_expansion_291bp
Chr1	21841914	21842913	Repeat_contraction_111bp
Chr1	21846184	21846489	Repeat_contraction_70bp
Chr1	21857534	21859390	Repeat_contraction_363bp
Chr1	21908158	21912441	Repeat_contraction_144bp
Chr1	21912805	21912903	Repeat_contraction_40bp
Chr1	21913285	21913721	Repeat_expansion_66bp
Chr1	21932077	21936360	Repeat_expansion_9506bp
Chr1	21941827	21946736	Repeat_expansion_1168bp
Chr1	21949361	21949442	Repeat_expansion_1203bp
Chr1	22024313	22024891	Repeat_expansion_60bp
Chr1	22059073	22059370	Repeat_expansion_498bp
Chr1	22074696	22075322	Repeat_contraction_244bp
Chr1	22086552	22087743	Repeat_contraction_46bp
Chr1	22088747	22089864	Repeat_contraction_711bp
Chr1	22111296	22113924	Repeat_contraction_1016bp
Chr1	22124099	22126240	Repeat_contraction_367bp
Chr1	22131667	22131875	Repeat_contraction_21bp

Chr1	22151050	22152289	Repeat_contraction_382bp
Chr1	22162392	22176068	Repeat_contraction_8629bp
Chr1	22174704	22176376	Tandem_expansion_5484bp
Chr1	22229031	22230315	Repeat_expansion_495bp
Chr1	22240741	22240742	Insertion_1045bp
Chr1	22278572	22279019	Repeat_contraction_77bp
Chr1	22282064	22282249	Repeat_contraction_20bp
Chr1	22293137	22302248	Repeat_contraction_7268bp
Chr1	22317246	22318167	Repeat_expansion_161bp
Chr1	22318915	22320786	Repeat_contraction_395bp
Chr1	22334173	22334409	Repeat_expansion_385bp
Chr1	22356207	22356386	Repeat_contraction_40bp
Chr1	22356785	22358177	Repeat_contraction_953bp
Chr1	22410791	22410961	Repeat_expansion_711bp
Chr1	22498249	22499532	Repeat_contraction_127bp
Chr1	22500027	22502940	Repeat_contraction_2649bp
Chr1	22529335	22529518	Repeat_contraction_27bp
Chr1	22531844	22533169	Repeat_contraction_247bp
Chr1	22550634	22557670	Repeat_contraction_4519bp
Chr1	22562431	22564057	Repeat_contraction_1076bp
Chr1	22589995	22593757	Repeat_contraction_907bp
Chr1	22595721	22598136	Repeat_contraction_32bp
Chr1	22606438	22607632	Repeat_contraction_155bp
Chr1	22608041	22614082	Repeat_contraction_5279bp
Chr1	22615746	22617309	Repeat_contraction_641bp
Chr1	22620226	22622390	Repeat_contraction_1337bp
Chr1	22625969	22626434	Repeat_expansion_241bp
Chr1	22627154	22627518	Repeat_contraction_31bp
Chr1	22660839	22673049	Repeat_contraction_12111bp
Chr1	22680002	22689707	Repeat_expansion_153bp
Chr1	22693788	22699445	Repeat_contraction_5352bp
Chr1	22716207	22716590	Repeat_expansion_99bp
Chr1	22719662	22720828	Repeat_contraction_51bp
Chr1	22731219	22733054	Repeat_contraction_130bp
Chr1	22736531	22737449	Repeat_contraction_32bp
Chr1	22741905	22744007	Repeat_contraction_1248bp
Chr1	22749307	22751831	Repeat_contraction_1293bp
Chr1	22766601	22766742	Repeat_expansion_164bp
Chr1	22768858	22769976	Repeat_expansion_28bp
Chr1	22775861	22776610	Repeat_expansion_55bp
Chr1	22778333	22779098	Repeat_expansion_1890bp
Chr1	22788398	22788947	Repeat_contraction_48bp
Chr1	22790408	22791156	Repeat_contraction_22bp
Chr1	22797158	22798014	Repeat_contraction_171bp
Chr1	22842071	22855998	Repeat_expansion_2184bp
Chr1	22871853	22881841	Repeat_expansion_5395bp
Chr1	22890479	22890746	Deletion_224bp
Chr1	22891011	22892206	Repeat_expansion_40bp
Chr1	22894752	22895769	Repeat_expansion_71bp

Chr1	22914112	22914517	Repeat_expansion_1608bp
Chr1	22940772	22940948	Repeat_expansion_42bp
Chr1	22941705	22943177	Repeat_contraction_356bp
Chr1	22945499	22946442	Repeat_contraction_230bp
Chr1	22947654	22948306	Repeat_contraction_29bp
Chr1	22953025	22953979	Repeat_contraction_23bp
Chr1	22977901	22979203	Repeat_expansion_37bp
Chr1	22980072	22980795	Repeat_expansion_125bp
Chr1	22993382	22994054	Repeat_expansion_1762bp
Chr1	23024385	23024654	Repeat_contraction_33bp
Chr1	23026651	23026750	Repeat_contraction_20bp
Chr1	23053596	23054184	Repeat_expansion_44bp
Chr1	23054784	23056373	Repeat_contraction_82bp
Chr1	23058255	23058573	Repeat_expansion_1234bp
Chr1	23059507	23059623	Repeat_expansion_26bp
Chr1	23107734	23107947	Repeat_contraction_77bp
Chr1	23109377	23110811	Repeat_contraction_25bp
Chr1	23123872	23127099	Repeat_contraction_464bp
Chr1	23149086	23153622	Repeat_expansion_262bp
Chr1	23162704	23163904	Repeat_contraction_223bp
Chr1	23165998	23166245	Repeat_expansion_21bp
Chr1	23166728	23169034	Repeat_contraction_191bp
Chr1	23183218	23183373	Repeat_contraction_26bp
Chr1	23184864	23185612	Repeat_contraction_148bp
Chr1	23186763	23192131	Repeat_expansion_752bp
Chr1	23195172	23195881	Repeat_expansion_38bp
Chr1	23196373	23198377	Repeat_contraction_478bp
Chr1	23211501	23212712	Repeat_contraction_898bp
Chr1	23238088	23243694	Repeat_contraction_2807bp
Chr1	23255244	23255430	Repeat_contraction_26bp
Chr1	23260121	23260327	Repeat_contraction_56bp
Chr1	23270402	23271227	Repeat_contraction_116bp
Chr1	23280398	23281659	Deletion_1246bp
Chr1	23294962	23294990	Insertion_172bp
Chr1	23295646	23297258	Deletion_1608bp
Chr1	23297617	23299942	Repeat_contraction_1601bp
Chr1	23326056	23326287	Repeat_expansion_28bp
Chr1	23337142	23337194	Repeat_expansion_162bp
Chr1	23342026	23342187	Repeat_expansion_23bp
Chr1	23386785	23389999	Tandem_contraction_3591bp
Chr1	23455472	23455530	Deletion_28bp
Chr1	23461045	23463115	Repeat_contraction_293bp
Chr1	23478420	23478805	Repeat_expansion_101bp
Chr1	23481064	23481247	Repeat_expansion_397bp
Chr1	23522421	23522484	Repeat_expansion_21bp
Chr1	23563544	23563614	Repeat_expansion_26bp
Chr1	23564609	23565084	Repeat_expansion_21bp
Chr1	23565405	23566662	Repeat_contraction_311bp
Chr1	23571692	23574588	Repeat_contraction_1870bp

Chr1	23604257	23605186	Repeat_contraction_83bp
Chr1	23605904	23606372	Repeat_expansion_50bp
Chr1	23611679	23611768	Repeat_expansion_25bp
Chr1	23678833	23680071	Repeat_contraction_150bp
Chr1	23716114	23717341	Repeat_expansion_29bp
Chr1	23726337	23727643	Repeat_contraction_1103bp
Chr1	23749716	23749739	Insertion_356bp
Chr1	23751386	23752833	Repeat_expansion_324bp
Chr1	23754129	23755509	Repeat_expansion_3285bp
Chr1	23787142	23787198	Deletion_32bp
Chr1	23824380	23824524	Repeat_expansion_21bp
Chr1	23827956	23828020	Repeat_expansion_86bp
Chr1	23828599	23828736	Repeat_contraction_30bp
Chr1	23835380	23835695	Repeat_expansion_570bp
Chr1	23837293	23840580	Repeat_expansion_262bp
Chr1	23845525	23852326	Repeat_contraction_4760bp
Chr1	23906992	23907346	Repeat_contraction_166bp
Chr1	23963502	23963599	Repeat_contraction_31bp
Chr1	23964646	23966238	Repeat_contraction_76bp
Chr1	23976332	23976387	Tandem_expansion_687bp
Chr1	24010335	24010858	Repeat_contraction_99bp
Chr1	24039372	24039559	Repeat_expansion_42bp
Chr1	24040566	24042088	Repeat_contraction_36bp
Chr1	24043418	24044066	Repeat_expansion_707bp
Chr1	24047300	24047610	Repeat_expansion_85bp
Chr1	24048787	24049690	Repeat_expansion_492bp
Chr1	24053078	24053192	Repeat_expansion_52bp
Chr1	24058498	24058983	Repeat_expansion_45bp
Chr1	24101033	24101481	Repeat_contraction_278bp
Chr1	24104720	24105567	Repeat_contraction_757bp
Chr1	24111250	24112675	Repeat_expansion_462bp
Chr1	24174530	24174744	Repeat_contraction_27bp
Chr1	24175603	24176559	Repeat_contraction_30bp
Chr1	24177165	24178045	Repeat_expansion_98bp
Chr1	24190102	24190242	Repeat_expansion_797bp
Chr1	24228815	24230024	Repeat_expansion_627bp
Chr1	24236499	24236818	Repeat_contraction_138bp
Chr1	24245898	24248155	Repeat_expansion_81bp
Chr1	24253364	24253547	Repeat_contraction_38bp
Chr1	24292813	24293744	Repeat_contraction_116bp
Chr1	24337859	24338848	Repeat_expansion_21bp
Chr1	24343907	24344078	Repeat_contraction_46bp
Chr1	24350735	24357297	Repeat_contraction_2860bp
Chr1	24361916	24362542	Repeat_expansion_155bp
Chr1	24364272	24365485	Repeat_expansion_398bp
Chr1	24366191	24367385	Repeat_contraction_84bp
Chr1	24370379	24370481	Repeat_expansion_98bp
Chr1	24370840	24371600	Repeat_contraction_78bp
Chr1	24395278	24395824	Repeat_expansion_21bp

Chr1	24428981	24429684	Tandem_expansion_726bp
Chr1	24428981	24429684	Tandem_expansion_726bp
Chr1	24428981	24429684	Tandem_expansion_726bp
Chr1	24450117	24451150	Repeat_expansion_347bp
Chr1	24451496	24451815	Repeat_contraction_71bp
Chr1	24455905	24458414	Deletion_2480bp
Chr1	24499445	24499584	Repeat_expansion_48bp
Chr1	24542679	24545327	Repeat_expansion_130bp
Chr1	24547655	24549795	Repeat_contraction_46bp
Chr1	24552185	24555174	Repeat_contraction_1847bp
Chr1	24602779	24609105	Repeat_contraction_3122bp
Chr1	24669097	24669933	Repeat_expansion_197bp
Chr1	24678475	24680693	Repeat_contraction_592bp
Chr1	24684821	24685944	Repeat_expansion_87bp
Chr1	24686217	24686296	Repeat_expansion_149bp
Chr1	24691407	24692607	Repeat_contraction_95bp
Chr1	24694922	24696193	Repeat_contraction_53bp
Chr1	24698687	24698916	Repeat_expansion_103bp
Chr1	24714069	24719101	Repeat_contraction_3413bp
Chr1	24720187	24720326	Repeat_expansion_44bp
Chr1	24721217	24721297	Repeat_expansion_24bp
Chr1	24765521	24766651	Repeat_expansion_346bp
Chr1	24779824	24780795	Repeat_contraction_47bp
Chr1	24806059	24806559	Repeat_contraction_83bp
Chr1	24807969	24808191	Repeat_expansion_42bp
Chr1	24813804	24813977	Repeat_contraction_107bp
Chr1	24880339	24880953	Repeat_expansion_449bp
Chr1	24884224	24884261	Insertion_45bp
Chr1	24920345	24920610	Repeat_expansion_24bp
Chr1	24922137	24925117	Repeat_contraction_340bp
Chr1	24929859	24929927	Repeat_expansion_47bp
Chr1	24947977	24948364	Repeat_contraction_258bp
Chr1	24950840	24951013	Repeat_expansion_96bp
Chr1	24961239	24962457	Repeat_expansion_5451bp
Chr1	24969082	24969938	Repeat_contraction_76bp
Chr1	24978630	24980022	Repeat_contraction_43bp
Chr1	24992117	24992694	Repeat_contraction_87bp
Chr1	24996185	24996347	Repeat_contraction_58bp
Chr1	24993735	24998883	Tandem_expansion_5999bp
Chr1	24996783	24998207	Repeat_contraction_51bp
Chr1	25006592	25006878	Repeat_expansion_46bp
Chr1	25024154	25024560	Repeat_expansion_44bp
Chr1	25064004	25064197	Repeat_expansion_22bp
Chr1	25120116	25122998	Repeat_expansion_1634bp
Chr1	25138046	25139242	Repeat_expansion_54bp
Chr1	25215189	25216684	Repeat_expansion_455bp
Chr1	25272878	25273693	Repeat_expansion_412bp
Chr1	25314882	25315125	Repeat_expansion_58bp
Chr1	25320504	25321101	Repeat_expansion_36bp

Chr1	25321456	25321850	Repeat_contraction_30bp
Chr1	25324253	25324477	Repeat_expansion_392bp
Chr1	25406481	25407156	Repeat_expansion_980bp
Chr1	25417769	25418954	Repeat_contraction_25bp
Chr1	25423640	25425684	Repeat_expansion_6069bp
Chr1	25428891	25428948	Repeat_expansion_553bp
Chr1	25433567	25434088	Repeat_expansion_76bp
Chr1	25502984	25503173	Repeat_contraction_49bp
Chr1	25577027	25577819	Repeat_contraction_145bp
Chr1	25580528	25582617	Repeat_expansion_506bp
Chr1	25591681	25594986	Repeat_contraction_539bp
Chr1	25632501	25633419	Repeat_expansion_26bp
Chr1	25635481	25635597	Repeat_contraction_41bp
Chr1	25659555	25659727	Repeat_expansion_22bp
Chr1	25722087	25722590	Repeat_contraction_103bp
Chr1	25799371	25800100	Repeat_expansion_47bp
Chr1	25952876	25953443	Repeat_contraction_55bp
Chr1	25961851	25963301	Repeat_contraction_753bp
Chr1	26052193	26053089	Repeat_contraction_53bp
Chr1	26105698	26105893	Repeat_contraction_21bp
Chr1	26110446	26111722	Repeat_contraction_996bp
Chr1	26112158	26112670	Repeat_expansion_73bp
Chr1	26117672	26118653	Repeat_contraction_37bp
Chr1	26147243	26147375	Repeat_contraction_32bp
Chr1	26148046	26150747	Repeat_contraction_1317bp
Chr1	26153038	26153738	Repeat_expansion_37bp
Chr1	26169325	26171583	Repeat_contraction_2097bp
Chr1	26582415	26582700	Repeat_contraction_90bp
Chr1	26637122	26637613	Repeat_expansion_33bp
Chr1	26723836	26725358	Repeat_contraction_459bp
Chr1	26737806	26740765	Repeat_expansion_487bp
Chr1	26854389	26854515	Repeat_contraction_23bp
Chr1	26872111	26872658	Repeat_expansion_1338bp
Chr1	26873264	26873475	Repeat_expansion_48bp
Chr1	26891454	26891859	Repeat_contraction_106bp
Chr1	26896392	26896981	Repeat_expansion_26bp
Chr1	26899495	26899751	Repeat_contraction_53bp
Chr1	26924979	26926526	Repeat_contraction_26bp
Chr1	27065914	27066475	Repeat_expansion_41bp
Chr1	27076637	27076707	Repeat_expansion_21bp
Chr1	27077050	27077270	Repeat_contraction_35bp
Chr1	27121085	27121243	Repeat_expansion_26bp
Chr1	27405137	27406859	Repeat_expansion_78bp
Chr1	27407985	27425173	Repeat_contraction_3549bp
Chr1	27427413	27429425	Repeat_contraction_918bp
Chr1	27498309	27498618	Repeat_expansion_51bp
Chr1	27551906	27551959	Deletion_23bp
Chr1	27554279	27554420	Repeat_contraction_29bp
Chr1	27555538	27556322	Repeat_expansion_494bp

Chr1	27595228	27595265	Insertion_295bp
Chr1	27644323	27645561	Repeat_contraction_78bp
Chr1	27703698	27703883	Repeat_contraction_69bp
Chr1	27740174	27740589	Repeat_expansion_28bp
Chr1	27798734	27799183	Repeat_contraction_23bp
Chr1	27952460	27952733	Repeat_expansion_22bp
Chr1	27984025	27984179	Repeat_expansion_53bp
Chr1	28420993	28424480	Repeat_expansion_871bp
Chr1	28526835	28527673	Deletion_819bp
Chr1	28677993	28678933	Repeat_contraction_806bp
Chr1	28679987	28680133	Repeat_expansion_181bp
Chr1	28748648	28749752	Repeat_expansion_2023bp
Chr1	28793176	28793901	Repeat_contraction_458bp
Chr1	28938114	28939098	Repeat_expansion_188bp
Chr1	29012048	29012212	Repeat_expansion_21bp
Chr1	29300756	29305643	Tandem_expansion_6271bp
Chr1	29342235	29346408	Repeat_expansion_324bp
Chr1	29377049	29380726	Repeat_contraction_3407bp
Chr1	29449954	29449978	Insertion_52bp
Chr1	29466598	29467103	Repeat_expansion_38bp
Chr1	29471314	29471528	Repeat_expansion_145bp
Chr1	29479854	29481605	Repeat_contraction_202bp
Chr1	29483016	29483627	Repeat_contraction_207bp
Chr1	29483917	29484380	Repeat_expansion_62bp
Chr1	29516564	29516991	Repeat_contraction_95bp
Chr1	29518142	29518378	Repeat_contraction_22bp
Chr1	29605171	29605304	Repeat_expansion_25bp
Chr1	29640887	29641965	Repeat_contraction_144bp
Chr1	29648882	29650053	Repeat_contraction_86bp
Chr1	29900137	29900481	Repeat_contraction_142bp
Chr1	29914013	29914194	Repeat_contraction_33bp
Chr1	29925744	29934590	Tandem_expansion_8847bp
Chr1	30067975	30069206	Repeat_contraction_851bp
Chr1	30134783	30134968	Repeat_expansion_66bp
Chr1	30189675	30189900	Repeat_expansion_101bp
Chr1	30287479	30287586	Repeat_expansion_1699bp
Chr1	30297571	30297606	Insertion_109bp
Chr1	30354878	30354979	Repeat_contraction_43bp
Chr1	16017650	16017888	Repeat_expansion_91bp
Chr1	13736959	13738536	Repeat_contraction_383bp
Chr1	14593307	14593769	Repeat_expansion_38bp
Chr1	14596023	14596138	Repeat_expansion_43bp
Chr1	13374864	13386044	Repeat_contraction_11103bp
Chr1	15066751	15069965	Repeat_contraction_42bp
Chr1	22698209	22698989	Repeat_contraction_125bp
Chr1	22696113	22696377	Repeat_contraction_95bp
Chr1	13772693	13775070	Repeat_expansion_87bp
Chr1	19675932	19677040	Deletion_1072bp
Chr1	16510051	16517297	Tandem_expansion_7290bp

Chr1	15451752	15452871	Repeat_expansion_49bp
Chr1	15448625	15449083	Repeat_contraction_225bp
Chr1	15446301	15446675	Repeat_contraction_61bp
Chr2	8566090	8566119	Deletion_29bp
Chr2	3790255	3791909	Deletion_1654bp
Chr2	4226473	4226500	Deletion_27bp
Chr2	4227248	4227248	Insertion_72bp
Chr2	4221805	4221805	Insertion_72bp
Chr2	4225788	4225788	Insertion_37bp
Chr2	19407574	19407606	Deletion_32bp
Chr2	19408800	19408800	Insertion_41bp
Chr2	19441601	19441601	Insertion_45bp
Chr2	19467190	19467190	Insertion_33bp
Chr2	19478193	19478193	Insertion_47bp
Chr2	19513323	19513555	Deletion_232bp
Chr2	19527974	19527974	Insertion_20bp
Chr2	19540374	19540394	Deletion_20bp
Chr2	19555386	19555407	Deletion_21bp
Chr2	19556196	19556220	Deletion_24bp
Chr2	19585766	19585802	Deletion_36bp
Chr2	19586272	19586319	Deletion_47bp
Chr2	19624821	19624821	Insertion_451bp
Chr2	19697576	19697576	Insertion_39bp
Chr2	18612272	18612272	Insertion_758bp
Chr2	18639843	18639874	Deletion_31bp
Chr2	18651249	18655833	Deletion_4584bp
Chr2	18664467	18664467	Insertion_416bp
Chr2	18702913	18702913	Insertion_1373bp
Chr2	18709081	18711059	Deletion_1978bp
Chr2	18779484	18779484	Insertion_26bp
Chr2	18797652	18797675	Deletion_23bp
Chr2	18797707	18797808	Deletion_101bp
Chr2	18797891	18797915	Deletion_24bp
Chr2	18812006	18812026	Deletion_20bp
Chr2	18812497	18812511	Insertion_45bp
Chr2	18855318	18855344	Deletion_26bp
Chr2	18874728	18874728	Insertion_20bp
Chr2	16952597	16952802	Deletion_205bp
Chr2	16952980	16953401	Deletion_421bp
Chr2	16972567	16973839	Deletion_1272bp
Chr2	17009143	17009296	Deletion_153bp
Chr2	17009625	17009625	Insertion_20bp
Chr2	17045201	17045235	Deletion_34bp
Chr2	17092683	17095522	Deletion_2839bp
Chr2	17102929	17102929	Insertion_107bp
Chr2	17106969	17107005	Deletion_36bp
Chr2	17108483	17108510	Deletion_27bp
Chr2	17164209	17164209	Insertion_20bp
Chr2	17190105	17190105	Insertion_22bp

Chr2	17575710	17575710	Insertion_20bp
Chr2	17589291	17589315	Deletion_24bp
Chr2	17636620	17636620	Insertion_24bp
Chr2	17642062	17644096	Deletion_2034bp
Chr2	17676960	17676960	Insertion_869bp
Chr2	17690120	17690120	Insertion_27bp
Chr2	17691001	17691025	Deletion_24bp
Chr2	17720903	17720925	Deletion_22bp
Chr2	17755217	17755217	Insertion_583bp
Chr2	10874569	10880251	Deletion_5682bp
Chr2	10880562	10880562	Insertion_38bp
Chr2	10974915	10974915	Insertion_43bp
Chr2	18960706	18960706	Insertion_33bp
Chr2	18974584	18974584	Insertion_226bp
Chr2	18993395	18993424	Deletion_29bp
Chr2	19000035	19000035	Insertion_38bp
Chr2	19051576	19051576	Insertion_30bp
Chr2	19065709	19065709	Insertion_215bp
Chr2	19100450	19100518	Deletion_68bp
Chr2	15508685	15508727	Deletion_42bp
Chr2	15553209	15553250	Deletion_41bp
Chr2	15566813	15568055	Deletion_1242bp
Chr2	15571001	15571001	Insertion_23bp
Chr2	15572568	15572568	Insertion_22bp
Chr2	15574604	15574604	Insertion_41bp
Chr2	15595111	15597184	Deletion_2073bp
Chr2	15605838	15605838	Insertion_46bp
Chr2	18470948	18471331	Deletion_383bp
Chr2	18528597	18528623	Deletion_26bp
Chr2	18572253	18572253	Insertion_34bp
Chr2	18589786	18589786	Insertion_41bp
Chr2	18593731	18593731	Insertion_20bp
Chr2	18595274	18595274	Insertion_172bp
Chr2	18600337	18600337	Insertion_867bp
Chr2	11443153	11443212	Deletion_59bp
Chr2	11443960	11443982	Deletion_22bp
Chr2	11445119	11445119	Insertion_22bp
Chr2	11446521	11446570	Deletion_49bp
Chr2	11453979	11454019	Deletion_40bp
Chr2	11458680	11458680	Insertion_40bp
Chr2	11512638	11512638	Insertion_256bp
Chr2	11531585	11531585	Insertion_26bp
Chr2	11549751	11549811	Deletion_60bp
Chr2	11584304	11584324	Deletion_20bp
Chr2	11315805	11315827	Deletion_22bp
Chr2	11327263	11329052	Deletion_1789bp
Chr2	11330044	11330069	Deletion_25bp
Chr2	11359014	11359014	Insertion_32bp
Chr2	11379100	11379125	Deletion_25bp

Chr2	11418893	11418896	Insertion_59bp
Chr2	14147865	14147865	Insertion_51bp
Chr2	14232845	14232845	Insertion_79bp
Chr2	14264115	14264115	Insertion_1264bp
Chr2	14264946	14264946	Insertion_24bp
Chr2	17770719	17770719	Insertion_23bp
Chr2	17771424	17771445	Deletion_21bp
Chr2	17788756	17789192	Deletion_436bp
Chr2	17796578	17796578	Insertion_21bp
Chr2	17822709	17822709	Insertion_20bp
Chr2	17829223	17829258	Deletion_35bp
Chr2	17847316	17847316	Insertion_38bp
Chr2	17850610	17850610	Insertion_23bp
Chr2	13738001	13738056	Deletion_55bp
Chr2	13808732	13808732	Insertion_30bp
Chr2	13824607	13824671	Deletion_64bp
Chr2	13840041	13840041	Insertion_1134bp
Chr2	13841627	13841683	Deletion_56bp
Chr2	13853483	13853483	Insertion_53bp
Chr2	17457068	17457096	Deletion_28bp
Chr2	17502077	17502167	Deletion_90bp
Chr2	17523120	17523120	Insertion_52bp
Chr2	17542110	17542133	Deletion_23bp
Chr2	16457264	16457338	Deletion_74bp
Chr2	16466016	16466055	Deletion_39bp
Chr2	16474464	16474489	Deletion_25bp
Chr2	16521706	16521751	Deletion_45bp
Chr2	16538191	16538191	Insertion_121bp
Chr2	16548367	16548367	Insertion_26bp
Chr2	16548803	16548803	Insertion_612bp
Chr2	16552531	16552531	Insertion_4977bp
Chr2	16552994	16553053	Deletion_59bp
Chr2	14826179	14826179	Insertion_564bp
Chr2	14858767	14860844	Deletion_2077bp
Chr2	14862634	14862689	Deletion_55bp
Chr2	14906549	14906549	Insertion_71bp
Chr2	14926213	14926213	Insertion_30bp
Chr2	15845207	15845229	Deletion_22bp
Chr2	15846364	15846364	Insertion_30bp
Chr2	15849360	15849360	Insertion_129bp
Chr2	15851011	15851011	Insertion_21bp
Chr2	15899243	15899268	Deletion_25bp
Chr2	15924684	15924708	Deletion_24bp
Chr2	15926501	15926501	Insertion_22bp
Chr2	15955465	15955465	Insertion_85bp
Chr2	13239444	13239756	Deletion_312bp
Chr2	13247163	13247163	Insertion_35bp
Chr2	13251997	13252092	Deletion_95bp
Chr2	13270812	13270847	Deletion_35bp

Chr2	13270994	13271021	Deletion_27bp
Chr2	13272722	13272787	Deletion_65bp
Chr2	13286137	13286137	Insertion_64bp
Chr2	13291163	13291163	Insertion_22bp
Chr2	13297950	13297950	Insertion_40bp
Chr2	13300245	13300254	Insertion_709bp
Chr2	13312187	13312220	Deletion_33bp
Chr2	13328054	13328054	Insertion_96bp
Chr2	13337372	13337418	Deletion_46bp
Chr2	17349111	17349111	Insertion_26bp
Chr2	14559387	14559411	Deletion_24bp
Chr2	14559566	14559720	Deletion_154bp
Chr2	14571278	14571278	Insertion_34bp
Chr2	14571895	14572746	Deletion_851bp
Chr2	14586374	14586374	Insertion_614bp
Chr2	14636125	14637157	Deletion_1032bp
Chr2	14645676	14645703	Deletion_27bp
Chr2	14648937	14648937	Insertion_35bp
Chr2	16013849	16013849	Insertion_25bp
Chr2	16026166	16026193	Deletion_27bp
Chr2	16028037	16028037	Insertion_55bp
Chr2	16049161	16049161	Insertion_867bp
Chr2	16071652	16071652	Insertion_43bp
Chr2	11768838	11769203	Deletion_365bp
Chr2	11797762	11797762	Insertion_20bp
Chr2	11797965	11797965	Insertion_794bp
Chr2	11818947	11818947	Insertion_47bp
Chr2	11114816	11114841	Deletion_25bp
Chr2	11161095	11164087	Deletion_2992bp
Chr2	11169389	11169419	Deletion_30bp
Chr2	11941278	11941313	Deletion_35bp
Chr2	11942137	11942137	Insertion_27bp
Chr2	11943482	11943482	Insertion_32bp
Chr2	11945584	11945584	Insertion_21bp
Chr2	11949691	11949728	Deletion_37bp
Chr2	11963843	11963843	Insertion_38bp
Chr2	11981018	11981018	Insertion_25bp
Chr2	15171977	15171977	Insertion_33bp
Chr2	15185989	15185989	Insertion_24bp
Chr2	15194243	15194243	Insertion_61bp
Chr2	15058431	15058486	Deletion_55bp
Chr2	15094444	15094471	Deletion_27bp
Chr2	15104617	15104617	Insertion_30bp
Chr2	15110052	15110323	Deletion_271bp
Chr2	15130893	15130917	Deletion_24bp
Chr2	19111939	19111939	Insertion_20bp
Chr2	19167352	19167379	Deletion_27bp
Chr2	19170961	19171047	Deletion_86bp
Chr2	19182906	19182939	Deletion_33bp

Chr2	19187628	19187628	Insertion_24bp
Chr2	16746530	16746551	Deletion_21bp
Chr2	16767338	16767384	Deletion_46bp
Chr2	16781816	16781844	Deletion_28bp
Chr2	16782105	16782105	Insertion_43bp
Chr2	16798240	16798274	Deletion_34bp
Chr2	16808800	16808832	Deletion_32bp
Chr2	18043549	18043549	Insertion_93bp
Chr2	11590539	11590621	Deletion_82bp
Chr2	11594841	11594841	Insertion_35bp
Chr2	11600548	11600548	Insertion_26bp
Chr2	11641454	11641454	Insertion_64bp
Chr2	11663256	11663256	Insertion_20bp
Chr2	14002739	14002739	Insertion_27bp
Chr2	14032566	14032591	Deletion_25bp
Chr2	14040838	14040868	Deletion_30bp
Chr2	14047189	14047189	Insertion_21bp
Chr2	14417951	14418241	Deletion_290bp
Chr2	14433452	14433478	Deletion_26bp
Chr2	14449375	14449396	Deletion_21bp
Chr2	14458549	14458602	Deletion_53bp
Chr2	12809668	12810791	Deletion_1123bp
Chr2	12812519	12812717	Deletion_198bp
Chr2	12835030	12835030	Insertion_71bp
Chr2	12862152	12862190	Deletion_38bp
Chr2	12862299	12862365	Deletion_66bp
Chr2	13509083	13509773	Deletion_690bp
Chr2	9091139	9092122	Deletion_983bp
Chr2	9092651	9092683	Deletion_32bp
Chr2	9097166	9097166	Insertion_22bp
Chr2	9100432	9100460	Deletion_28bp
Chr2	9105680	9105701	Deletion_21bp
Chr2	9121953	9125819	Deletion_3866bp
Chr2	9126323	9126341	Insertion_24bp
Chr2	9135337	9135361	Deletion_24bp
Chr2	9149312	9149312	Insertion_695bp
Chr2	9161346	9161862	Deletion_516bp
Chr2	9162584	9162584	Insertion_23bp
Chr2	9168159	9168183	Deletion_24bp
Chr2	9170256	9170285	Deletion_29bp
Chr2	9171540	9171573	Deletion_33bp
Chr2	19317193	19317193	Insertion_130bp
Chr2	19317746	19317746	Insertion_4961bp
Chr2	19336110	19336110	Insertion_21bp
Chr2	19337604	19337604	Insertion_38bp
Chr2	19347688	19347718	Deletion_30bp
Chr2	19390631	19390631	Insertion_16153bp
Chr2	7772998	7773042	Deletion_44bp
Chr2	7777040	7784300	Deletion_7260bp

Chr2	7805473	7805501	Deletion_28bp
Chr2	7812626	7812700	Deletion_74bp
Chr2	7852046	7852101	Deletion_55bp
Chr2	8009254	8009254	Insertion_67bp
Chr2	8019536	8019558	Deletion_22bp
Chr2	8021586	8021619	Deletion_33bp
Chr2	8033777	8033777	Insertion_28bp
Chr2	8047428	8047449	Deletion_21bp
Chr2	15236493	15236493	Insertion_39bp
Chr2	15240248	15240284	Deletion_36bp
Chr2	15253724	15253724	Insertion_383bp
Chr2	15267011	15267011	Insertion_20bp
Chr2	15270643	15270692	Deletion_49bp
Chr2	15285482	15285504	Deletion_22bp
Chr2	15285729	15285729	Insertion_20bp
Chr2	12965704	12965716	Insertion_51bp
Chr2	12967570	12967570	Insertion_61bp
Chr2	12970433	12970433	Insertion_33bp
Chr2	12980181	12980288	Deletion_107bp
Chr2	13004370	13004370	Insertion_31bp
Chr2	13034371	13034401	Deletion_30bp
Chr2	13035776	13035776	Insertion_234bp
Chr2	13036333	13036409	Deletion_76bp
Chr2	69926	69967	Deletion_41bp
Chr2	70942	70964	Deletion_22bp
Chr2	79034	79034	Insertion_21bp
Chr2	79808	79808	Insertion_1220bp
Chr2	80986	80986	Insertion_45bp
Chr2	81984	82021	Deletion_37bp
Chr2	95663	95663	Insertion_20bp
Chr2	110329	110329	Insertion_565bp
Chr2	122200	122256	Deletion_56bp
Chr2	123151	123151	Insertion_29bp
Chr2	15685436	15685436	Insertion_43bp
Chr2	15690933	15690933	Insertion_54bp
Chr2	15693245	15693245	Insertion_46bp
Chr2	8379695	8382473	Deletion_2778bp
Chr2	8388777	8388837	Deletion_60bp
Chr2	8410148	8410208	Deletion_60bp
Chr2	8437295	8437295	Insertion_33bp
Chr2	16153999	16153999	Insertion_25bp
Chr2	16156878	16156909	Deletion_31bp
Chr2	16184033	16184094	Deletion_61bp
Chr2	12198168	12198168	Insertion_22bp
Chr2	12204108	12204108	Insertion_209bp
Chr2	12224589	12224612	Deletion_37bp
Chr2	4712764	4712764	Insertion_320bp
Chr2	4713637	4713659	Deletion_22bp
Chr2	4721923	4733823	Deletion_11900bp

Chr2	4734281	4734387	Deletion_106bp
Chr2	4737971	4738050	Deletion_79bp
Chr2	4748015	4748041	Deletion_26bp
Chr2	4748115	4748142	Deletion_27bp
Chr2	4748219	4748246	Deletion_27bp
Chr2	4751747	4751777	Deletion_30bp
Chr2	4775319	4775367	Deletion_48bp
Chr2	4785019	4785019	Insertion_82bp
Chr2	4789555	4789555	Insertion_29bp
Chr2	3735673	3735673	Insertion_10621bp
Chr2	3737991	3738021	Deletion_30bp
Chr2	3738695	3739196	Deletion_501bp
Chr2	3747392	3747453	Deletion_61bp
Chr2	3752534	3752554	Deletion_20bp
Chr2	3755714	3755714	Insertion_31bp
Chr2	3757807	3757838	Deletion_31bp
Chr2	3758096	3758105	Insertion_58bp
Chr2	3759703	3759733	Deletion_30bp
Chr2	3760854	3761567	Deletion_713bp
Chr2	3761938	3761989	Deletion_51bp
Chr2	3768001	3768001	Insertion_32bp
Chr2	3770939	3770939	Insertion_763bp
Chr2	3788525	3789241	Deletion_716bp
Chr2	3802254	3802254	Insertion_80bp
Chr2	3806895	3806895	Insertion_371bp
Chr2	3812592	3812592	Insertion_105bp
Chr2	3813195	3813195	Insertion_22bp
Chr2	3816065	3816065	Insertion_376bp
Chr2	3819435	3819435	Insertion_35bp
Chr2	3836288	3836288	Insertion_58bp
Chr2	13132034	13132066	Deletion_32bp
Chr2	13147890	13147933	Deletion_43bp
Chr2	13167052	13167073	Deletion_21bp
Chr2	4008979	4009006	Deletion_27bp
Chr2	4011419	4011419	Insertion_21bp
Chr2	4023193	4023221	Deletion_28bp
Chr2	4028457	4028457	Insertion_23bp
Chr2	4031292	4031323	Deletion_31bp
Chr2	4034408	4034408	Insertion_51bp
Chr2	4040239	4040239	Insertion_38bp
Chr2	4062524	4062545	Deletion_21bp
Chr2	4065807	4066304	Deletion_497bp
Chr2	4077393	4077447	Deletion_54bp
Chr2	8949377	8949415	Deletion_38bp
Chr2	8983057	8983068	Insertion_79bp
Chr2	12950658	12950779	Deletion_121bp
Chr2	12959212	12959249	Deletion_37bp
Chr2	16235871	16235894	Deletion_23bp
Chr2	16253595	16253706	Deletion_111bp

Chr2	16271058	16271058	Insertion_27bp
Chr2	16896663	16896663	Insertion_20bp
Chr2	16916201	16916226	Deletion_25bp
Chr2	16929205	16929205	Insertion_20bp
Chr2	16417657	16418079	Deletion_430bp
Chr2	12070726	12070828	Deletion_102bp
Chr2	12073701	12073728	Deletion_27bp
Chr2	12092405	12092405	Insertion_60bp
Chr2	12093442	12093442	Insertion_23bp
Chr2	13583534	13583534	Insertion_91bp
Chr2	13634395	13634395	Insertion_28bp
Chr2	14340042	14340042	Insertion_20bp
Chr2	14359987	14359987	Insertion_27bp
Chr2	14364439	14364439	Insertion_32bp
Chr2	2116415	2116415	Insertion_44bp
Chr2	2133157	2133177	Deletion_20bp
Chr2	2138278	2138278	Insertion_70bp
Chr2	2140529	2140529	Insertion_77bp
Chr2	2149937	2150865	Deletion_928bp
Chr2	2151430	2151459	Deletion_29bp
Chr2	2154694	2154694	Insertion_34bp
Chr2	2157845	2157875	Deletion_30bp
Chr2	2160249	2160270	Deletion_21bp
Chr2	2162267	2163223	Deletion_956bp
Chr2	2165905	2165947	Deletion_42bp
Chr2	2175888	2175888	Insertion_44bp
Chr2	2179267	2179267	Insertion_405bp
Chr2	2179289	2179289	Insertion_30bp
Chr2	2179360	2179360	Insertion_82bp
Chr2	18340413	18340413	Insertion_46bp
Chr2	18341321	18341321	Insertion_30bp
Chr2	18345051	18345051	Insertion_38bp
Chr2	18347157	18347157	Insertion_39bp
Chr2	18373075	18373102	Deletion_27bp
Chr2	10796731	10796731	Insertion_54bp
Chr2	10806743	10807547	Deletion_804bp
Chr2	10814001	10814001	Insertion_24bp
Chr2	10832011	10832011	Insertion_333bp
Chr2	13674008	13674008	Insertion_68bp
Chr2	13675944	13675984	Deletion_40bp
Chr2	13679900	13679900	Insertion_591bp
Chr2	13697077	13697077	Insertion_84bp
Chr2	13717181	13717181	Insertion_134bp
Chr2	13722145	13722217	Deletion_72bp
Chr2	6329239	6329271	Deletion_32bp
Chr2	6339189	6339189	Insertion_35bp
Chr2	6342889	6342944	Deletion_55bp
Chr2	6348497	6348540	Deletion_43bp
Chr2	6353621	6353755	Deletion_134bp

Chr2	2765877	2765919	Deletion_42bp
Chr2	2766767	2766767	Insertion_38bp
Chr2	2799766	2799788	Deletion_22bp
Chr2	2807089	2807089	Insertion_72bp
Chr2	2808456	2808456	Insertion_32bp
Chr2	2811679	2811679	Insertion_5553bp
Chr2	2815777	2815808	Deletion_31bp
Chr2	2818586	2818826	Deletion_240bp
Chr2	2822716	2822811	Deletion_95bp
Chr2	2823778	2823778	Insertion_38bp
Chr2	2837480	2837519	Deletion_39bp
Chr2	2845707	2845762	Deletion_55bp
Chr2	14495823	14495823	Insertion_31bp
Chr2	14502750	14502750	Insertion_43bp
Chr2	10692190	10692247	Deletion_57bp
Chr2	10702553	10702577	Deletion_24bp
Chr2	10705983	10706377	Deletion_394bp
Chr2	10738229	10738229	Insertion_44bp
Chr2	17282960	17282960	Insertion_33bp
Chr2	17289050	17289566	Deletion_516bp
Chr2	17289835	17289882	Deletion_47bp
Chr2	17290912	17291093	Deletion_181bp
Chr2	17299410	17299442	Deletion_32bp
Chr2	17299919	17300154	Deletion_235bp
Chr2	17337495	17345020	Deletion_7525bp
Chr2	14939645	14939645	Insertion_72bp
Chr2	14944851	14944851	Insertion_44bp
Chr2	14953736	14953777	Deletion_41bp
Chr2	14967702	14967725	Deletion_23bp
Chr2	12308369	12308402	Deletion_33bp
Chr2	12309872	12310245	Deletion_373bp
Chr2	12311019	12311035	Insertion_73bp
Chr2	12316158	12316158	Insertion_36bp
Chr2	12359882	12360261	Deletion_379bp
Chr2	7598035	7598060	Deletion_25bp
Chr2	7598190	7603177	Deletion_4987bp
Chr2	7616506	7616528	Deletion_22bp
Chr2	7653281	7653281	Insertion_880bp
Chr2	7656553	7656553	Insertion_68bp
Chr2	13350195	13350195	Insertion_30bp
Chr2	13397141	13397141	Insertion_32bp
Chr2	13397447	13397447	Insertion_29bp
Chr2	1464011	1464011	Insertion_2056bp
Chr2	1473440	1474095	Deletion_655bp
Chr2	1484562	1484603	Deletion_41bp
Chr2	8258799	8258825	Deletion_26bp
Chr2	8277381	8277381	Insertion_46bp
Chr2	7327391	7327391	Insertion_45bp
Chr2	7348689	7348696	Insertion_43bp

Chr2	7349125	7349125	Insertion_35bp
Chr2	7353595	7353595	Insertion_1318bp
Chr2	7370786	7370786	Insertion_29bp
Chr2	7374852	7374873	Deletion_21bp
Chr2	7385036	7385036	Insertion_126bp
Chr2	9641535	9641535	Insertion_344bp
Chr2	9641870	9641908	Deletion_38bp
Chr2	9652648	9652648	Insertion_24bp
Chr2	9652916	9652957	Deletion_41bp
Chr2	9654650	9654673	Deletion_23bp
Chr2	9654956	9654984	Deletion_28bp
Chr2	9659454	9659502	Deletion_48bp
Chr2	9676714	9676744	Deletion_30bp
Chr2	7718824	7719028	Deletion_204bp
Chr2	7739724	7739724	Insertion_153bp
Chr2	7750707	7750707	Insertion_45bp
Chr2	7751391	7751448	Deletion_57bp
Chr2	14683825	14683845	Deletion_20bp
Chr2	14683847	14683847	Insertion_67bp
Chr2	14702313	14702313	Insertion_214bp
Chr2	14733003	14733034	Deletion_31bp
Chr2	14733685	14733685	Insertion_29bp
Chr2	16813152	16813195	Deletion_43bp
Chr2	16814287	16814561	Deletion_274bp
Chr2	16833419	16833452	Deletion_33bp
Chr2	16851701	16851701	Insertion_28bp
Chr2	10067795	10067816	Deletion_21bp
Chr2	10070100	10070963	Deletion_863bp
Chr2	10073109	10073109	Insertion_27bp
Chr2	10075301	10076202	Deletion_901bp
Chr2	10085694	10085694	Insertion_22bp
Chr2	10090338	10090338	Insertion_20bp
Chr2	13858976	13858976	Insertion_21bp
Chr2	13905377	13905377	Insertion_45bp
Chr2	451112	451112	Insertion_20bp
Chr2	468631	468654	Deletion_23bp
Chr2	478246	478246	Insertion_271bp
Chr2	486565	486565	Insertion_1174bp
Chr2	9702272	9702272	Insertion_22bp
Chr2	9707829	9707829	Insertion_20bp
Chr2	9716723	9716723	Insertion_369bp
Chr2	9723263	9723288	Deletion_25bp
Chr2	9736634	9736634	Insertion_126bp
Chr2	9542400	9542931	Deletion_531bp
Chr2	9564896	9565365	Deletion_469bp
Chr2	9566754	9566913	Deletion_159bp
Chr2	9579188	9579219	Deletion_31bp
Chr2	9584604	9585356	Deletion_752bp
Chr2	9585803	9585836	Deletion_33bp

Chr2	13075225	13075249	Deletion_24bp
Chr2	13090789	13090789	Insertion_59bp
Chr2	13095045	13095934	Deletion_889bp
Chr2	13101811	13102360	Deletion_549bp
Chr2	13121515	13121539	Deletion_24bp
Chr2	9891732	9891732	Insertion_44bp
Chr2	9896670	9897441	Deletion_771bp
Chr2	9912957	9912957	Insertion_34bp
Chr2	9927685	9932557	Deletion_4872bp
Chr2	13959050	13959050	Insertion_1539bp
Chr2	13971943	13971965	Deletion_22bp
Chr2	13986547	13986547	Insertion_146bp
Chr2	8823429	8823637	Deletion_208bp
Chr2	8824428	8824428	Insertion_23bp
Chr2	8846005	8846005	Insertion_20bp
Chr2	8866871	8866921	Deletion_50bp
Chr2	8867297	8867318	Deletion_21bp
Chr2	17904370	17905404	Deletion_1034bp
Chr2	17907002	17907002	Insertion_37bp
Chr2	17924327	17924583	Deletion_256bp
Chr2	17941716	17941716	Insertion_35bp
Chr2	13478635	13478635	Insertion_138bp
Chr2	18892036	18892079	Deletion_43bp
Chr2	18902805	18902921	Deletion_121bp
Chr2	18933675	18933675	Insertion_4204bp
Chr2	18934833	18934879	Deletion_46bp
Chr2	10163950	10163980	Deletion_30bp
Chr2	10179974	10179974	Insertion_32bp
Chr2	10190697	10190838	Deletion_141bp
Chr2	10197831	10197831	Insertion_31bp
Chr2	4491751	4491779	Deletion_28bp
Chr2	4496474	4496474	Insertion_20bp
Chr2	4496621	4496621	Insertion_279bp
Chr2	4522259	4525396	Deletion_3137bp
Chr2	4538108	4538108	Insertion_26bp
Chr2	9399981	9399981	Insertion_62bp
Chr2	9422947	9422947	Insertion_20bp
Chr2	9424229	9424229	Insertion_817bp
Chr2	9440286	9440286	Insertion_25bp
Chr2	7457888	7457888	Insertion_25bp
Chr2	7472279	7472279	Insertion_1116bp
Chr2	10462868	10463355	Deletion_487bp
Chr2	10487764	10487764	Insertion_60bp
Chr2	18432196	18432240	Deletion_44bp
Chr2	18439568	18439568	Insertion_608bp
Chr2	2250942	2251006	Deletion_64bp
Chr2	2265811	2265811	Insertion_32bp
Chr2	2274170	2274170	Insertion_25bp
Chr2	2280884	2280919	Deletion_35bp

Chr2	2283415	2283451	Deletion_36bp
Chr2	3946038	3946038	Insertion_50bp
Chr2	3947907	3948332	Deletion_425bp
Chr2	3949283	3949283	Insertion_2516bp
Chr2	3959079	3959079	Insertion_40bp
Chr2	3961411	3961435	Deletion_24bp
Chr2	3962661	3962661	Insertion_59bp
Chr2	3963415	3963583	Deletion_168bp
Chr2	3968967	3968967	Insertion_22bp
Chr2	3969872	3969872	Insertion_348bp
Chr2	3976135	3976313	Deletion_178bp
Chr2	3990682	3990682	Insertion_38bp
Chr2	3998474	3998612	Deletion_138bp
Chr2	4000067	4000110	Deletion_43bp
Chr2	16339573	16339633	Deletion_60bp
Chr2	16363573	16363573	Insertion_27bp
Chr2	8730681	8730681	Insertion_1300bp
Chr2	8740318	8740342	Deletion_24bp
Chr2	8755325	8755325	Insertion_27bp
Chr2	8760554	8760568	Insertion_22bp
Chr2	8764780	8764780	Insertion_2128bp
Chr2	8776638	8776874	Deletion_236bp
Chr2	8779044	8779121	Deletion_77bp
Chr2	1104339	1104339	Insertion_21bp
Chr2	1124042	1124071	Deletion_29bp
Chr2	1136290	1136290	Insertion_30bp
Chr2	16300496	16300521	Deletion_25bp
Chr2	16302455	16302506	Deletion_51bp
Chr2	16318976	16319133	Deletion_157bp
Chr2	16324114	16324114	Insertion_21bp
Chr2	16325106	16325148	Deletion_42bp
Chr2	8073060	8073102	Deletion_42bp
Chr2	8077834	8077856	Deletion_22bp
Chr2	8078291	8078353	Deletion_62bp
Chr2	8078719	8078719	Insertion_34bp
Chr2	8099057	8099269	Deletion_212bp
Chr2	293869	293901	Deletion_32bp
Chr2	305764	305787	Deletion_23bp
Chr2	316629	316629	Insertion_30bp
Chr2	317348	317348	Insertion_26bp
Chr2	14985536	14985536	Insertion_54bp
Chr2	14994205	14994205	Insertion_27bp
Chr2	14995472	14995472	Insertion_180bp
Chr2	14999362	14999362	Insertion_56bp
Chr2	15023261	15023293	Deletion_32bp
Chr2	15023528	15023563	Deletion_35bp
Chr2	15026424	15026424	Insertion_26bp
Chr2	15027080	15027149	Deletion_69bp
Chr2	8528063	8528063	Insertion_73bp

Chr2	6199925	6199925	Insertion_266bp
Chr2	6200956	6200956	Insertion_106bp
Chr2	6203070	6203070	Insertion_31bp
Chr2	6203589	6203589	Insertion_132bp
Chr2	6206595	6207150	Deletion_555bp
Chr2	6209599	6209630	Deletion_31bp
Chr2	6209996	6209996	Insertion_110bp
Chr2	6215235	6215235	Insertion_26bp
Chr2	6217586	6217586	Insertion_52bp
Chr2	6227622	6227644	Deletion_22bp
Chr2	16595402	16595402	Insertion_255bp
Chr2	16596219	16596533	Deletion_314bp
Chr2	16602086	16602086	Insertion_31bp
Chr2	16613653	16613653	Insertion_50bp
Chr2	16625753	16626818	Deletion_1065bp
Chr2	16634025	16634025	Insertion_5335bp
Chr2	16635382	16635382	Insertion_25bp
Chr2	16645506	16645558	Deletion_52bp
Chr2	16650375	16650375	Insertion_36bp
Chr2	9456421	9456455	Deletion_34bp
Chr2	9457467	9457487	Deletion_20bp
Chr2	9486544	9486544	Insertion_5091bp
Chr2	14082951	14082974	Deletion_23bp
Chr2	14097909	14097909	Insertion_32bp
Chr2	14112752	14112772	Deletion_20bp
Chr2	10623314	10623539	Deletion_225bp
Chr2	10623804	10623879	Deletion_75bp
Chr2	10635257	10635289	Deletion_32bp
Chr2	11056476	11056476	Insertion_112bp
Chr2	11062720	11062720	Insertion_21bp
Chr2	11071445	11071445	Insertion_27bp
Chr2	11079868	11079868	Insertion_27bp
Chr2	11088430	11088450	Deletion_20bp
Chr2	10010652	10010675	Deletion_23bp
Chr2	12261539	12261563	Deletion_24bp
Chr2	12272811	12273147	Deletion_336bp
Chr2	12288701	12288900	Deletion_199bp
Chr2	12289178	12289229	Deletion_51bp
Chr2	12421458	12421458	Insertion_28bp
Chr2	2983893	2983893	Insertion_717bp
Chr2	2987016	2987181	Deletion_165bp
Chr2	2996578	2996623	Deletion_45bp
Chr2	12120282	12120354	Deletion_72bp
Chr2	12121783	12121855	Deletion_72bp
Chr2	12122003	12122028	Deletion_25bp
Chr2	12149577	12150036	Deletion_459bp
Chr2	18091979	18091979	Insertion_39bp
Chr2	18105228	18105271	Deletion_43bp
Chr2	18109735	18109753	Insertion_36bp

Chr2	18114767	18114767	Insertion_777bp
Chr2	18120897	18120897	Insertion_28bp
Chr2	10405965	10405965	Insertion_461bp
Chr2	10421150	10421150	Insertion_49bp
Chr2	10442327	10442327	Insertion_85bp
Chr2	17206869	17207034	Deletion_165bp
Chr2	382514	382661	Deletion_147bp
Chr2	384517	384517	Insertion_31bp
Chr2	10351634	10351947	Deletion_313bp
Chr2	10373423	10373446	Deletion_23bp
Chr2	8667362	8667362	Insertion_291bp
Chr2	8669891	8669891	Insertion_25bp
Chr2	8673401	8673445	Deletion_44bp
Chr2	8698572	8698572	Insertion_406bp
Chr2	9495562	9495562	Insertion_24bp
Chr2	9504587	9504642	Deletion_55bp
Chr2	9508980	9508983	Insertion_28bp
Chr2	10210838	10210838	Insertion_30bp
Chr2	10211024	10211024	Insertion_27bp
Chr2	10236539	10236539	Insertion_28bp
Chr2	10238929	10238929	Insertion_52bp
Chr2	10241457	10241457	Insertion_460bp
Chr2	10242765	10242765	Insertion_44bp
Chr2	10247282	10247312	Deletion_30bp
Chr2	15785654	15785654	Insertion_5326bp
Chr2	15817889	15817956	Deletion_77bp
Chr2	15818643	15818643	Insertion_768bp
Chr2	15823148	15823198	Deletion_50bp
Chr2	15843709	15843732	Deletion_23bp
Chr2	8117628	8117652	Deletion_24bp
Chr2	7110375	7110826	Deletion_451bp
Chr2	7115972	7115972	Insertion_43bp
Chr2	7124526	7124526	Insertion_1898bp
Chr2	7125340	7125390	Deletion_50bp
Chr2	7253497	7253497	Insertion_104bp
Chr2	7269481	7269508	Deletion_27bp
Chr2	7270775	7270804	Deletion_29bp
Chr2	7278760	7278786	Deletion_26bp
Chr2	7283685	7283685	Insertion_34bp
Chr2	7285632	7285671	Deletion_39bp
Chr2	19206303	19206303	Insertion_35bp
Chr2	19216908	19216954	Deletion_46bp
Chr2	12773548	12773548	Insertion_45bp
Chr2	12773681	12774332	Deletion_651bp
Chr2	12780593	12780947	Deletion_354bp
Chr2	12781169	12781201	Deletion_32bp
Chr2	12797868	12797893	Deletion_25bp
Chr2	15346311	15346345	Deletion_34bp
Chr2	15349719	15349743	Deletion_24bp

Chr2	15361662	15361684	Deletion_22bp
Chr2	15370080	15370116	Deletion_36bp
Chr2	15371905	15371942	Deletion_37bp
Chr2	15378047	15378067	Deletion_20bp
Chr2	15378325	15378325	Insertion_28bp
Chr2	15387876	15387876	Insertion_4917bp
Chr2	15412926	15412926	Insertion_34bp
Chr2	10682311	10682311	Insertion_24bp
Chr2	8175988	8175988	Insertion_44bp
Chr2	8179042	8179065	Deletion_23bp
Chr2	8187035	8187035	Insertion_4439bp
Chr2	8210594	8210616	Deletion_22bp
Chr2	8215911	8215911	Insertion_310bp
Chr2	18150585	18150585	Insertion_31bp
Chr2	18153804	18153835	Deletion_31bp
Chr2	18154118	18154162	Deletion_44bp
Chr2	18154378	18154378	Insertion_20bp
Chr2	18154868	18154890	Deletion_22bp
Chr2	18165553	18166102	Deletion_549bp
Chr2	18166326	18166350	Deletion_24bp
Chr2	18179222	18179258	Deletion_36bp
Chr2	18184599	18184644	Deletion_45bp
Chr2	18186707	18186759	Deletion_52bp
Chr2	10119453	10119453	Insertion_89bp
Chr2	10125101	10125101	Insertion_49bp
Chr2	10128237	10128263	Deletion_26bp
Chr2	7494457	7494493	Deletion_36bp
Chr2	7524062	7524062	Insertion_6530bp
Chr2	7529561	7529561	Insertion_44bp
Chr2	14792854	14792854	Insertion_28bp
Chr2	14804819	14804858	Deletion_58bp
Chr2	14811688	14811738	Deletion_50bp
Chr2	1287308	1287362	Deletion_54bp
Chr2	1289210	1289237	Deletion_27bp
Chr2	1292580	1292580	Insertion_825bp
Chr2	1307505	1307541	Deletion_36bp
Chr2	1317336	1317336	Insertion_5344bp
Chr2	1318429	1318688	Deletion_259bp
Chr2	1327075	1327132	Deletion_57bp
Chr2	1329201	1329679	Deletion_478bp
Chr2	18220115	18220115	Insertion_25bp
Chr2	18236680	18236680	Insertion_398bp
Chr2	11206717	11206717	Insertion_51bp
Chr2	4575085	4575085	Insertion_295bp
Chr2	4578566	4578587	Deletion_21bp
Chr2	4587469	4587469	Insertion_22bp
Chr2	2289968	2289998	Deletion_30bp
Chr2	2290272	2290272	Insertion_21bp
Chr2	2295130	2295157	Deletion_27bp

Chr2	2308398	2308398	Insertion_30bp
Chr2	2312595	2312623	Deletion_28bp
Chr2	2313827	2313827	Insertion_80bp
Chr2	8589657	8589657	Insertion_452bp
Chr2	8593461	8593483	Deletion_22bp
Chr2	8597721	8597721	Insertion_27bp
Chr2	2374981	2376012	Deletion_1031bp
Chr2	2377391	2377391	Insertion_25bp
Chr2	2377395	2377416	Deletion_21bp
Chr2	2381845	2381845	Insertion_57bp
Chr2	2384047	2384233	Deletion_186bp
Chr2	2394231	2394732	Deletion_501bp
Chr2	2401951	2401951	Insertion_37bp
Chr2	2404655	2404655	Insertion_80bp
Chr2	2406335	2406650	Deletion_315bp
Chr2	2409096	2409481	Deletion_385bp
Chr2	2413133	2413133	Insertion_99bp
Chr2	9591922	9592411	Deletion_489bp
Chr2	9592501	9592547	Deletion_46bp
Chr2	9594590	9595826	Deletion_1236bp
Chr2	9605562	9605597	Deletion_35bp
Chr2	9607250	9607250	Insertion_34bp
Chr2	15722222	15722371	Deletion_149bp
Chr2	2866296	2866318	Deletion_22bp
Chr2	2868921	2868944	Deletion_23bp
Chr2	2871696	2871737	Deletion_41bp
Chr2	2871847	2872183	Deletion_336bp
Chr2	2872613	2872613	Insertion_33bp
Chr2	2885875	2885875	Insertion_157bp
Chr2	2902324	2907117	Deletion_4793bp
Chr2	2913553	2913573	Deletion_20bp
Chr2	2914580	2914580	Insertion_36bp
Chr2	4082468	4082746	Deletion_278bp
Chr2	4082768	4082768	Insertion_20bp
Chr2	4084160	4084264	Deletion_104bp
Chr2	4086471	4086471	Insertion_312bp
Chr2	4096926	4098079	Deletion_1153bp
Chr2	4099248	4099278	Deletion_30bp
Chr2	4100035	4100604	Deletion_569bp
Chr2	4100918	4100967	Deletion_49bp
Chr2	4108936	4109009	Deletion_73bp
Chr2	4109457	4109457	Insertion_76bp
Chr2	4114171	4114215	Deletion_44bp
Chr2	7965604	7965663	Deletion_59bp
Chr2	7153549	7153549	Insertion_1645bp
Chr2	7155501	7156609	Deletion_1108bp
Chr2	7159701	7159701	Insertion_27bp
Chr2	7161321	7161347	Deletion_26bp
Chr2	7164522	7164522	Insertion_42bp

Chr2	7169980	7170000	Deletion_20bp
Chr2	9823285	9823404	Deletion_119bp
Chr2	824558	824597	Deletion_39bp
Chr2	840852	840876	Deletion_24bp
Chr2	16680954	16680980	Deletion_26bp
Chr2	16693825	16693825	Insertion_1182bp
Chr2	16697834	16697834	Insertion_3950bp
Chr2	9963481	9963481	Insertion_20bp
Chr2	9965614	9965641	Deletion_27bp
Chr2	9970379	9970379	Insertion_30bp
Chr2	9971280	9971374	Deletion_94bp
Chr2	1159681	1159681	Insertion_373bp
Chr2	1159951	1159951	Insertion_27bp
Chr2	1162303	1162303	Insertion_25bp
Chr2	1175371	1175371	Insertion_28bp
Chr2	530234	537738	Deletion_7504bp
Chr2	566062	566062	Insertion_130bp
Chr2	566259	566259	Insertion_20bp
Chr2	566748	582572	Deletion_15824bp
Chr2	591998	592020	Deletion_22bp
Chr2	5963434	5963434	Insertion_31bp
Chr2	5986176	5986222	Deletion_46bp
Chr2	962473	962473	Insertion_2083bp
Chr2	237139	237176	Deletion_37bp
Chr2	240847	241924	Deletion_1077bp
Chr2	15442717	15442717	Insertion_713bp
Chr2	17253229	17253454	Deletion_225bp
Chr2	17266923	17267210	Insertion_574bp
Chr2	4244986	4245290	Deletion_304bp
Chr2	4251426	4251426	Insertion_62bp
Chr2	4252721	4252721	Insertion_21bp
Chr2	4255855	4255855	Insertion_637bp
Chr2	4258029	4258029	Insertion_35bp
Chr2	4262065	4262109	Deletion_44bp
Chr2	4274214	4274214	Insertion_20bp
Chr2	4279351	4279351	Insertion_121bp
Chr2	4601030	4601073	Deletion_43bp
Chr2	4603614	4603667	Deletion_53bp
Chr2	4610651	4610651	Insertion_37bp
Chr2	4624021	4624021	Insertion_25bp
Chr2	12681289	12681289	Insertion_32bp
Chr2	1894410	1894410	Insertion_29bp
Chr2	1905803	1905803	Insertion_46bp
Chr2	1912589	1913450	Deletion_861bp
Chr2	7881249	7881249	Insertion_59bp
Chr2	7883868	7884061	Deletion_193bp
Chr2	7896842	7896842	Insertion_27bp
Chr2	8342752	8342796	Deletion_44bp
Chr2	6023302	6023322	Deletion_20bp

Chr2	6027245	6027245	Insertion_31bp
Chr2	6028234	6028265	Deletion_31bp
Chr2	2422198	2422198	Insertion_20bp
Chr2	2444058	2444058	Insertion_1192bp
Chr2	2452689	2452689	Insertion_46bp
Chr2	164648	164669	Deletion_21bp
Chr2	172117	172145	Deletion_28bp
Chr2	176997	177028	Deletion_31bp
Chr2	183227	183227	Insertion_23bp
Chr2	15994740	15994863	Deletion_123bp
Chr2	15998565	15998622	Deletion_57bp
Chr2	16001568	16001620	Deletion_52bp
Chr2	4656502	4657430	Deletion_928bp
Chr2	4658414	4658414	Insertion_1892bp
Chr2	4669567	4669567	Insertion_33bp
Chr2	4674490	4674511	Deletion_21bp
Chr2	4683850	4683850	Insertion_53bp
Chr2	4684735	4684735	Insertion_26bp
Chr2	4685238	4685238	Insertion_43bp
Chr2	12646999	12646999	Insertion_28bp
Chr2	6880803	6880803	Insertion_21bp
Chr2	6884542	6884578	Deletion_36bp
Chr2	6888451	6888480	Deletion_29bp
Chr2	6892487	6892487	Insertion_32bp
Chr2	6898532	6898532	Insertion_6128bp
Chr2	12593578	12593578	Insertion_174bp
Chr2	416828	416854	Deletion_26bp
Chr2	430853	430914	Deletion_61bp
Chr2	16148837	16148875	Deletion_38bp
Chr2	16150377	16151305	Deletion_928bp
Chr2	13929886	13929953	Deletion_67bp
Chr2	1048773	1048799	Deletion_26bp
Chr2	18053305	18053344	Deletion_39bp
Chr2	18061163	18061163	Insertion_6094bp
Chr2	9225476	9226024	Deletion_548bp
Chr2	9226254	9226301	Deletion_47bp
Chr2	9238724	9238724	Insertion_22bp
Chr2	1401159	1401159	Insertion_145bp
Chr2	1408819	1408847	Deletion_28bp
Chr2	1410199	1410199	Insertion_40bp
Chr2	1414159	1414159	Insertion_20bp
Chr2	1416777	1416777	Insertion_31bp
Chr2	1421781	1421804	Deletion_23bp
Chr2	1423168	1423168	Insertion_702bp
Chr2	1427261	1427261	Insertion_36bp
Chr2	1427571	1427597	Deletion_26bp
Chr2	1429654	1429675	Deletion_21bp
Chr2	1430492	1430492	Insertion_282bp
Chr2	13223049	13227048	Deletion_3999bp

Chr2	11745329	11745329	Insertion_54bp
Chr2	11745646	11745670	Deletion_24bp
Chr2	11748039	11748039	Insertion_20bp
Chr2	11760765	11760765	Insertion_26bp
Chr2	1434183	1434231	Deletion_48bp
Chr2	1434578	1434578	Insertion_137bp
Chr2	1444722	1444722	Insertion_1082bp
Chr2	1448808	1448836	Deletion_28bp
Chr2	14272186	14272363	Deletion_177bp
Chr2	14275712	14275712	Insertion_28bp
Chr2	14292246	14292246	Insertion_40bp
Chr2	14294278	14294278	Insertion_21bp
Chr2	17965967	17965967	Insertion_22bp
Chr2	2502318	2502318	Insertion_26bp
Chr2	2502483	2502483	Insertion_27bp
Chr2	2518861	2518861	Insertion_20bp
Chr2	2521348	2521348	Insertion_32bp
Chr2	2522582	2522582	Insertion_22bp
Chr2	2526470	2526470	Insertion_4815bp
Chr2	2527815	2527815	Insertion_1600bp
Chr2	10516216	10516278	Deletion_62bp
Chr2	9277832	9277874	Deletion_42bp
Chr2	9280413	9280413	Insertion_38bp
Chr2	9280462	9280462	Insertion_103bp
Chr2	9292832	9292899	Deletion_67bp
Chr2	8151191	8151223	Deletion_32bp
Chr2	8166781	8166967	Deletion_186bp
Chr2	8167721	8167747	Deletion_26bp
Chr2	12657518	12657588	Deletion_70bp
Chr2	12661415	12661415	Insertion_30bp
Chr2	12661878	12661878	Insertion_376bp
Chr2	18192813	18192843	Deletion_30bp
Chr2	5772927	5772927	Insertion_30bp
Chr2	5786420	5786420	Insertion_32bp
Chr2	5786737	5786737	Insertion_629bp
Chr2	5792290	5792346	Deletion_56bp
Chr2	15309197	15309197	Insertion_55bp
Chr2	1064213	1064247	Deletion_34bp
Chr2	10248555	10248555	Insertion_237bp
Chr2	10269202	10269202	Insertion_5336bp
Chr2	6778153	6778153	Insertion_20bp
Chr2	6778842	6785568	Deletion_6726bp
Chr2	10281113	10281154	Deletion_41bp
Chr2	514683	514703	Deletion_20bp
Chr2	517230	517230	Insertion_553bp
Chr2	522655	522655	Insertion_22bp
Chr2	11878326	11878346	Deletion_20bp
Chr2	2018366	2020888	Deletion_2522bp
Chr2	2028555	2028576	Deletion_21bp

Chr2	2037533	2037533	Insertion_5428bp
Chr2	2052127	2052178	Deletion_51bp
Chr2	2058075	2059187	Deletion_1112bp
Chr2	2062722	2062722	Insertion_45bp
Chr2	2063940	2063960	Deletion_20bp
Chr2	2065629	2065745	Deletion_116bp
Chr2	2065837	2066091	Deletion_254bp
Chr2	5162705	5162726	Deletion_21bp
Chr2	5163816	5163816	Insertion_40bp
Chr2	5175698	5175742	Deletion_44bp
Chr2	5179383	5180245	Deletion_862bp
Chr2	5182061	5182088	Deletion_27bp
Chr2	5185829	5185898	Deletion_69bp
Chr2	5189766	5189766	Insertion_33bp
Chr2	4137311	4137311	Insertion_1093bp
Chr2	4140793	4140806	Insertion_20bp
Chr2	4153022	4153022	Insertion_45bp
Chr2	4155299	4155755	Deletion_456bp
Chr2	4322108	4322108	Insertion_28bp
Chr2	4328180	4328180	Insertion_40bp
Chr2	4328387	4328387	Insertion_34bp
Chr2	4335534	4335534	Insertion_52bp
Chr2	4345872	4345902	Deletion_30bp
Chr2	1567383	1567383	Insertion_32bp
Chr2	1568180	1568218	Deletion_38bp
Chr2	1573251	1573382	Deletion_131bp
Chr2	1574107	1574107	Insertion_48bp
Chr2	1576549	1576549	Insertion_33bp
Chr2	1581275	1581275	Insertion_42bp
Chr2	18311959	18311983	Deletion_24bp
Chr2	18314758	18314758	Insertion_30bp
Chr2	1827639	1827670	Deletion_31bp
Chr2	1832197	1832409	Deletion_212bp
Chr2	1838147	1838147	Insertion_30bp
Chr2	10569235	10569235	Insertion_76bp
Chr2	10573144	10573144	Insertion_3974bp
Chr2	10573955	10574143	Deletion_188bp
Chr2	3028364	3028675	Deletion_311bp
Chr2	3037098	3037143	Deletion_45bp
Chr2	3040196	3040196	Insertion_25bp
Chr2	3042079	3042383	Deletion_304bp
Chr2	3045995	3045995	Insertion_88bp
Chr2	3046850	3046879	Deletion_29bp
Chr2	3046973	3046973	Insertion_203bp
Chr2	3051702	3051747	Deletion_45bp
Chr2	14118551	14118598	Deletion_47bp
Chr2	14132954	14132954	Insertion_256bp
Chr2	3930767	3930767	Insertion_29bp
Chr2	3937279	3937291	Insertion_35bp

Chr2	3943387	3943416	Deletion_29bp
Chr2	10316813	10316813	Insertion_25bp
Chr2	404754	404792	Deletion_38bp
Chr2	406334	406372	Deletion_38bp
Chr2	8352870	8352870	Insertion_23bp
Chr2	1238320	1238374	Deletion_54bp
Chr2	1241651	1241651	Insertion_21bp
Chr2	1241949	1242000	Deletion_51bp
Chr2	1242370	1242370	Insertion_33bp
Chr2	1248700	1248736	Deletion_36bp
Chr2	1248973	1248993	Deletion_20bp
Chr2	1258056	1258056	Insertion_25bp
Chr2	1259994	1259994	Insertion_22bp
Chr2	12517481	12517511	Deletion_30bp
Chr2	12518785	12518825	Deletion_40bp
Chr2	12528414	12528443	Deletion_29bp
Chr2	15735386	15735386	Insertion_38bp
Chr2	5058597	5058597	Insertion_44bp
Chr2	5067599	5067640	Deletion_41bp
Chr2	5073575	5073597	Deletion_22bp
Chr2	5077104	5077104	Insertion_676bp
Chr2	8220900	8220934	Deletion_34bp
Chr2	11271189	11271189	Insertion_24bp
Chr2	11279299	11279402	Deletion_103bp
Chr2	5729312	5729312	Insertion_21bp
Chr2	9262041	9263108	Deletion_1067bp
Chr2	3524435	3524481	Deletion_46bp
Chr2	7695838	7695838	Insertion_20bp
Chr2	14381478	14381504	Deletion_26bp
Chr2	14383373	14383373	Insertion_74bp
Chr2	2935940	2935940	Insertion_49bp
Chr2	2939028	2939028	Insertion_38bp
Chr2	2951042	2951042	Insertion_24bp
Chr2	2953379	2953379	Insertion_7292bp
Chr2	2960233	2960233	Insertion_83bp
Chr2	6059613	6059635	Deletion_22bp
Chr2	6071734	6071734	Insertion_42bp
Chr2	3562930	3563162	Deletion_232bp
Chr2	3570745	3570745	Insertion_61bp
Chr2	3572155	3572155	Insertion_50bp
Chr2	3576042	3576111	Deletion_69bp
Chr2	3576272	3576272	Insertion_4220bp
Chr2	8804200	8804223	Deletion_23bp
Chr2	8810503	8810503	Insertion_80bp
Chr2	10779656	10779656	Insertion_114bp
Chr2	5950068	5950432	Deletion_728bp
Chr2	6426639	6426639	Insertion_21bp
Chr2	6428318	6428318	Insertion_4729bp
Chr2	6430717	6430717	Insertion_36bp

Chr2	6438599	6438630	Deletion_31bp
Chr2	6445790	6445790	Insertion_89bp
Chr2	6446172	6446233	Deletion_61bp
Chr2	6449102	6449131	Deletion_29bp
Chr2	5143386	5143542	Deletion_156bp
Chr2	5144448	5144448	Insertion_108bp
Chr2	5146280	5146308	Deletion_28bp
Chr2	5159619	5159909	Deletion_290bp
Chr2	6830561	6830561	Insertion_1551bp
Chr2	6841756	6841756	Insertion_52bp
Chr2	6844971	6844991	Deletion_20bp
Chr2	6846042	6846066	Deletion_24bp
Chr2	2340372	2340486	Deletion_114bp
Chr2	2346980	2347066	Deletion_86bp
Chr2	648356	648356	Insertion_22bp
Chr2	649589	649762	Deletion_173bp
Chr2	654043	654043	Insertion_142bp
Chr2	656373	656373	Insertion_1847bp
Chr2	658903	658903	Insertion_38bp
Chr2	660260	660291	Deletion_31bp
Chr2	660658	660658	Insertion_21bp
Chr2	666265	666308	Deletion_43bp
Chr2	669251	669251	Insertion_240bp
Chr2	8891618	8891618	Insertion_2336bp
Chr2	8895138	8895138	Insertion_21bp
Chr2	8896255	8896286	Deletion_31bp
Chr2	8903814	8903814	Insertion_54bp
Chr2	6736153	6736153	Insertion_46bp
Chr2	6738474	6738474	Insertion_30bp
Chr2	6744848	6744878	Deletion_30bp
Chr2	6747733	6747801	Deletion_68bp
Chr2	6966826	6966826	Insertion_357bp
Chr2	6970101	6970101	Insertion_21bp
Chr2	6979115	6979115	Insertion_32bp
Chr2	9376450	9376450	Insertion_881bp
Chr2	4281952	4281952	Insertion_22bp
Chr2	4287221	4287293	Deletion_72bp
Chr2	4287434	4287470	Deletion_36bp
Chr2	4299412	4299412	Insertion_31bp
Chr2	1020653	1020682	Deletion_29bp
Chr2	986094	986094	Insertion_29bp
Chr2	1715077	1715077	Insertion_348bp
Chr2	6990988	6992256	Deletion_1268bp
Chr2	6994724	6994754	Deletion_30bp
Chr2	6995622	6995622	Insertion_36bp
Chr2	2473830	2473830	Insertion_36bp
Chr2	2476723	2476780	Deletion_57bp
Chr2	845478	845478	Insertion_23bp
Chr2	846650	846684	Deletion_34bp

Chr2	857373	857415	Deletion_42bp
Chr2	859326	859326	Insertion_4647bp
Chr2	5000928	5000989	Deletion_61bp
Chr2	4166333	4166333	Insertion_53bp
Chr2	4166802	4166802	Insertion_52bp
Chr2	4168368	4168386	Insertion_45bp
Chr2	4170698	4170723	Deletion_25bp
Chr2	4175135	4175135	Insertion_29bp
Chr2	4183063	4183103	Deletion_40bp
Chr2	6855613	6855645	Deletion_32bp
Chr2	6870149	6870172	Deletion_23bp
Chr2	6872446	6872446	Insertion_289bp
Chr2	7085500	7085549	Deletion_49bp
Chr2	7096534	7096534	Insertion_4728bp
Chr2	6506344	6506344	Insertion_20bp
Chr2	6508864	6510919	Deletion_2055bp
Chr2	6512925	6512952	Deletion_27bp
Chr2	6519940	6519940	Insertion_29bp
Chr2	6522592	6522592	Insertion_8989bp
Chr2	6523632	6523652	Deletion_20bp
Chr2	6523734	6523773	Deletion_39bp
Chr2	6537773	6537966	Deletion_193bp
Chr2	18139181	18139348	Deletion_167bp
Chr2	18142092	18142171	Deletion_79bp
Chr2	18143028	18143048	Deletion_20bp
Chr2	18145541	18145624	Deletion_83bp
Chr2	9797267	9797267	Insertion_20bp
Chr2	19237115	19237115	Insertion_26bp
Chr2	19249036	19249069	Deletion_33bp
Chr2	5653510	5653510	Insertion_27bp
Chr2	5653654	5653654	Insertion_57bp
Chr2	5656871	5660073	Deletion_3202bp
Chr2	5665218	5665218	Insertion_26bp
Chr2	5670134	5671282	Deletion_1148bp
Chr2	5680920	5680920	Insertion_379bp
Chr2	15964454	15964505	Deletion_51bp
Chr2	15972318	15972566	Deletion_248bp
Chr2	15975058	15975058	Insertion_31bp
Chr2	9863777	9863777	Insertion_3754bp
Chr2	7230017	7230017	Insertion_229bp
Chr2	7230375	7230397	Deletion_22bp
Chr2	7232091	7232124	Deletion_33bp
Chr2	7238476	7238476	Insertion_148bp
Chr2	15631677	15631702	Deletion_25bp
Chr2	6003022	6003022	Insertion_30bp
Chr2	6008034	6008067	Deletion_33bp
Chr2	6010252	6010252	Insertion_20bp
Chr2	6015562	6015562	Insertion_643bp
Chr2	9994402	9994402	Insertion_1104bp

Chr2	5092233	5092297	Deletion_64bp
Chr2	8552209	8552209	Insertion_154bp
Chr2	8554828	8555811	Deletion_983bp
Chr2	1992656	1992688	Deletion_32bp
Chr2	9206122	9206146	Deletion_24bp
Chr2	1083016	1083051	Deletion_35bp
Chr2	1083119	1083147	Deletion_28bp
Chr2	897242	897268	Deletion_26bp
Chr2	898529	898549	Deletion_20bp
Chr2	909728	914339	Deletion_4611bp
Chr2	923267	923267	Insertion_22bp
Chr2	924279	924279	Insertion_135bp
Chr2	925150	925322	Deletion_172bp
Chr2	263881	263917	Deletion_36bp
Chr2	273312	273312	Insertion_21bp
Chr2	275767	275767	Insertion_67bp
Chr2	8997561	8997561	Insertion_39bp
Chr2	11703029	11703491	Deletion_462bp
Chr2	11705648	11705648	Insertion_1459bp
Chr2	11715040	11715091	Deletion_51bp
Chr2	13064506	13068389	Deletion_3883bp
Chr2	16707860	16707860	Insertion_32bp
Chr2	16708051	16708157	Deletion_106bp
Chr2	16708429	16708522	Deletion_93bp
Chr2	16723215	16723287	Deletion_72bp
Chr2	2199546	2199582	Deletion_36bp
Chr2	2201579	2201612	Deletion_33bp
Chr2	863981	863981	Insertion_34bp
Chr2	18260421	18260446	Deletion_25bp
Chr2	18261937	18261966	Deletion_29bp
Chr2	1682175	1682175	Insertion_67bp
Chr2	10560273	10560312	Deletion_39bp
Chr2	5106131	5106178	Deletion_47bp
Chr2	5110283	5110283	Insertion_714bp
Chr2	5111859	5111916	Deletion_57bp
Chr2	5113180	5113259	Deletion_79bp
Chr2	5118503	5118532	Deletion_29bp
Chr2	5120518	5120550	Deletion_32bp
Chr2	5121735	5122724	Deletion_989bp
Chr2	5123463	5130646	Deletion_7183bp
Chr2	7405072	7405072	Insertion_87bp
Chr2	7032731	7032731	Insertion_42bp
Chr2	7034379	7034379	Insertion_24bp
Chr2	2211339	2211369	Deletion_30bp
Chr2	6274908	6274944	Deletion_36bp
Chr2	2581306	2581306	Insertion_24bp
Chr2	9195839	9195853	Insertion_73bp
Chr2	14751467	14751467	Insertion_777bp
Chr2	966353	966384	Deletion_31bp

Chr2	972747	972747	Insertion_30bp
Chr2	977991	978033	Deletion_42bp
Chr2	979045	979085	Deletion_40bp
Chr2	3655218	3655218	Insertion_22bp
Chr2	3663755	3663755	Insertion_1659bp
Chr2	9852483	9852483	Insertion_27bp
Chr2	5704799	5704799	Insertion_24bp
Chr2	3679505	3679505	Insertion_34bp
Chr2	3686674	3686674	Insertion_197bp
Chr2	3686675	3686678	Deletion_488bp
Chr2	3689956	3689984	Deletion_28bp
Chr2	18280399	18280423	Deletion_24bp
Chr2	18284970	18284970	Insertion_27bp
Chr2	1387763	1387763	Insertion_30bp
Chr2	2531209	2531209	Insertion_53bp
Chr2	2536879	2536879	Insertion_21bp
Chr2	14297841	14297886	Deletion_45bp
Chr2	10494086	10494963	Deletion_877bp
Chr2	10504574	10504645	Deletion_71bp
Chr2	10505059	10505084	Deletion_25bp
Chr2	10505344	10505344	Insertion_3610bp
Chr2	9008673	9008673	Insertion_34bp
Chr2	9014370	9014370	Insertion_34bp
Chr2	9018145	9018184	Deletion_39bp
Chr2	9018435	9018488	Deletion_53bp
Chr2	7552950	7552980	Deletion_30bp
Chr2	1670328	1670328	Insertion_737bp
Chr2	1674370	1674370	Insertion_39bp
Chr2	1675068	1675094	Deletion_26bp
Chr2	5388872	5388908	Deletion_36bp
Chr2	5395049	5396622	Deletion_1573bp
Chr2	5396651	5396792	Deletion_141bp
Chr2	5400579	5400579	Insertion_96bp
Chr2	5401369	5401916	Deletion_547bp
Chr2	5407086	5407086	Insertion_22bp
Chr2	758972	758972	Insertion_46bp
Chr2	13945241	13945241	Insertion_30bp
Chr2	12715278	12715278	Insertion_126bp
Chr2	12717042	12717279	Deletion_237bp
Chr2	12719145	12719145	Insertion_4963bp
Chr2	12722454	12722484	Deletion_30bp
Chr2	12727317	12727317	Insertion_21bp
Chr2	6155955	6155955	Insertion_52bp
Chr2	6077775	6078165	Deletion_390bp
Chr2	6082582	6084542	Deletion_1960bp
Chr2	6091370	6091623	Deletion_253bp
Chr2	5326905	5326905	Insertion_37bp
Chr2	5327068	5327068	Insertion_244bp
Chr2	5327793	5327825	Deletion_32bp

Chr2	8299144	8299338	Deletion_194bp
Chr2	15140110	15140143	Deletion_33bp
Chr2	3673454	3673475	Deletion_21bp
Chr2	3674505	3674526	Deletion_21bp
Chr2	3674624	3674624	Insertion_49bp
Chr2	3676635	3676635	Insertion_662bp
Chr2	3679505	3679505	Insertion_34bp
Chr2	8601139	8601153	Insertion_55bp
Chr2	8607238	8607238	Insertion_28bp
Chr2	8607900	8607921	Deletion_21bp
Chr2	7673716	7673716	Insertion_173bp
Chr2	1281157	1281179	Deletion_22bp
Chr2	16373126	16373517	Deletion_391bp
Chr2	16374431	16374434	Insertion_41bp
Chr2	9065291	9065291	Insertion_20bp
Chr2	9073536	9073536	Insertion_238bp
Chr2	9359269	9359269	Insertion_12989bp
Chr2	9360988	9361008	Deletion_20bp
Chr2	9361023	9361310	Deletion_287bp
Chr2	208285	208351	Deletion_66bp
Chr2	16664756	16664756	Insertion_34bp
Chr2	16665801	16665801	Insertion_864bp
Chr2	16665838	16665838	Insertion_729bp
Chr2	12105049	12105049	Insertion_79bp
Chr2	12107657	12107657	Insertion_89bp
Chr2	12111623	12111623	Insertion_24bp
Chr2	8612940	8612940	Insertion_2219bp
Chr2	5018928	5018970	Deletion_42bp
Chr2	5022350	5022442	Deletion_92bp
Chr2	5026859	5026904	Deletion_45bp
Chr2	12168815	12168815	Insertion_44bp
Chr2	336500	336536	Deletion_36bp
Chr2	337046	337072	Deletion_26bp
Chr2	337739	338130	Deletion_398bp
Chr2	343637	343637	Insertion_33bp
Chr2	347333	347333	Insertion_185bp
Chr2	13416973	13416987	Insertion_24bp
Chr2	13421909	13426564	Deletion_4655bp
Chr2	10205534	10205534	Insertion_34bp
Chr2	10207385	10207428	Deletion_43bp
Chr2	7423203	7423227	Deletion_24bp
Chr2	7427137	7427137	Insertion_317bp
Chr2	8623569	8623569	Insertion_23bp
Chr2	8627086	8629652	Deletion_2566bp
Chr2	7070284	7070305	Deletion_21bp
Chr2	7071586	7072224	Deletion_638bp
Chr2	4821788	4821808	Deletion_20bp
Chr2	18291208	18291225	Insertion_47bp
Chr2	18291749	18291749	Insertion_365bp

Chr2	18293281	18293281	Insertion_23bp
Chr2	18300717	18300756	Deletion_39bp
Chr2	4943463	4943506	Deletion_43bp
Chr2	4945273	4945273	Insertion_44bp
Chr2	2747652	2747666	Insertion_24bp
Chr2	7761440	7761440	Insertion_35bp
Chr2	7765539	7765571	Deletion_32bp
Chr2	881479	881479	Insertion_22bp
Chr2	884824	884824	Insertion_28bp
Chr2	10002612	10002612	Insertion_182bp
Chr2	2552344	2552721	Deletion_377bp
Chr2	2553608	2553835	Deletion_227bp
Chr2	2557779	2557779	Insertion_44bp
Chr2	2558472	2558472	Insertion_84bp
Chr2	781763	781763	Insertion_77bp
Chr2	787557	787583	Deletion_26bp
Chr2	12242772	12242772	Insertion_20bp
Chr2	12248686	12248686	Insertion_242bp
Chr2	12250035	12250068	Deletion_33bp
Chr2	9343823	9343823	Insertion_566bp
Chr2	9345786	9345807	Deletion_21bp
Chr2	5417671	5417671	Insertion_191bp
Chr2	4199624	4199645	Deletion_21bp
Chr2	4203306	4203336	Deletion_30bp
Chr2	4204628	4204628	Insertion_50bp
Chr2	12566146	12578423	Deletion_12277bp
Chr2	12585451	12585451	Insertion_5335bp
Chr2	7408264	7408264	Insertion_39bp
Chr2	7416611	7417236	Deletion_625bp
Chr2	7417837	7417865	Deletion_28bp
Chr2	7418738	7419425	Deletion_687bp
Chr2	13446922	13446922	Insertion_42bp
Chr2	5589082	5589082	Insertion_87bp
Chr2	4993846	4993871	Deletion_25bp
Chr2	16122809	16122809	Insertion_26bp
Chr2	3905004	3905004	Insertion_109bp
Chr2	3906520	3912271	Deletion_5751bp
Chr2	3913909	3913909	Insertion_54bp
Chr2	3919363	3919363	Insertion_37bp
Chr2	3920802	3920802	Insertion_22bp
Chr2	7319687	7319687	Insertion_1321bp
Chr2	4691822	4691858	Deletion_36bp
Chr2	4692755	4692806	Deletion_51bp
Chr2	4694317	4694317	Insertion_2718bp
Chr2	4694781	4694825	Deletion_44bp
Chr2	4695214	4695214	Insertion_21bp
Chr2	623704	623732	Deletion_28bp
Chr2	628566	628602	Deletion_36bp
Chr2	12708831	12708831	Insertion_94bp

Chr2	6547115	6547115	Insertion_29bp
Chr2	6549315	6549354	Deletion_39bp
Chr2	6549598	6549598	Insertion_43bp
Chr2	6549799	6549799	Insertion_40bp
Chr2	1856596	1856596	Insertion_26bp
Chr2	1861246	1861246	Insertion_164bp
Chr2	1867582	1867582	Insertion_8738bp
Chr2	6649084	6649084	Insertion_23bp
Chr2	6652713	6652751	Deletion_38bp
Chr2	16442280	16442280	Insertion_68bp
Chr2	1183973	1184048	Deletion_75bp
Chr2	9039005	9039271	Deletion_266bp
Chr2	14775105	14775105	Insertion_23bp
Chr2	1781824	1781824	Insertion_23bp
Chr2	1788148	1788168	Deletion_20bp
Chr2	6486138	6486138	Insertion_23bp
Chr2	6494708	6494708	Insertion_347bp
Chr2	2084882	2084927	Deletion_45bp
Chr2	3730404	3730424	Deletion_20bp
Chr2	2240706	2240744	Deletion_38bp
Chr2	1652274	1652728	Deletion_454bp
Chr2	1657635	1657726	Deletion_91bp
Chr2	1659632	1659632	Insertion_27bp
Chr2	1659678	1659698	Deletion_20bp
Chr2	1876740	1878766	Deletion_2026bp
Chr2	5134682	5134682	Insertion_20bp
Chr2	6677873	6678048	Deletion_175bp
Chr2	6678441	6680818	Deletion_2377bp
Chr2	6682174	6683113	Deletion_939bp
Chr2	6684329	6684354	Deletion_25bp
Chr2	8998408	8998408	Insertion_23bp
Chr2	5824939	5831366	Deletion_6427bp
Chr2	5831972	5831972	Insertion_50bp
Chr2	2486953	2486953	Insertion_93bp
Chr2	2489242	2489645	Deletion_403bp
Chr2	2490642	2490666	Deletion_24bp
Chr2	2491724	2492047	Deletion_323bp
Chr2	2492956	2492956	Insertion_27bp
Chr2	2367873	2367873	Insertion_36bp
Chr2	4204798	4204822	Deletion_24bp
Chr2	4211533	4211533	Insertion_533bp
Chr2	4214337	4214372	Deletion_35bp
Chr2	4214900	4214900	Insertion_21bp
Chr2	4215751	4215751	Insertion_571bp
Chr2	5466900	5466980	Deletion_80bp
Chr2	5468711	5468733	Deletion_22bp
Chr2	682925	682925	Insertion_21bp
Chr2	9807805	9808379	Deletion_574bp
Chr2	6712510	6712599	Deletion_89bp

Chr2	3015191	3015359	Deletion_168bp
Chr2	3015488	3015656	Deletion_168bp
Chr2	3016317	3016466	Deletion_149bp
Chr2	3017429	3017514	Deletion_85bp
Chr2	3018218	3018241	Deletion_23bp
Chr2	3022359	3022359	Insertion_25bp
Chr2	3022811	3022831	Deletion_20bp
Chr2	5637751	5637780	Deletion_29bp
Chr2	7301035	7301069	Deletion_34bp
Chr2	7305679	7305679	Insertion_26bp
Chr2	5617439	5617439	Insertion_66bp
Chr2	5624096	5624096	Insertion_213bp
Chr2	1529855	1530220	Deletion_365bp
Chr2	1530828	1530828	Insertion_40bp
Chr2	1530914	1530937	Deletion_23bp
Chr2	1535263	1536260	Deletion_997bp
Chr2	4851642	4851642	Insertion_652bp
Chr2	4856509	4856509	Insertion_31bp
Chr2	4858969	4859019	Deletion_50bp
Chr2	4806951	4806951	Insertion_37bp
Chr2	4808533	4808533	Insertion_46bp
Chr2	4809897	4809897	Insertion_50bp
Chr2	4810788	4810788	Insertion_31bp
Chr2	4812007	4812035	Deletion_28bp
Chr2	4812445	4812513	Deletion_68bp
Chr2	4814375	4814375	Insertion_30bp
Chr2	5280298	5280298	Insertion_50bp
Chr2	5282699	5282699	Insertion_22bp
Chr2	5286367	5286404	Deletion_37bp
Chr2	9043216	9043216	Insertion_20bp
Chr2	5353714	5353955	Deletion_241bp
Chr2	5359345	5359366	Deletion_21bp
Chr2	5360386	5360386	Insertion_27bp
Chr2	5361305	5361375	Deletion_70bp
Chr2	5361668	5361668	Insertion_2890bp
Chr2	1938707	1938758	Deletion_51bp
Chr2	8796126	8796215	Deletion_89bp
Chr2	1362065	1362065	Insertion_4532bp
Chr2	2230980	2231000	Deletion_20bp
Chr2	6614535	6614535	Insertion_38bp
Chr2	6619426	6619472	Deletion_46bp
Chr2	7056745	7057156	Deletion_411bp
Chr2	282316	282339	Deletion_23bp
Chr2	12897748	12897770	Deletion_22bp
Chr2	6473214	6473214	Insertion_187bp
Chr2	11257321	11257345	Deletion_24bp
Chr2	5915815	5915842	Deletion_27bp
Chr2	17971718	17971718	Insertion_30bp
Chr2	9631135	9631424	Deletion_289bp

Chr2	9633540	9635122	Deletion_1582bp
Chr2	19298019	19298019	Insertion_53bp
Chr2	4977409	4977409	Insertion_124bp
Chr2	4978567	4978567	Insertion_68bp
Chr2	9050124	9050152	Deletion_28bp
Chr2	9055335	9055402	Deletion_67bp
Chr2	1768843	1768843	Insertion_22bp
Chr2	1768899	1768941	Deletion_42bp
Chr2	1771662	1771694	Deletion_32bp
Chr2	1773707	1773707	Insertion_2038bp
Chr2	12560442	12560474	Deletion_32bp
Chr2	12562300	12562329	Deletion_29bp
Chr2	5851100	5851100	Insertion_58bp
Chr2	5332570	5332570	Insertion_52bp
Chr2	5334081	5334081	Insertion_47bp
Chr2	5334958	5334986	Deletion_28bp
Chr2	5338650	5338650	Insertion_21bp
Chr2	5338876	5338909	Deletion_33bp
Chr2	5340878	5340878	Insertion_56bp
Chr2	5345873	5345906	Deletion_33bp
Chr2	17374	17404	Deletion_30bp
Chr2	5908275	5908310	Deletion_35bp
Chr2	5909040	5909040	Insertion_24bp
Chr2	5298579	5298579	Insertion_29bp
Chr2	606001	606053	Deletion_61bp
Chr2	606319	606406	Deletion_87bp
Chr2	12446342	12446342	Insertion_414bp
Chr2	12447429	12447429	Insertion_70bp
Chr2	12449199	12454483	Deletion_5284bp
Chr2	147771	147815	Deletion_44bp
Chr2	152006	153199	Deletion_1193bp
Chr2	6636585	6636585	Insertion_20bp
Chr2	6373123	6373161	Deletion_38bp
Chr2	6376344	6376397	Deletion_53bp
Chr2	6377689	6377784	Deletion_95bp
Chr2	6382744	6384053	Deletion_1309bp
Chr2	8918958	8918958	Insertion_35bp
Chr2	8539170	8539170	Insertion_5128bp
Chr2	8541775	8541810	Deletion_35bp
Chr2	8542073	8542095	Deletion_22bp
Chr2	1543013	1543325	Deletion_312bp
Chr2	14402235	14405889	Deletion_3654bp
Chr2	14406955	14407028	Deletion_73bp
Chr2	1609749	1609749	Insertion_32bp
Chr2	778980	779025	Deletion_45bp
Chr2	258124	258154	Deletion_37bp
Chr2	2563688	2563742	Deletion_54bp
Chr2	2563876	2564086	Deletion_210bp
Chr2	2568455	2568565	Deletion_110bp

Chr2	2570010	2570216	Deletion_206bp
Chr2	2570451	2570451	Insertion_30bp
Chr2	7322711	7322711	Insertion_24bp
Chr2	7323294	7323294	Insertion_857bp
Chr2	981596	981751	Deletion_155bp
Chr2	981978	982006	Deletion_28bp
Chr2	10562555	10562577	Deletion_22bp
Chr2	9765415	9765448	Deletion_33bp
Chr2	1098332	1098355	Deletion_23bp
Chr2	12291372	12291401	Deletion_29bp
Chr2	12294459	12294459	Insertion_41bp
Chr2	6814422	6814475	Deletion_53bp
Chr2	6817127	6817154	Deletion_27bp
Chr2	6819001	6823731	Deletion_4730bp
Chr2	6823951	6823990	Deletion_39bp
Chr2	6658913	6664117	Deletion_5204bp
Chr2	6666964	6666964	Insertion_4965bp
Chr2	15958849	15958873	Deletion_24bp
Chr2	6150412	6150479	Deletion_67bp
Chr2	6152604	6152639	Deletion_35bp
Chr2	1944830	1945100	Deletion_270bp
Chr2	6361699	6361699	Insertion_506bp
Chr2	7539406	7539406	Insertion_567bp
Chr2	2351119	2351155	Deletion_36bp
Chr2	2354028	2354049	Deletion_21bp
Chr2	10603495	10603495	Insertion_23bp
Chr2	10605922	10605942	Deletion_20bp
Chr2	10606060	10606084	Deletion_24bp
Chr2	10607001	10607001	Insertion_42bp
Chr2	10608131	10608173	Deletion_42bp
Chr2	14676533	14676557	Deletion_24bp
Chr2	16702532	16702532	Insertion_57bp
Chr2	16704607	16704639	Deletion_32bp
Chr2	283509	283533	Deletion_24bp
Chr2	284449	284504	Deletion_55bp
Chr2	9302612	9302612	Insertion_87bp
Chr2	9305929	9305929	Insertion_53bp
Chr2	10754668	10754668	Insertion_214bp
Chr2	7920649	7920670	Deletion_21bp
Chr2	9778225	9778225	Insertion_38bp
Chr2	4311833	4311863	Deletion_30bp
Chr2	4923499	4923499	Insertion_23bp
Chr2	1705696	1705696	Insertion_106bp
Chr2	701336	701336	Insertion_37bp
Chr2	701454	701454	Insertion_113bp
Chr2	4362973	4362973	Insertion_29bp
Chr2	7919749	7919905	Deletion_156bp
Chr2	7702088	7702088	Insertion_27bp
Chr2	10056862	10056891	Deletion_29bp

Chr2	1195203	1195203	Insertion_4693bp
Chr2	1195407	1195456	Deletion_49bp
Chr2	16730013	16730145	Deletion_132bp
Chr2	4378480	4378480	Insertion_63bp
Chr2	4382012	4382045	Deletion_33bp
Chr2	10771084	10771107	Deletion_23bp
Chr2	5035974	5035980	Insertion_37bp
Chr2	5036636	5036636	Insertion_24bp
Chr2	5612711	5612785	Deletion_74bp
Chr2	8871257	8871257	Insertion_31bp
Chr2	720968	720968	Insertion_28bp
Chr2	723386	723386	Insertion_357bp
Chr2	1854500	1854571	Deletion_80bp
Chr2	4302085	4302190	Deletion_105bp
Chr2	4302524	4302723	Deletion_199bp
Chr2	4372501	4372501	Insertion_138bp
Chr2	4375258	4375279	Deletion_21bp
Chr2	4375545	4375613	Deletion_68bp
Chr2	12651903	12651903	Insertion_143bp
Chr2	717274	717626	Deletion_352bp
Chr2	719451	719451	Insertion_402bp
Chr2	12456891	12456930	Deletion_39bp
Chr2	12458041	12458041	Insertion_3020bp
Chr2	4838474	4838474	Insertion_456bp
Chr2	5048611	5048611	Insertion_32bp
Chr2	5049598	5049619	Deletion_21bp
Chr2	1352733	1352758	Deletion_25bp
Chr2	1177516	1177544	Deletion_28bp
Chr2	1180708	1180792	Deletion_84bp
Chr2	1606803	1606910	Deletion_107bp
Chr2	4185826	4185826	Insertion_31bp
Chr2	2480677	2480677	Insertion_25bp
Chr2	5744683	5744683	Insertion_32bp
Chr2	9080408	9080437	Deletion_29bp
Chr2	9080631	9080671	Deletion_40bp
Chr2	12622948	12622973	Deletion_25bp
Chr2	12623231	12623231	Insertion_20bp
Chr2	6939052	6939337	Deletion_285bp
Chr2	6939496	6939496	Insertion_24bp
Chr2	6942032	6945265	Deletion_3233bp
Chr2	6945289	6945714	Deletion_425bp
Chr2	16453500	16453606	Deletion_106bp
Chr2	6900365	6900532	Deletion_167bp
Chr2	8450177	8450177	Insertion_131bp
Chr2	6715522	6715522	Insertion_29bp
Chr2	6716248	6716248	Insertion_28bp
Chr2	18304455	18304455	Insertion_45bp
Chr2	8454329	8454329	Insertion_50bp
Chr2	252969	253011	Deletion_42bp

Chr2	1553276	1553276	Insertion_23bp
Chr2	15047324	15047324	Insertion_115bp
Chr2	15048854	15048893	Deletion_39bp
Chr2	5629861	5629861	Insertion_1107bp
Chr2	12465365	12465365	Insertion_34bp
Chr2	15330026	15330026	Insertion_123bp
Chr2	15331374	15331401	Deletion_27bp
Chr2	12899689	12899689	Insertion_20bp
Chr2	614885	614885	Insertion_46bp
Chr2	1799105	1799105	Insertion_885bp
Chr2	5742684	5742742	Deletion_58bp
Chr2	6915769	6915805	Deletion_36bp
Chr2	6916887	6916887	Insertion_23bp
Chr2	1849008	1849039	Deletion_31bp
Chr2	4648520	4648575	Deletion_55bp
Chr2	6960179	6960202	Deletion_23bp
Chr2	5455173	5455213	Deletion_40bp
Chr2	610527	610574	Deletion_47bp
Chr2	7580609	7580645	Deletion_36bp
Chr2	5436751	5436751	Insertion_36bp
Chr2	5439162	5439196	Deletion_34bp
Chr2	5440524	5444576	Deletion_4052bp
Chr2	10774512	10774512	Insertion_22bp
Chr2	2105199	2105199	Insertion_26bp
Chr2	2106256	2106264	Insertion_64bp
Chr2	9755884	9755913	Deletion_29bp
Chr2	12295064	12295064	Insertion_28bp
Chr2	12296259	12296315	Deletion_56bp
Chr2	18397182	18397208	Deletion_26bp
Chr2	5420717	5420870	Deletion_153bp
Chr2	2930798	2930798	Insertion_62bp
Chr2	12538293	12538388	Deletion_95bp
Chr2	5803551	5803551	Insertion_103bp
Chr2	3698260	3698260	Insertion_582bp
Chr2	3698555	3698555	Insertion_670bp
Chr2	3699567	3699567	Insertion_458bp
Chr2	11736773	11736773	Insertion_55bp
Chr2	16655326	16655326	Insertion_1004bp
Chr2	16655460	16655460	Insertion_25bp
Chr2	7006038	7006070	Deletion_32bp
Chr2	7007334	7007362	Deletion_28bp
Chr2	706910	707235	Deletion_325bp
Chr2	707442	710072	Deletion_2630bp
Chr2	6173203	6173203	Insertion_141bp
Chr2	2920961	2920961	Insertion_31bp
Chr2	5769750	5769750	Insertion_30bp
Chr2	6173203	6173203	Insertion_140bp
Chr2	16942501	16942522	Deletion_21bp
Chr2	1538532	1538563	Deletion_31bp

Chr2	4348691	4348727	Deletion_36bp
Chr2	4349026	4349051	Deletion_25bp
Chr2	3138940	3138940	Insertion_20bp
Chr2	1003354	1003374	Deletion_20bp
Chr2	5869425	5872199	Deletion_2774bp
Chr2	5872700	5872750	Deletion_50bp
Chr2	5093364	5093644	Deletion_280bp
Chr2	8240157	8240157	Insertion_31bp
Chr2	5688776	5688798	Deletion_22bp
Chr2	5689432	5689454	Deletion_22bp
Chr2	704832	704832	Insertion_81bp
Chr2	5875818	5875818	Insertion_211bp
Chr2	5844100	5844127	Deletion_27bp
Chr2	5844522	5844522	Insertion_44bp
Chr2	5038716	5038763	Deletion_47bp
Chr2	5039677	5039677	Insertion_227bp
Chr2	14295095	14295095	Insertion_36bp
Chr2	6262613	6262613	Insertion_65bp
Chr2	5686851	5686908	Deletion_57bp
Chr2	18123188	18123214	Deletion_26bp
Chr2	7661880	7662049	Deletion_169bp
Chr2	1547166	1547211	Deletion_45bp
Chr2	5304839	5304839	Insertion_41bp
Chr2	2246958	2246958	Insertion_34bp
Chr2	2254163	2254194	Deletion_31bp
Chr2	10007955	10007955	Insertion_22bp
Chr2	1760748	1760748	Insertion_36bp
Chr2	16876563	16876620	Deletion_57bp
Chr2	3755714	3755714	Insertion_31bp
Chr2	3756890	3760477	Deletion_3587bp
Chr2	8894515	8894515	Insertion_30bp
Chr2	5412138	5412164	Deletion_26bp
Chr2	5413297	5413297	Insertion_3573bp
Chr2	5898442	5898442	Insertion_45bp
Chr2	2090508	2090508	Insertion_21bp
Chr2	2094191	2094191	Insertion_22bp
Chr2	2100922	2100954	Deletion_32bp
Chr2	2096300	2096300	Insertion_22bp
Chr2	2099982	2099982	Insertion_21bp
Chr2	2100273	2100303	Deletion_30bp
Chr2	2100355	2100375	Deletion_20bp
Chr2	6821754	6821754	Insertion_24bp
Chr2	6823126	6823202	Deletion_76bp
Chr2	4558943	4559043	Deletion_100bp
Chr2	10592514	10592514	Insertion_31bp
Chr2	10594977	10594977	Insertion_81bp
Chr2	3086750	3086810	Deletion_60bp
Chr2	10592750	10592770	Deletion_20bp
Chr2	10593132	10593132	Insertion_81bp

Chr2	3955799	3955843	Deletion_44bp
Chr2	5001894	5001915	Deletion_21bp
Chr2	6838947	6838947	Insertion_29bp
Chr2	5491464	5491464	Insertion_22bp
Chr2	10602346	10602346	Insertion_22bp
Chr2	10603240	10603240	Insertion_20bp
Chr2	10593639	10593639	Insertion_30bp
Chr2	10594977	10594977	Insertion_81bp
Chr2	3293739	3293764	Deletion_25bp
Chr2	6722595	6722672	Deletion_77bp
Chr2	6723812	6723812	Insertion_35bp
Chr2	6724430	6724666	Deletion_236bp
Chr2	6726773	6726773	Insertion_20bp
Chr2	6726913	6726951	Deletion_38bp
Chr2	4188392	4188419	Deletion_27bp
Chr2	6718430	6718430	Insertion_34bp
Chr2	1434710	1434764	Deletion_54bp
Chr2	1435925	1436101	Deletion_176bp
Chr2	3768001	3768001	Insertion_247bp
Chr2	13727487	13727487	Insertion_23bp
Chr2	16876305	16876361	Deletion_56bp
Chr2	4193545	4193648	Deletion_103bp
Chr2	3574825	3574868	Deletion_43bp
Chr2	6115885	6117850	Repeat_contraction_753bp
Chr2	4222732	4222953	Repeat_expansion_315bp
Chr2	4224000	4225526	Repeat_contraction_507bp
Chr2	4226097	4226310	Repeat_expansion_32bp
Chr2	3620127	3620864	Repeat_expansion_7028bp
Chr2	146305	146472	Repeat_expansion_34bp
Chr2	153342	154022	Repeat_expansion_1890bp
Chr2	213728	213938	Repeat_expansion_42bp
Chr2	243799	249222	Deletion_5421bp
Chr2	259307	260931	Repeat_expansion_46bp
Chr2	282542	283427	Repeat_expansion_283bp
Chr2	286615	287255	Repeat_contraction_31bp
Chr2	288937	289114	Repeat_expansion_62bp
Chr2	393494	393777	Repeat_contraction_100bp
Chr2	439689	439984	Repeat_contraction_92bp
Chr2	499602	502685	Repeat_expansion_2236bp
Chr2	526612	526714	Deletion_55bp
Chr2	610321	610509	Repeat_expansion_261bp
Chr2	611794	613051	Repeat_expansion_30bp
Chr2	615151	615889	Repeat_expansion_232bp
Chr2	619130	619712	Repeat_expansion_138bp
Chr2	630596	631386	Repeat_contraction_273bp
Chr2	679913	680092	Repeat_expansion_98bp
Chr2	705545	705726	Repeat_expansion_27bp
Chr2	710248	710701	Repeat_contraction_29bp
Chr2	712645	713807	Repeat_contraction_527bp

Chr2	714666	716579	Repeat_contraction_820bp
Chr2	720682	720717	Insertion_60bp
Chr2	791547	793505	Repeat_contraction_920bp
Chr2	809899	810189	Repeat_expansion_262bp
Chr2	874932	875990	Repeat_contraction_242bp
Chr2	885331	885370	Insertion_162bp
Chr2	890885	895706	Repeat_contraction_3057bp
Chr2	1002355	1003254	Repeat_contraction_243bp
Chr2	1004332	1005337	Repeat_contraction_876bp
Chr2	1021374	1022207	Repeat_contraction_229bp
Chr2	1025969	1026741	Repeat_expansion_59bp
Chr2	1050132	1050402	Deletion_240bp
Chr2	1078079	1079659	Repeat_expansion_417bp
Chr2	1080354	1080355	Insertion_837bp
Chr2	1098629	1099515	Repeat_expansion_20bp
Chr2	1102144	1102791	Repeat_expansion_48bp
Chr2	1146186	1146426	Repeat_contraction_54bp
Chr2	1181073	1181215	Repeat_contraction_26bp
Chr2	1189482	1191578	Repeat_expansion_4820bp
Chr2	1198597	1204865	Repeat_contraction_4434bp
Chr2	1206042	1208749	Repeat_contraction_1876bp
Chr2	1260531	1273451	Repeat_contraction_3884bp
Chr2	1273970	1274409	Repeat_contraction_63bp
Chr2	1347212	1351380	Repeat_contraction_92bp
Chr2	1353220	1353355	Repeat_expansion_97bp
Chr2	1356277	1356312	Insertion_2887bp
Chr2	1366874	1377019	Tandem_contraction_10205bp
Chr2	1388831	1400069	Repeat_expansion_5995bp
Chr2	1431146	1431201	Repeat_expansion_414bp
Chr2	1523845	1526859	Repeat_contraction_2849bp
Chr2	1537252	1538457	Repeat_contraction_312bp
Chr2	1539662	1540197	Repeat_expansion_113bp
Chr2	1546010	1546543	Repeat_expansion_3790bp
Chr2	1547374	1547637	Repeat_expansion_1930bp
Chr2	1553037	1553074	Insertion_598bp
Chr2	1555126	1555252	Repeat_expansion_970bp
Chr2	1584065	1588195	Repeat_expansion_2437bp
Chr2	1602505	1602573	Repeat_expansion_927bp
Chr2	1607641	1609559	Repeat_contraction_1718bp
Chr2	1613096	1618520	Repeat_contraction_3207bp
Chr2	1620415	1621661	Repeat_contraction_618bp
Chr2	1622913	1645004	Repeat_contraction_5715bp
Chr2	1647804	1648951	Repeat_expansion_319bp
Chr2	1681189	1681192	Insertion_873bp
Chr2	1701369	1702333	Repeat_contraction_336bp
Chr2	1723920	1724443	Tandem_expansion_3153bp
Chr2	1779845	1780790	Repeat_expansion_2414bp
Chr2	1788578	1789909	Repeat_contraction_505bp
Chr2	1791277	1797799	Repeat_contraction_5028bp

Chr2	1800905	1823345	Repeat_contraction_19151bp
Chr2	1847105	1847313	Repeat_contraction_59bp
Chr2	1848590	1848952	Repeat_contraction_79bp
Chr2	1850801	1852184	Repeat_expansion_3546bp
Chr2	1854994	1855794	Repeat_contraction_395bp
Chr2	1867854	1869861	Repeat_contraction_409bp
Chr2	1883369	1887044	Tandem_contraction_4446bp
Chr2	1944337	1944342	Insertion_484bp
Chr2	1952904	1953026	Repeat_expansion_4709bp
Chr2	1977985	1978095	Repeat_expansion_51bp
Chr2	1978808	1983791	Repeat_contraction_764bp
Chr2	1985240	1986170	Repeat_expansion_293bp
Chr2	1987057	1987337	Repeat_contraction_36bp
Chr2	1989013	1989047	Insertion_1337bp
Chr2	2002990	2014013	Repeat_contraction_2429bp
Chr2	2070053	2080608	Repeat_expansion_3462bp
Chr2	2089355	2101414	Deletion_12059bp
Chr2	2107327	2115379	Repeat_contraction_6268bp
Chr2	2198172	2198247	Repeat_expansion_140bp
Chr2	2209817	2210952	Tandem_expansion_1145bp
Chr2	2223566	2224253	Repeat_contraction_523bp
Chr2	2231880	2234215	Repeat_contraction_110bp
Chr2	2325113	2329840	Repeat_contraction_352bp
Chr2	2349449	2350138	Repeat_expansion_636bp
Chr2	2350744	2351006	Repeat_expansion_69bp
Chr2	2355613	2359018	Repeat_expansion_529bp
Chr2	2360570	2361537	Repeat_contraction_236bp
Chr2	2368624	2368698	Repeat_expansion_49bp
Chr2	2419257	2419327	Repeat_expansion_11074bp
Chr2	2454639	2455931	Repeat_expansion_529bp
Chr2	2460884	2461060	Repeat_expansion_38bp
Chr2	2478360	2478579	Deletion_194bp
Chr2	2480978	2484558	Repeat_contraction_2366bp
Chr2	2498299	2498321	Insertion_32bp
Chr2	2529073	2529075	Insertion_6749bp
Chr2	2542266	2551219	Repeat_contraction_8424bp
Chr2	2563762	2578730	Repeat_contraction_7906bp
Chr2	2738234	2738372	Repeat_contraction_29bp
Chr2	2758580	2759084	Repeat_contraction_133bp
Chr2	2759500	2763145	Repeat_expansion_331bp
Chr2	2846959	2864651	Deletion_17654bp
Chr2	2925368	2925616	Repeat_contraction_57bp
Chr2	2930529	2930537	Insertion_8372bp
Chr2	2931546	2931567	Insertion_1748bp
Chr2	2960659	2967367	Repeat_contraction_1219bp
Chr2	3026690	3026703	Insertion_631bp
Chr2	3057203	3059287	Repeat_contraction_567bp
Chr2	3126305	3138089	Repeat_expansion_321bp
Chr2	6457326	6461074	Tandem_expansion_10310bp

Chr2	5493219	5495317	Repeat_expansion_25bp
Chr2	3665418	3665652	Deletion_198bp
Chr2	3676635	3680902	Tandem_contraction_32bp
Chr2	3694305	3697115	Repeat_expansion_63bp
Chr2	3700328	3722447	Repeat_expansion_2251bp
Chr2	3728872	3731404	Tandem_expansion_11321bp
Chr2	3945194	3945369	Repeat_expansion_48bp
Chr2	4081007	4081743	Deletion_756bp
Chr2	4129535	4133644	Repeat_contraction_3989bp
Chr2	4187697	4191199	Deletion_3480bp
Chr2	4192711	4194412	Repeat_contraction_1617bp
Chr2	4204674	4204817	Tandem_expansion_5855bp
Chr2	4218863	4228780	Repeat_contraction_9494bp
Chr2	4236657	4244407	Deletion_7744bp
Chr2	4280911	4280974	Repeat_expansion_836bp
Chr2	4309587	4309623	Deletion_27bp
Chr2	4316515	4317145	Repeat_expansion_194bp
Chr2	4320797	4321727	Repeat_contraction_846bp
Chr2	4370227	4371312	Tandem_expansion_6097bp
Chr2	4363254	4367018	Repeat_contraction_3591bp
Chr2	4556703	4556740	Insertion_41bp
Chr2	4595262	4595620	Repeat_contraction_110bp
Chr2	4626816	4647587	Repeat_contraction_12017bp
Chr2	4650197	4650477	Repeat_expansion_1204bp
Chr2	4688515	4688517	Insertion_3882bp
Chr2	4703843	4706959	Tandem_contraction_4104bp
Chr2	4804746	4805687	Repeat_contraction_63bp
Chr2	4815944	4815987	Insertion_175bp
Chr2	4826414	4826415	Insertion_970bp
Chr2	4826734	4826749	Insertion_926bp
Chr2	4839625	4848490	Repeat_contraction_8673bp
Chr2	4924424	4938886	Repeat_contraction_9379bp
Chr2	4949279	4972228	Repeat_contraction_14191bp
Chr2	4978934	4979060	Repeat_contraction_71bp
Chr2	4981031	4983205	Repeat_contraction_1725bp
Chr2	4996917	4996966	Insertion_953bp
Chr2	4997450	4997465	Insertion_5714bp
Chr2	5014841	5015323	Repeat_expansion_627bp
Chr2	5029027	5030068	Repeat_contraction_795bp
Chr2	5037323	5038313	Repeat_contraction_562bp
Chr2	5040995	5048453	Deletion_7420bp
Chr2	5052038	5052523	Repeat_contraction_110bp
Chr2	5053695	5054330	Repeat_contraction_527bp
Chr2	5055181	5057813	Repeat_expansion_2172bp
Chr2	5080138	5081660	Repeat_expansion_642bp
Chr2	5097496	5098330	Repeat_expansion_4746bp
Chr2	5099969	5100143	Repeat_expansion_24bp
Chr2	5130720	5131934	Repeat_expansion_173bp
Chr2	5139644	5139791	Tandem_expansion_2234bp

Chr2	5162382	5162632	Tandem_expansion_4333bp
Chr2	5291511	5291575	Repeat_expansion_2016bp
Chr2	5303441	5303500	Deletion_20bp
Chr2	5304994	5312984	Repeat_contraction_7019bp
Chr2	5330388	5331990	Repeat_contraction_375bp
Chr2	5346958	5349252	Repeat_contraction_1302bp
Chr2	5366401	5377645	Repeat_contraction_9181bp
Chr2	5380963	5384292	Repeat_expansion_543bp
Chr2	5418732	5420255	Repeat_contraction_262bp
Chr2	5446659	5447206	Repeat_expansion_3219bp
Chr2	5451772	5452773	Tandem_expansion_4835bp
Chr2	5452773	5452794	Insertion_2989bp
Chr2	5456651	5456800	Repeat_expansion_108bp
Chr2	5538928	5539104	Repeat_contraction_85bp
Chr2	5557080	5578990	Repeat_contraction_14713bp
Chr2	5598366	5608922	Repeat_contraction_10284bp
Chr2	5609644	5612061	Repeat_expansion_2102bp
Chr2	5612449	5612451	Insertion_28bp
Chr2	5627731	5627739	Insertion_8171bp
Chr2	5631836	5635419	Deletion_3565bp
Chr2	5642857	5649085	Repeat_contraction_4557bp
Chr2	5687324	5687977	Repeat_expansion_10402bp
Chr2	5689661	5689887	Repeat_contraction_32bp
Chr2	5706246	5717310	Repeat_expansion_3621bp
Chr2	5739615	5741258	Deletion_1642bp
Chr2	5743081	5743919	Repeat_expansion_42bp
Chr2	5746632	5766668	Repeat_contraction_12494bp
Chr2	5799685	5802520	Repeat_contraction_1819bp
Chr2	5805659	5817076	Repeat_contraction_10710bp
Chr2	5836748	5837582	Deletion_817bp
Chr2	5840202	5843961	Repeat_contraction_191bp
Chr2	5845088	5845117	Insertion_240bp
Chr2	5846240	5865952	Repeat_contraction_14301bp
Chr2	5867033	5867272	Repeat_expansion_15677bp
Chr2	5874308	5875088	Repeat_contraction_457bp
Chr2	5878168	5907806	Repeat_contraction_14607bp
Chr2	5915658	5915679	Insertion_38bp
Chr2	5921422	5925072	Repeat_expansion_540bp
Chr2	5927063	5928517	Repeat_expansion_287bp
Chr2	5933089	5933275	Repeat_expansion_29bp
Chr2	5951153	5951725	Deletion_547bp
Chr2	5986715	6002443	Repeat_contraction_12354bp
Chr2	6056622	6057486	Repeat_expansion_2076bp
Chr2	6076032	6076311	Repeat_contraction_199bp
Chr2	6144028	6148888	Repeat_contraction_99bp
Chr2	6153779	6155243	Repeat_contraction_930bp
Chr2	6173567	6173740	Repeat_expansion_247bp
Chr2	6173567	6173740	Repeat_expansion_246bp
Chr2	6176067	6182267	Repeat_expansion_16497bp

Chr2	6182974	6187387	Repeat_expansion_4829bp
Chr2	6190158	6198317	Repeat_expansion_10483bp
Chr2	6291170	6298765	Repeat_contraction_1268bp
Chr2	6359096	6359161	Repeat_expansion_31bp
Chr2	6364862	6366937	Repeat_contraction_89bp
Chr2	6371210	6371319	Repeat_expansion_47bp
Chr2	6387951	6388607	Repeat_expansion_31bp
Chr2	6395109	6395458	Repeat_contraction_20bp
Chr2	6454897	6466908	Repeat_contraction_10025bp
Chr2	6474262	6483971	Repeat_contraction_6231bp
Chr2	6495125	6504147	Repeat_contraction_2706bp
Chr2	6620449	6631554	Deletion_11095bp
Chr2	6633973	6635457	Repeat_expansion_5121bp
Chr2	6643401	6645507	Repeat_contraction_1260bp
Chr2	6646893	6647075	Tandem_expansion_2855bp
Chr2	6655488	6658477	Repeat_contraction_336bp
Chr2	6671001	6671534	Repeat_expansion_368bp
Chr2	6685107	6688127	Repeat_expansion_1554bp
Chr2	6700151	6708002	Repeat_contraction_5767bp
Chr2	6714962	6715424	Repeat_contraction_206bp
Chr2	6717281	6730025	Repeat_contraction_11062bp
Chr2	6749351	6756409	Repeat_contraction_3472bp
Chr2	6793025	6794866	Repeat_contraction_251bp
Chr2	6802664	6810473	Repeat_expansion_5987bp
Chr2	6812846	6814265	Repeat_contraction_1130bp
Chr2	6852431	6855159	Repeat_contraction_2369bp
Chr2	6872881	6873545	Repeat_expansion_438bp
Chr2	6898996	6899097	Repeat_expansion_51bp
Chr2	6900602	6901922	Repeat_contraction_445bp
Chr2	6909446	6914834	Repeat_contraction_5087bp
Chr2	6917398	6917711	Repeat_expansion_171bp
Chr2	6935457	6935602	Repeat_contraction_27bp
Chr2	6945792	6946920	Repeat_contraction_448bp
Chr2	6953953	6959321	Repeat_contraction_4465bp
Chr2	6960253	6960686	Repeat_expansion_3563bp
Chr2	6982155	6982251	Repeat_expansion_69bp
Chr2	7005165	7019991	Repeat_contraction_14563bp
Chr2	7053217	7056274	Repeat_expansion_8478bp
Chr2	7063409	7063517	Repeat_expansion_43bp
Chr2	7076696	7076982	Repeat_contraction_24bp
Chr2	7077402	7081615	Repeat_expansion_384bp
Chr2	7147671	7150197	Repeat_contraction_751bp
Chr2	7187671	7187847	Repeat_expansion_34bp
Chr2	7219972	7220235	Repeat_contraction_40bp
Chr2	7245997	7248162	Repeat_contraction_558bp
Chr2	7248536	7249496	Repeat_contraction_29bp
Chr2	7249496	7250232	Tandem_expansion_6106bp
Chr2	7250232	7252428	Repeat_expansion_3567bp
Chr2	7288914	7300586	Repeat_contraction_5196bp

Chr2	7306776	7309140	Repeat_expansion_715bp
Chr2	7311654	7312261	Repeat_expansion_45bp
Chr2	7319718	7319934	Repeat_expansion_188bp
Chr2	7326486	7326533	Insertion_268bp
Chr2	7396334	7396559	Repeat_contraction_27bp
Chr2	7431933	7432627	Repeat_expansion_107bp
Chr2	7437436	7442658	Repeat_contraction_1045bp
Chr2	7491631	7493050	Repeat_expansion_302bp
Chr2	7530174	7530235	Deletion_34bp
Chr2	7535981	7537202	Repeat_contraction_108bp
Chr2	7543172	7543794	Repeat_contraction_46bp
Chr2	7554947	7555318	Repeat_contraction_38bp
Chr2	7557933	7558757	Repeat_expansion_51bp
Chr2	7563896	7564307	Repeat_expansion_39bp
Chr2	7565446	7567634	Repeat_contraction_1013bp
Chr2	7581428	7584146	Deletion_2715bp
Chr2	7589647	7590081	Repeat_contraction_176bp
Chr2	7592125	7592324	Repeat_contraction_27bp
Chr2	7593850	7596235	Repeat_contraction_255bp
Chr2	7657297	7661167	Repeat_contraction_1188bp
Chr2	7662664	7663363	Repeat_expansion_25bp
Chr2	7677544	7678726	Repeat_contraction_31bp
Chr2	7680326	7681942	Repeat_contraction_295bp
Chr2	7699817	7700370	Repeat_expansion_85bp
Chr2	7702994	7703568	Repeat_expansion_46bp
Chr2	7753863	7753978	Repeat_contraction_34bp
Chr2	7756548	7759074	Repeat_expansion_1330bp
Chr2	7856073	7862484	Repeat_contraction_572bp
Chr2	7871466	7871763	Repeat_expansion_987bp
Chr2	7903777	7907836	Repeat_contraction_2663bp
Chr2	7909573	7909795	Repeat_contraction_40bp
Chr2	7915964	7916266	Repeat_contraction_86bp
Chr2	7923709	7925248	Repeat_contraction_376bp
Chr2	7926585	7926617	Insertion_1060bp
Chr2	7959684	7960700	Repeat_contraction_448bp
Chr2	8067955	8068646	Repeat_contraction_121bp
Chr2	8111972	8112090	Repeat_expansion_44bp
Chr2	8145639	8145843	Repeat_expansion_33bp
Chr2	8146274	8147240	Repeat_contraction_69bp
Chr2	8235326	8238489	Repeat_contraction_1163bp
Chr2	8240411	8240487	Deletion_39bp
Chr2	8241594	8242768	Repeat_expansion_52bp
Chr2	8292555	8292956	Repeat_expansion_267bp
Chr2	8304753	8304890	Repeat_expansion_437bp
Chr2	8343034	8349808	Repeat_contraction_5387bp
Chr2	8369727	8369729	Insertion_86bp
Chr2	8370550	8372886	Repeat_expansion_5250bp
Chr2	8472706	8473511	Repeat_expansion_191bp
Chr2	8492685	8493686	Repeat_contraction_401bp

Chr2	8535007	8535290	Repeat_expansion_106bp
Chr2	8542655	8543667	Repeat_expansion_98bp
Chr2	8562278	8566585	Tandem_contraction_4742bp
Chr2	8621628	8623410	Repeat_contraction_1238bp
Chr2	8663914	8664059	Repeat_contraction_47bp
Chr2	8725304	8725534	Repeat_contraction_86bp
Chr2	8780131	8780245	Repeat_contraction_29bp
Chr2	8782803	8783735	Repeat_expansion_53bp
Chr2	8786395	8790861	Repeat_expansion_464bp
Chr2	8869341	8870400	Repeat_contraction_1000bp
Chr2	8872627	8872778	Repeat_contraction_28bp
Chr2	8874447	8875725	Repeat_expansion_371bp
Chr2	8876874	8878001	Repeat_expansion_756bp
Chr2	8880669	8890348	Repeat_contraction_9582bp
Chr2	8907339	8908090	Repeat_contraction_543bp
Chr2	8913816	8917257	Repeat_contraction_3134bp
Chr2	8983968	8984204	Repeat_contraction_23bp
Chr2	8997926	8998253	Repeat_contraction_263bp
Chr2	9005581	9005944	Repeat_contraction_33bp
Chr2	9021586	9028541	Repeat_contraction_5322bp
Chr2	9029808	9030696	Deletion_881bp
Chr2	9047790	9048624	Repeat_contraction_754bp
Chr2	9049792	9049947	Repeat_expansion_64bp
Chr2	9056368	9059987	Repeat_contraction_2380bp
Chr2	9062948	9064814	Repeat_contraction_1091bp
Chr2	9076317	9076554	Repeat_expansion_35bp
Chr2	9077068	9078773	Repeat_contraction_379bp
Chr2	9079766	9080215	Repeat_expansion_21bp
Chr2	9188217	9194555	Tandem_contraction_7064bp
Chr2	9205394	9206031	Repeat_expansion_2150bp
Chr2	9245680	9246014	Repeat_contraction_127bp
Chr2	9273407	9273604	Repeat_expansion_210bp
Chr2	9297318	9300572	Repeat_expansion_334bp
Chr2	10602376	10603307	Tandem_expansion_932bp
Chr2	9319893	9320166	Repeat_contraction_28bp
Chr2	9321090	9321489	Repeat_contraction_23bp
Chr2	9329223	9330811	Repeat_contraction_172bp
Chr2	9331439	9331488	Insertion_141bp
Chr2	9332717	9333799	Repeat_contraction_225bp
Chr2	9334534	9335349	Repeat_contraction_84bp
Chr2	9336716	9339965	Repeat_expansion_2622bp
Chr2	9398700	9399034	Repeat_expansion_23bp
Chr2	9446358	9449413	Repeat_contraction_2890bp
Chr2	9492846	9494100	Deletion_1250bp
Chr2	9525629	9525804	Repeat_contraction_22bp
Chr2	9589174	9589598	Repeat_contraction_33bp
Chr2	9692012	9693113	Repeat_contraction_952bp
Chr2	9746383	9748610	Repeat_contraction_327bp
Chr2	9754644	9755126	Repeat_contraction_387bp

Chr2	9756057	9758849	Repeat_expansion_1437bp
Chr2	9770395	9770511	Repeat_expansion_666bp
Chr2	9771196	9771356	Repeat_expansion_1809bp
Chr2	9773688	9774300	Repeat_contraction_84bp
Chr2	9778316	9779143	Repeat_expansion_11866bp
Chr2	9814032	9814117	Repeat_contraction_27bp
Chr2	9842834	9844053	Repeat_contraction_193bp
Chr2	9844853	9845299	Repeat_expansion_184bp
Chr2	9876527	9876970	Repeat_contraction_268bp
Chr2	9949135	9949342	Repeat_contraction_41bp
Chr2	9980539	9982480	Repeat_contraction_39bp
Chr2	10001480	10009675	Deletion_8186bp
Chr2	10047783	10048104	Repeat_contraction_213bp
Chr2	10055029	10056384	Repeat_contraction_46bp
Chr2	10059518	10059708	Repeat_contraction_24bp
Chr2	10118079	10118192	Repeat_expansion_30bp
Chr2	10152353	10152358	Insertion_796bp
Chr2	10208288	10210179	Repeat_expansion_54bp
Chr2	10247591	10247724	Repeat_contraction_37bp
Chr2	10271596	10272698	Repeat_expansion_1302bp
Chr2	10272977	10274107	Repeat_contraction_474bp
Chr2	10294912	10294967	Deletion_29bp
Chr2	10304962	10305740	Repeat_contraction_38bp
Chr2	10331432	10331559	Repeat_contraction_30bp
Chr2	10332943	10333768	Repeat_expansion_28bp
Chr2	10336121	10336241	Repeat_expansion_49bp
Chr2	10374907	10376886	Repeat_expansion_9635bp
Chr2	10403447	10404278	Repeat_expansion_754bp
Chr2	10488231	10491916	Deletion_3689bp
Chr2	10506795	10511177	Repeat_expansion_292bp
Chr2	10533497	10547820	Deletion_14308bp
Chr2	10561961	10562205	Repeat_contraction_125bp
Chr2	10565586	10566585	Repeat_contraction_843bp
Chr2	10592184	10609121	Deletion_16945bp
Chr2	10683846	10683907	Repeat_expansion_429bp
Chr2	10689156	10689685	Repeat_expansion_20bp
Chr2	10753371	10753689	Repeat_expansion_1540bp
Chr2	10759795	10760184	Repeat_contraction_41bp
Chr2	10768838	10769117	Repeat_expansion_41bp
Chr2	10772933	10774016	Repeat_contraction_35bp
Chr2	10775637	10776810	Repeat_contraction_73bp
Chr2	10855960	10855967	Insertion_1921bp
Chr2	10856761	10856907	Repeat_expansion_4766bp
Chr2	11043142	11043249	Repeat_expansion_87bp
Chr2	11052251	11053687	Repeat_contraction_1221bp
Chr2	11090939	11091225	Repeat_contraction_116bp
Chr2	11195076	11195294	Repeat_expansion_198bp
Chr2	11225798	11225898	Repeat_expansion_323bp
Chr2	11258847	11259143	Repeat_expansion_138bp

Chr2	11265691	11267509	Repeat_contraction_483bp
Chr2	11436238	11442615	Tandem_contraction_6810bp
Chr2	11699232	11699233	Insertion_947bp
Chr2	11720902	11723937	Repeat_contraction_295bp
Chr2	11734692	11735442	Repeat_contraction_149bp
Chr2	11737776	11738210	Repeat_expansion_20bp
Chr2	11761450	11761763	Repeat_contraction_36bp
Chr2	11865843	11865892	Insertion_58bp
Chr2	11867173	11868348	Repeat_contraction_1073bp
Chr2	11869907	11870840	Repeat_contraction_850bp
Chr2	11981724	11983968	Repeat_contraction_1427bp
Chr2	11988220	11988655	Repeat_expansion_236bp
Chr2	12099668	12099924	Repeat_expansion_83bp
Chr2	12101584	12102310	Repeat_expansion_1622bp
Chr2	12153908	12155950	Repeat_contraction_544bp
Chr2	12156583	12157948	Repeat_contraction_381bp
Chr2	12159057	12160363	Repeat_expansion_45bp
Chr2	12294807	12295003	Repeat_expansion_143bp
Chr2	12297075	12298270	Repeat_contraction_115bp
Chr2	12299397	12300181	Repeat_expansion_218bp
Chr2	12305337	12305524	Repeat_expansion_167bp
Chr2	12306751	12306990	Repeat_expansion_136bp
Chr2	12366380	12366866	Repeat_contraction_76bp
Chr2	12367585	12368236	Repeat_expansion_73bp
Chr2	12385588	12385790	Repeat_expansion_325bp
Chr2	12431407	12431661	Repeat_contraction_57bp
Chr2	12433697	12434582	Repeat_contraction_81bp
Chr2	12460041	12465147	Repeat_expansion_12855bp
Chr2	12514660	12515036	Repeat_expansion_319bp
Chr2	12537511	12538232	Repeat_contraction_26bp
Chr2	12539414	12541829	Deletion_2383bp
Chr2	12542109	12542176	Repeat_expansion_155bp
Chr2	12554035	12557628	Repeat_contraction_1820bp
Chr2	12592883	12593003	Repeat_contraction_24bp
Chr2	12615585	12615859	Repeat_expansion_873bp
Chr2	12623706	12624027	Repeat_contraction_39bp
Chr2	12712700	12712831	Repeat_expansion_37bp
Chr2	12730289	12743580	Repeat_contraction_5978bp
Chr2	12800755	12803094	Repeat_contraction_2009bp
Chr2	12885871	12885877	Insertion_1017bp
Chr2	12890266	12891219	Repeat_expansion_571bp
Chr2	12898649	12899311	Repeat_expansion_44bp
Chr2	12900782	12900861	Repeat_expansion_28bp
Chr2	12962991	12964887	Repeat_expansion_264bp
Chr2	13042173	13042412	Repeat_expansion_62bp
Chr2	13053016	13053242	Repeat_contraction_27bp
Chr2	13073622	13073847	Repeat_expansion_184bp
Chr2	13130210	13130792	Repeat_contraction_120bp
Chr2	13195168	13195209	Insertion_21bp

Chr2	13232820	13234628	Repeat_expansion_65bp
Chr2	13409047	13409106	Repeat_expansion_368bp
Chr2	13411500	13411890	Repeat_contraction_52bp
Chr2	13412506	13413573	Repeat_expansion_20bp
Chr2	13426634	13436120	Repeat_expansion_3220bp
Chr2	13439043	13439327	Repeat_contraction_109bp
Chr2	13447441	13447493	Repeat_expansion_280bp
Chr2	13495120	13495307	Repeat_expansion_824bp
Chr2	13495826	13504950	Repeat_contraction_1327bp
Chr2	13582061	13583176	Repeat_expansion_74bp
Chr2	13660694	13661837	Repeat_contraction_991bp
Chr2	13671136	13671591	Repeat_expansion_468bp
Chr2	13672066	13672196	Repeat_expansion_28bp
Chr2	13731114	13731625	Repeat_contraction_35bp
Chr2	13906631	13911111	Repeat_contraction_1942bp
Chr2	13940751	13940979	Repeat_expansion_55bp
Chr2	13950384	13951234	Repeat_contraction_593bp
Chr2	14000795	14000961	Repeat_expansion_410bp
Chr2	14001436	14002045	Repeat_contraction_35bp
Chr2	14077554	14079524	Repeat_contraction_46bp
Chr2	14116551	14116600	Insertion_281bp
Chr2	14117325	14117578	Deletion_223bp
Chr2	14137575	14137973	Repeat_expansion_848bp
Chr2	14268441	14268694	Repeat_contraction_23bp
Chr2	14295495	14296982	Repeat_contraction_201bp
Chr2	14370402	14378908	Repeat_contraction_661bp
Chr2	14548130	14548901	Repeat_expansion_862bp
Chr2	14558849	14558954	Repeat_contraction_21bp
Chr2	14675483	14676420	Repeat_contraction_680bp
Chr2	14680469	14683798	Repeat_contraction_338bp
Chr2	14739895	14740315	Repeat_expansion_30bp
Chr2	14753449	14754446	Repeat_contraction_31bp
Chr2	14932560	14932605	Insertion_314bp
Chr2	14981657	14981839	Repeat_contraction_71bp
Chr2	14984977	14985293	Repeat_contraction_187bp
Chr2	15028007	15029701	Repeat_contraction_63bp
Chr2	15050353	15050354	Insertion_1253bp
Chr2	15134226	15134844	Repeat_contraction_531bp
Chr2	15144445	15144609	Repeat_expansion_301bp
Chr2	15292927	15294051	Repeat_contraction_41bp
Chr2	15328811	15329750	Repeat_expansion_136bp
Chr2	15332945	15333093	Repeat_contraction_25bp
Chr2	15335355	15335460	Repeat_expansion_254bp
Chr2	15370769	15371879	Repeat_contraction_812bp
Chr2	15730939	15735213	Repeat_contraction_425bp
Chr2	15844645	15844794	Repeat_expansion_622bp
Chr2	15961608	15961727	Repeat_expansion_32bp
Chr2	16117034	16117216	Repeat_contraction_25bp
Chr2	16125664	16126524	Deletion_836bp

Chr2	16279587	16281275	Repeat_expansion_100bp
Chr2	16368433	16368551	Repeat_expansion_20bp
Chr2	16379571	16380903	Deletion_1340bp
Chr2	16441858	16442162	Repeat_expansion_39bp
Chr2	16454676	16454738	Deletion_27bp
Chr2	16588216	16588308	Repeat_expansion_239bp
Chr2	16651556	16654035	Repeat_expansion_843bp
Chr2	16655565	16656228	Repeat_contraction_28bp
Chr2	16702067	16702254	Repeat_expansion_49bp
Chr2	16705747	16705895	Repeat_expansion_45bp
Chr2	16725554	16727009	Repeat_contraction_139bp
Chr2	16812887	16812934	Insertion_32bp
Chr2	16865464	16867219	Repeat_contraction_1084bp
Chr2	16876083	16877153	Deletion_1068bp
Chr2	16951179	16951215	Insertion_163bp
Chr2	17203517	17203829	Repeat_expansion_657bp
Chr2	17239226	17239704	Repeat_expansion_22bp
Chr2	17268756	17277942	Repeat_contraction_6374bp
Chr2	17572347	17572459	Repeat_expansion_37bp
Chr2	17895803	17895950	Repeat_contraction_46bp
Chr2	17946169	17946221	Tandem_expansion_3126bp
Chr2	17966117	17966139	Insertion_6438bp
Chr2	18051886	18052697	Repeat_expansion_954bp
Chr2	18082802	18082879	Repeat_expansion_41bp
Chr2	18124362	18129929	Repeat_contraction_30bp
Chr2	18150120	18150318	Repeat_expansion_29bp
Chr2	18187113	18188918	Repeat_expansion_46bp
Chr2	18208045	18211105	Tandem_expansion_3072bp
Chr2	18258192	18258585	Repeat_expansion_20bp
Chr2	18260084	18260175	Repeat_expansion_40bp
Chr2	18274904	18275407	Repeat_contraction_397bp
Chr2	18288385	18289213	Repeat_contraction_127bp
Chr2	18304512	18305096	Repeat_expansion_24bp
Chr2	18325223	18333393	Repeat_contraction_2353bp
Chr2	18396618	18396893	Repeat_contraction_171bp
Chr2	18398365	18399159	Repeat_contraction_462bp
Chr2	18443814	18443940	Deletion_79bp
Chr2	18890395	18890759	Repeat_contraction_298bp
Chr2	18938654	18938915	Repeat_contraction_60bp
Chr2	19249875	19250050	Repeat_expansion_702bp
Chr2	19295289	19295430	Repeat_contraction_69bp
Chr2	19305135	19305540	Repeat_contraction_50bp
Chr2	19697219	19697723	Tandem_expansion_867bp
Chr2	1760811	1764275	Repeat_expansion_171bp
Chr2	10603963	10604177	Repeat_contraction_47bp
Chr2	10599846	10600103	Repeat_expansion_385bp
Chr2	10598733	10598965	Repeat_contraction_67bp
Chr2	10597453	10597918	Repeat_contraction_156bp
Chr2	10595927	10596190	Repeat_expansion_166bp

Chr2	3770432	3771258	Repeat_expansion_233bp
Chr2	54905	55277	Repeat_expansion_151bp
Chr2	6721230	6721262	Insertion_60bp
Chr2	6719637	6719776	Repeat_contraction_39bp
Chr2	6115596	6117853	Repeat_expansion_171bp
Chr2	13065286	13066622	Tandem_expansion_1455bp
Chr2	3225664	3230917	Repeat_contraction_5197bp
Chr2	4191031	4192496	Repeat_expansion_90bp
Chr2	4188669	4189459	Repeat_expansion_50bp
Chr3	12185195	12185217	Deletion_22bp
Chr3	12185743	12185781	Deletion_38bp
Chr3	12188657	12188657	Insertion_131bp
Chr3	12199558	12199596	Deletion_38bp
Chr3	12200122	12200144	Deletion_22bp
Chr3	14849536	14849536	Insertion_54bp
Chr3	14849740	14849740	Insertion_31bp
Chr3	14850486	14850515	Deletion_29bp
Chr3	14850754	14850787	Deletion_33bp
Chr3	14854507	14854535	Deletion_28bp
Chr3	15258161	15258161	Insertion_66bp
Chr3	15253395	15253395	Insertion_24bp
Chr3	12252021	12252021	Insertion_81bp
Chr3	17107410	17107567	Deletion_157bp
Chr3	17114125	17114125	Insertion_21bp
Chr3	12090313	12090540	Deletion_227bp
Chr3	15713175	15713197	Deletion_22bp
Chr3	17403873	17403957	Deletion_84bp
Chr3	14194470	14194470	Insertion_31bp
Chr3	3180663	3180787	Deletion_124bp
Chr3	14194683	14194683	Insertion_41bp
Chr3	14195396	14195396	Insertion_454bp
Chr3	14195414	14195414	Insertion_411bp
Chr3	18630164	18630204	Deletion_40bp
Chr3	18631050	18631470	Deletion_420bp
Chr3	17383085	17383085	Insertion_28bp
Chr3	12156024	12156139	Deletion_115bp
Chr3	12156929	12156929	Insertion_20bp
Chr3	20726319	20726339	Deletion_20bp
Chr3	14049883	14049883	Insertion_43bp
Chr3	13535011	13535011	Insertion_26bp
Chr3	13535738	13535771	Deletion_33bp
Chr3	11726987	11726987	Insertion_84bp
Chr3	14049904	14049904	Insertion_43bp
Chr3	393877	393877	Insertion_64bp
Chr3	492894	493088	Deletion_194bp
Chr3	574341	574341	Insertion_75bp
Chr3	576581	576602	Deletion_21bp
Chr3	622908	622929	Deletion_21bp
Chr3	1058338	1058338	Insertion_33bp

Chr3	1066370	1066400	Deletion_30bp
Chr3	1135707	1135707	Insertion_36bp
Chr3	1138273	1138306	Deletion_33bp
Chr3	1198661	1198846	Deletion_185bp
Chr3	1217299	1217299	Insertion_29bp
Chr3	1220486	1220486	Insertion_23bp
Chr3	1225524	1225524	Insertion_260bp
Chr3	1229119	1229119	Insertion_22bp
Chr3	2505126	2505410	Deletion_284bp
Chr3	2563521	2563521	Insertion_113bp
Chr3	2570033	2570061	Deletion_28bp
Chr3	2572446	2572529	Deletion_83bp
Chr3	2579345	2579345	Insertion_152bp
Chr3	2601651	2601651	Insertion_20bp
Chr3	19269437	19269471	Deletion_34bp
Chr3	19273221	19273221	Insertion_39bp
Chr3	19412774	19412774	Insertion_21bp
Chr3	19421136	19421136	Insertion_20bp
Chr3	19428329	19428357	Deletion_28bp
Chr3	19428467	19428858	Deletion_391bp
Chr3	18577595	18577595	Insertion_46bp
Chr3	18577655	18577655	Insertion_32bp
Chr3	18585026	18585026	Insertion_425bp
Chr3	18585072	18585094	Deletion_22bp
Chr3	18610342	18610342	Insertion_93bp
Chr3	18630176	18630196	Deletion_20bp
Chr3	18652405	18652405	Insertion_26bp
Chr3	18652633	18652660	Deletion_27bp
Chr3	18667268	18667268	Insertion_47bp
Chr3	18703933	18703933	Insertion_24bp
Chr3	18718729	18718729	Insertion_22bp
Chr3	18724173	18724410	Deletion_237bp
Chr3	23281280	23281305	Deletion_25bp
Chr3	23289764	23289764	Insertion_31bp
Chr3	23299265	23299265	Insertion_800bp
Chr3	23352189	23352230	Deletion_41bp
Chr3	23359600	23359611	Insertion_666bp
Chr3	23377864	23377945	Deletion_81bp
Chr3	23406647	23406671	Deletion_24bp
Chr3	23429762	23429762	Insertion_1339bp
Chr3	23430426	23430426	Insertion_21bp
Chr3	23438174	23438174	Insertion_2804bp
Chr3	23438239	23438239	Insertion_48bp
Chr3	3657102	3658336	Deletion_1234bp
Chr3	3683431	3688774	Deletion_5343bp
Chr3	3710096	3710096	Insertion_1784bp
Chr3	3778144	3778173	Deletion_29bp
Chr3	3778863	3779732	Deletion_869bp
Chr3	3830062	3830062	Insertion_29bp

Chr3	3840667	3840888	Deletion_221bp
Chr3	21115319	21115340	Deletion_21bp
Chr3	21135272	21136234	Deletion_962bp
Chr3	21145337	21145353	Insertion_27bp
Chr3	21146764	21146788	Deletion_24bp
Chr3	21147008	21147037	Deletion_29bp
Chr3	21186144	21186620	Deletion_476bp
Chr3	21216860	21216938	Deletion_78bp
Chr3	21218052	21218052	Insertion_573bp
Chr3	5082734	5082734	Insertion_52bp
Chr3	5114351	5114351	Insertion_54bp
Chr3	5151197	5151425	Deletion_228bp
Chr3	5159662	5164378	Deletion_4716bp
Chr3	5167211	5167277	Deletion_66bp
Chr3	5167539	5167539	Insertion_41bp
Chr3	5195824	5195824	Insertion_22bp
Chr3	5212071	5212071	Insertion_4247bp
Chr3	197228	197228	Insertion_35bp
Chr3	225988	225988	Insertion_27bp
Chr3	259818	259846	Deletion_28bp
Chr3	272742	272742	Insertion_64bp
Chr3	325383	325383	Insertion_34bp
Chr3	325500	325500	Insertion_3240bp
Chr3	20578387	20578409	Deletion_22bp
Chr3	20629766	20630036	Deletion_270bp
Chr3	20645338	20645372	Deletion_34bp
Chr3	20653342	20653342	Insertion_748bp
Chr3	20654375	20654395	Deletion_20bp
Chr3	20655101	20655165	Deletion_64bp
Chr3	20660198	20660516	Deletion_318bp
Chr3	20668427	20668427	Insertion_230bp
Chr3	20681791	20681859	Deletion_68bp
Chr3	20685591	20686818	Deletion_1227bp
Chr3	20695392	20695430	Deletion_38bp
Chr3	20723342	20723374	Deletion_32bp
Chr3	3842514	3842514	Insertion_21bp
Chr3	3915546	3915546	Insertion_50bp
Chr3	3928044	3928091	Deletion_47bp
Chr3	3945329	3945351	Deletion_22bp
Chr3	3954773	3954773	Insertion_20bp
Chr3	8661993	8661993	Insertion_34bp
Chr3	8684721	8684721	Insertion_29bp
Chr3	8684947	8685101	Deletion_154bp
Chr3	8685113	8685133	Deletion_20bp
Chr3	8693458	8693458	Insertion_4817bp
Chr3	8695278	8695314	Deletion_36bp
Chr3	8728917	8728939	Deletion_22bp
Chr3	8772880	8772880	Insertion_12844bp
Chr3	8789329	8791043	Deletion_1714bp

Chr3	8792120	8792142	Deletion_22bp
Chr3	8797129	8797149	Deletion_20bp
Chr3	8842961	8858229	Deletion_15268bp
Chr3	8866544	8866544	Insertion_249bp
Chr3	8873530	8873563	Deletion_33bp
Chr3	8874898	8875675	Deletion_777bp
Chr3	8878613	8878613	Insertion_23bp
Chr3	8894158	8894524	Deletion_366bp
Chr3	8901302	8901302	Insertion_780bp
Chr3	8925741	8925839	Deletion_98bp
Chr3	8925891	8925923	Deletion_32bp
Chr3	8926366	8926366	Insertion_53bp
Chr3	8927232	8927232	Insertion_30bp
Chr3	6849362	6849362	Insertion_32bp
Chr3	6896193	6896239	Deletion_46bp
Chr3	6903386	6903386	Insertion_39bp
Chr3	6940617	6940617	Insertion_52bp
Chr3	1884549	1884629	Deletion_80bp
Chr3	1938335	1938361	Deletion_26bp
Chr3	1959021	1959214	Deletion_193bp
Chr3	1959413	1959413	Insertion_395bp
Chr3	1959450	1959450	Insertion_3758bp
Chr3	1959805	1959825	Deletion_20bp
Chr3	1962877	1963081	Deletion_204bp
Chr3	1963314	1963390	Deletion_76bp
Chr3	1963653	1963653	Insertion_48bp
Chr3	1963655	1963678	Deletion_23bp
Chr3	1967205	1967205	Insertion_489bp
Chr3	1971522	1971831	Deletion_309bp
Chr3	7469956	7469990	Deletion_34bp
Chr3	7502319	7502319	Insertion_255bp
Chr3	7538381	7538410	Deletion_29bp
Chr3	7542479	7542479	Insertion_37bp
Chr3	7560117	7560117	Insertion_564bp
Chr3	7565962	7566828	Deletion_866bp
Chr3	7567184	7567348	Deletion_164bp
Chr3	7568503	7568503	Insertion_25bp
Chr3	7576781	7576781	Insertion_23bp
Chr3	7585983	7585983	Insertion_23bp
Chr3	20778755	20778776	Deletion_21bp
Chr3	20786400	20788447	Deletion_2047bp
Chr3	20802590	20802617	Deletion_27bp
Chr3	20808423	20808423	Insertion_855bp
Chr3	20813431	20813431	Insertion_29bp
Chr3	20856634	20856634	Insertion_22bp
Chr3	20858247	20858283	Deletion_40bp
Chr3	20882493	20882539	Deletion_46bp
Chr3	638239	638239	Insertion_38bp
Chr3	654715	654715	Insertion_41bp

Chr3	662044	662044	Insertion_22bp
Chr3	684646	684646	Insertion_26bp
Chr3	3965197	3965197	Insertion_563bp
Chr3	3965249	3965249	Insertion_685bp
Chr3	3966284	3966284	Insertion_89bp
Chr3	4044600	4044600	Insertion_55bp
Chr3	4054689	4054718	Deletion_29bp
Chr3	4063638	4063638	Insertion_48bp
Chr3	4074517	4074517	Insertion_700bp
Chr3	18387948	18387990	Deletion_42bp
Chr3	18393982	18393982	Insertion_22bp
Chr3	18394409	18394409	Insertion_51bp
Chr3	18413531	18413531	Insertion_32bp
Chr3	18432125	18432159	Deletion_34bp
Chr3	18434361	18434387	Deletion_26bp
Chr3	18474381	18474381	Insertion_112bp
Chr3	3288188	3288188	Insertion_36bp
Chr3	3344854	3344887	Deletion_33bp
Chr3	3346709	3346709	Insertion_20bp
Chr3	3380832	3380872	Insertion_48bp
Chr3	21735349	21735349	Insertion_171bp
Chr3	21753756	21753807	Deletion_51bp
Chr3	21759043	21759077	Deletion_34bp
Chr3	21761223	21761223	Insertion_21bp
Chr3	21766693	21766693	Insertion_229bp
Chr3	21792214	21792245	Deletion_31bp
Chr3	21798639	21798639	Insertion_812bp
Chr3	4561373	4561373	Insertion_548bp
Chr3	4569695	4569695	Insertion_163bp
Chr3	4591752	4591756	Deletion_37bp
Chr3	4603040	4603064	Deletion_24bp
Chr3	4607198	4607218	Deletion_20bp
Chr3	4635847	4636558	Deletion_711bp
Chr3	4643980	4644051	Deletion_71bp
Chr3	4662340	4662340	Insertion_45bp
Chr3	2267791	2267791	Insertion_44bp
Chr3	2306993	2306993	Insertion_29bp
Chr3	2334279	2334279	Insertion_897bp
Chr3	2346490	2346490	Insertion_51bp
Chr3	2360592	2362773	Deletion_2181bp
Chr3	2367241	2367241	Insertion_22bp
Chr3	214	235	Deletion_21bp
Chr3	24766	24766	Insertion_37bp
Chr3	51496	51496	Insertion_25bp
Chr3	64183	64212	Deletion_29bp
Chr3	77826	77849	Deletion_23bp
Chr3	81724	81754	Deletion_30bp
Chr3	91429	91429	Insertion_50bp
Chr3	101611	101636	Deletion_25bp

Chr3	6265909	6265944	Deletion_35bp
Chr3	6287943	6287943	Insertion_97bp
Chr3	6293475	6293475	Insertion_25bp
Chr3	6293923	6293923	Insertion_2373bp
Chr3	6311376	6311376	Insertion_24bp
Chr3	6348131	6348131	Insertion_25bp
Chr3	6366420	6366441	Deletion_21bp
Chr3	6366609	6366640	Deletion_31bp
Chr3	6372698	6372698	Insertion_26bp
Chr3	21500546	21500581	Deletion_35bp
Chr3	21558628	21558628	Insertion_21bp
Chr3	21576352	21576352	Insertion_616bp
Chr3	21582659	21582696	Deletion_37bp
Chr3	21586425	21586449	Deletion_24bp
Chr3	21586803	21586803	Insertion_524bp
Chr3	21589651	21589651	Insertion_60bp
Chr3	21590468	21590468	Insertion_44bp
Chr3	21590688	21590688	Insertion_429bp
Chr3	21592986	21592986	Insertion_22bp
Chr3	6495452	6495452	Insertion_33bp
Chr3	6514051	6514078	Deletion_27bp
Chr3	6540928	6540954	Deletion_26bp
Chr3	6562469	6562469	Insertion_30bp
Chr3	6577238	6577270	Deletion_32bp
Chr3	6060850	6060878	Deletion_28bp
Chr3	6063085	6063118	Deletion_33bp
Chr3	6073284	6073284	Insertion_89bp
Chr3	6117168	6117168	Insertion_55bp
Chr3	17691873	17691928	Deletion_55bp
Chr3	17692328	17692370	Deletion_42bp
Chr3	17704760	17704780	Deletion_20bp
Chr3	17760161	17760172	Insertion_22bp
Chr3	17777941	17778051	Deletion_110bp
Chr3	17787741	17787774	Deletion_33bp
Chr3	22939805	22939872	Deletion_67bp
Chr3	22965759	22965791	Deletion_32bp
Chr3	23007349	23007349	Insertion_30bp
Chr3	23015811	23015832	Deletion_21bp
Chr3	1453856	1453856	Insertion_23bp
Chr3	1512297	1512297	Insertion_24bp
Chr3	1514898	1514920	Deletion_22bp
Chr3	1540352	1540372	Deletion_20bp
Chr3	22847961	22848151	Deletion_190bp
Chr3	22855315	22855315	Insertion_32bp
Chr3	22865785	22865971	Deletion_186bp
Chr3	22897784	22897840	Deletion_56bp
Chr3	22912658	22912658	Insertion_40bp
Chr3	7096322	7096350	Deletion_28bp
Chr3	7107390	7107413	Deletion_23bp

Chr3	7132240	7132240	Insertion_50bp
Chr3	7142380	7142380	Insertion_945bp
Chr3	7180908	7180936	Deletion_28bp
Chr3	5707031	5707053	Deletion_22bp
Chr3	5708721	5708721	Insertion_24bp
Chr3	5744467	5744497	Deletion_30bp
Chr3	5754674	5754674	Insertion_26bp
Chr3	5779290	5779290	Insertion_52bp
Chr3	905283	905311	Deletion_28bp
Chr3	910808	910808	Insertion_43bp
Chr3	911035	911133	Deletion_98bp
Chr3	950964	950964	Insertion_30bp
Chr3	951562	951562	Insertion_516bp
Chr3	952297	952324	Deletion_27bp
Chr3	19165521	19165571	Deletion_50bp
Chr3	19179577	19179597	Deletion_20bp
Chr3	19075516	19075556	Deletion_40bp
Chr3	19088848	19088848	Insertion_26bp
Chr3	19121439	19121439	Insertion_581bp
Chr3	19121491	19121491	Insertion_58bp
Chr3	19152527	19152527	Insertion_35bp
Chr3	19157313	19157313	Insertion_910bp
Chr3	2132845	2132845	Insertion_28bp
Chr3	2138798	2138826	Deletion_28bp
Chr3	2170220	2170220	Insertion_49bp
Chr3	2205625	2206976	Deletion_1351bp
Chr3	20526604	20526630	Deletion_26bp
Chr3	20531863	20531910	Deletion_47bp
Chr3	20541340	20541360	Deletion_20bp
Chr3	20560218	20560238	Deletion_20bp
Chr3	20564256	20564283	Deletion_27bp
Chr3	104544	104544	Insertion_40bp
Chr3	115241	115241	Insertion_34bp
Chr3	123060	123060	Insertion_34bp
Chr3	129154	130749	Deletion_1595bp
Chr3	162891	162891	Insertion_45bp
Chr3	195389	195389	Insertion_34bp
Chr3	7355485	7355506	Deletion_21bp
Chr3	7374464	7374493	Deletion_29bp
Chr3	7374529	7374529	Insertion_22bp
Chr3	7394644	7394644	Insertion_32bp
Chr3	7419827	7419827	Insertion_37bp
Chr3	22256761	22256848	Deletion_97bp
Chr3	22303764	22303794	Deletion_30bp
Chr3	22311745	22311745	Insertion_32bp
Chr3	5800860	5800860	Insertion_4631bp
Chr3	5819467	5819467	Insertion_117bp
Chr3	5835315	5835315	Insertion_352bp
Chr3	5839301	5840255	Deletion_954bp

Chr3	5846063	5846092	Deletion_29bp
Chr3	4998083	4998139	Deletion_56bp
Chr3	5016979	5016979	Insertion_28bp
Chr3	5039679	5039679	Insertion_21bp
Chr3	5065978	5066000	Deletion_22bp
Chr3	1358829	1358829	Insertion_69bp
Chr3	1361729	1361729	Insertion_27bp
Chr3	1399006	1399006	Insertion_205bp
Chr3	1408191	1408433	Deletion_242bp
Chr3	18960818	18960852	Deletion_34bp
Chr3	18967774	18967774	Insertion_191bp
Chr3	18984162	18984191	Deletion_29bp
Chr3	19011232	19011326	Deletion_94bp
Chr3	19020015	19020019	Insertion_51bp
Chr3	6433304	6433939	Deletion_635bp
Chr3	6459784	6459812	Deletion_28bp
Chr3	6486318	6487245	Deletion_927bp
Chr3	20203337	20203337	Insertion_75bp
Chr3	20209333	20209333	Insertion_25bp
Chr3	20253119	20253245	Deletion_126bp
Chr3	20277020	20277167	Deletion_147bp
Chr3	3253539	3253574	Deletion_35bp
Chr3	18155327	18155327	Insertion_84bp
Chr3	18158471	18158496	Deletion_25bp
Chr3	18172308	18172354	Deletion_46bp
Chr3	18175283	18175508	Deletion_225bp
Chr3	18176074	18176074	Insertion_126bp
Chr3	18204272	18204293	Deletion_21bp
Chr3	18204669	18204669	Insertion_32bp
Chr3	18206972	18207175	Deletion_203bp
Chr3	18207434	18207572	Deletion_138bp
Chr3	18208752	18208752	Insertion_35bp
Chr3	18211695	18211744	Deletion_49bp
Chr3	2973241	2973241	Insertion_32bp
Chr3	2985886	2985928	Deletion_42bp
Chr3	2991011	2991011	Insertion_27bp
Chr3	1676418	1676418	Insertion_59bp
Chr3	1703767	1703767	Insertion_173bp
Chr3	1714820	1714820	Insertion_139bp
Chr3	1747147	1747147	Insertion_160bp
Chr3	17538601	17538623	Deletion_22bp
Chr3	17546281	17546281	Insertion_2724bp
Chr3	17561629	17561629	Insertion_31bp
Chr3	17562631	17562669	Deletion_51bp
Chr3	17566241	17566265	Deletion_24bp
Chr3	17571173	17571197	Deletion_24bp
Chr3	17575851	17579779	Deletion_3928bp
Chr3	17619075	17619075	Insertion_34bp
Chr3	17623003	17623043	Deletion_40bp

Chr3	2630710	2630744	Deletion_34bp
Chr3	2648232	2648283	Deletion_51bp
Chr3	2651973	2652008	Deletion_35bp
Chr3	2696043	2696043	Insertion_25bp
Chr3	826861	827089	Deletion_228bp
Chr3	865077	865102	Deletion_25bp
Chr3	895414	895414	Insertion_38bp
Chr3	7785884	7785907	Deletion_23bp
Chr3	7786689	7786689	Insertion_21bp
Chr3	7786756	7786781	Deletion_25bp
Chr3	7794344	7794344	Insertion_25bp
Chr3	7796052	7796079	Deletion_27bp
Chr3	7846125	7846273	Deletion_148bp
Chr3	8596104	8596966	Deletion_862bp
Chr3	8608456	8608456	Insertion_21bp
Chr3	8639905	8639905	Insertion_27bp
Chr3	8641342	8641342	Insertion_23bp
Chr3	8644980	8645023	Deletion_43bp
Chr3	19630295	19630295	Insertion_30bp
Chr3	19638184	19638417	Deletion_233bp
Chr3	19679175	19679205	Deletion_30bp
Chr3	19687053	19687053	Insertion_32bp
Chr3	19700989	19701198	Deletion_209bp
Chr3	19701427	19701448	Deletion_21bp
Chr3	21008127	21008164	Deletion_37bp
Chr3	12277053	12277053	Insertion_56bp
Chr3	12291522	12291696	Deletion_174bp
Chr3	12312121	12312147	Deletion_26bp
Chr3	12323877	12323898	Deletion_21bp
Chr3	12334046	12334102	Deletion_56bp
Chr3	12335132	12335132	Insertion_8369bp
Chr3	12353674	12353674	Insertion_27bp
Chr3	12356948	12357088	Deletion_140bp
Chr3	8484500	8484540	Deletion_44bp
Chr3	8494845	8494882	Deletion_37bp
Chr3	8495131	8495176	Deletion_45bp
Chr3	8500268	8500311	Deletion_43bp
Chr3	8506743	8506743	Insertion_55bp
Chr3	3050490	3050546	Deletion_56bp
Chr3	3056219	3056266	Deletion_47bp
Chr3	3066196	3066196	Insertion_71bp
Chr3	3103668	3103668	Insertion_2481bp
Chr3	3106085	3106085	Insertion_23bp
Chr3	3106605	3106605	Insertion_22bp
Chr3	3110062	3110062	Insertion_22bp
Chr3	22150453	22150478	Deletion_25bp
Chr3	22175673	22175673	Insertion_1008bp
Chr3	22206279	22206279	Insertion_48bp
Chr3	22206550	22206609	Deletion_59bp

Chr3	22460052	22460108	Deletion_56bp
Chr3	22470048	22470048	Insertion_190bp
Chr3	3401121	3401141	Deletion_20bp
Chr3	3402214	3402214	Insertion_24bp
Chr3	3414449	3414470	Deletion_21bp
Chr3	3435577	3435577	Insertion_37bp
Chr3	3435808	3435808	Insertion_33bp
Chr3	11908412	11908450	Deletion_38bp
Chr3	11926155	11926223	Deletion_68bp
Chr3	11933712	11933796	Deletion_84bp
Chr3	11937105	11937105	Insertion_28bp
Chr3	11937192	11937242	Deletion_50bp
Chr3	11941058	11941103	Deletion_45bp
Chr3	23135755	23135755	Insertion_447bp
Chr3	23135836	23135836	Insertion_514bp
Chr3	23145041	23145041	Insertion_51bp
Chr3	2011299	2011299	Insertion_46bp
Chr3	2034038	2034038	Insertion_46bp
Chr3	2034547	2034586	Deletion_39bp
Chr3	2048631	2048631	Insertion_28bp
Chr3	2048726	2048726	Insertion_179bp
Chr3	9978014	9978014	Insertion_85bp
Chr3	9981927	9982214	Deletion_287bp
Chr3	10004502	10004502	Insertion_38bp
Chr3	10006116	10006116	Insertion_24bp
Chr3	10014534	10014558	Deletion_24bp
Chr3	10015171	10015246	Deletion_75bp
Chr3	10015367	10015378	Insertion_30bp
Chr3	10018564	10018603	Deletion_39bp
Chr3	10037710	10037829	Deletion_119bp
Chr3	10039124	10039147	Deletion_23bp
Chr3	4413526	4413526	Insertion_22bp
Chr3	4438939	4438939	Insertion_24bp
Chr3	4441640	4441640	Insertion_113bp
Chr3	21358331	21358331	Insertion_21bp
Chr3	21380650	21380794	Deletion_144bp
Chr3	4682935	4682955	Deletion_20bp
Chr3	4693771	4693811	Deletion_40bp
Chr3	4694082	4694082	Insertion_37bp
Chr3	2718662	2718700	Deletion_38bp
Chr3	2758429	2758429	Insertion_26bp
Chr3	11796799	11796835	Deletion_36bp
Chr3	11796862	11796898	Deletion_36bp
Chr3	11800158	11800158	Insertion_22bp
Chr3	11801353	11801387	Deletion_34bp
Chr3	11837321	11837321	Insertion_22bp
Chr3	11849349	11849369	Deletion_20bp
Chr3	11860845	11860845	Insertion_23bp
Chr3	10060524	10060524	Insertion_5027bp

Chr3	10065456	10065456	Insertion_289bp
Chr3	10082060	10082827	Deletion_767bp
Chr3	10106133	10106162	Deletion_29bp
Chr3	10121025	10121025	Insertion_23bp
Chr3	7231285	7231285	Insertion_47bp
Chr3	7234645	7235004	Deletion_359bp
Chr3	7275123	7275144	Deletion_21bp
Chr3	7279043	7280165	Deletion_1122bp
Chr3	7289673	7289753	Deletion_80bp
Chr3	21639489	21639512	Deletion_23bp
Chr3	21664718	21664718	Insertion_2871bp
Chr3	12850267	12850312	Deletion_45bp
Chr3	12852990	12852990	Insertion_216bp
Chr3	12857927	12861545	Deletion_3618bp
Chr3	12870015	12870051	Deletion_36bp
Chr3	12870531	12870531	Insertion_218bp
Chr3	12872352	12872374	Deletion_22bp
Chr3	12880503	12881320	Deletion_817bp
Chr3	12897983	12898015	Deletion_32bp
Chr3	12900295	12900368	Deletion_73bp
Chr3	12909502	12909845	Deletion_343bp
Chr3	12925444	12925465	Deletion_21bp
Chr3	12927480	12927908	Deletion_428bp
Chr3	17842033	17842033	Insertion_40bp
Chr3	4242669	4242669	Insertion_24bp
Chr3	4268639	4268639	Insertion_22bp
Chr3	4268992	4268992	Insertion_48bp
Chr3	4285536	4285614	Deletion_78bp
Chr3	4287395	4301574	Deletion_14179bp
Chr3	4331345	4331388	Deletion_43bp
Chr3	4153773	4153834	Deletion_61bp
Chr3	4176580	4176580	Insertion_59bp
Chr3	4177013	4177013	Insertion_29bp
Chr3	9381015	9381015	Insertion_288bp
Chr3	9383774	9383795	Deletion_21bp
Chr3	9385434	9385434	Insertion_880bp
Chr3	9390122	9390122	Insertion_24bp
Chr3	9395257	9395257	Insertion_83bp
Chr3	9404279	9404366	Deletion_87bp
Chr3	9412261	9412261	Insertion_29bp
Chr3	9414308	9414308	Insertion_36bp
Chr3	9442206	9442390	Deletion_184bp
Chr3	7861029	7861029	Insertion_36bp
Chr3	7862438	7862438	Insertion_25bp
Chr3	7900543	7900543	Insertion_24bp
Chr3	7905935	7905935	Insertion_1841bp
Chr3	7920094	7920094	Insertion_1833bp
Chr3	7921934	7922073	Deletion_139bp
Chr3	8251143	8251143	Insertion_32bp

Chr3	8267541	8267915	Deletion_374bp
Chr3	8270746	8270746	Insertion_113bp
Chr3	8290931	8290931	Insertion_52bp
Chr3	8293192	8293192	Insertion_2120bp
Chr3	9322292	9322312	Deletion_20bp
Chr3	9325536	9325580	Deletion_44bp
Chr3	9328441	9328473	Deletion_32bp
Chr3	9329315	9329315	Insertion_30bp
Chr3	9338251	9338251	Insertion_23bp
Chr3	9348915	9348915	Insertion_1833bp
Chr3	9361610	9361610	Insertion_21bp
Chr3	9362447	9362480	Deletion_33bp
Chr3	9365902	9365948	Deletion_46bp
Chr3	21473088	21473117	Deletion_29bp
Chr3	21483061	21483061	Insertion_21bp
Chr3	7727370	7727370	Insertion_189bp
Chr3	7731497	7731530	Deletion_33bp
Chr3	7739550	7739590	Deletion_40bp
Chr3	7756206	7756206	Insertion_28bp
Chr3	20028906	20028927	Deletion_21bp
Chr3	20028950	20028950	Insertion_22bp
Chr3	22110697	22110697	Insertion_49bp
Chr3	22110792	22110792	Insertion_52bp
Chr3	3556993	3558052	Deletion_1059bp
Chr3	21062094	21062114	Deletion_20bp
Chr3	21097938	21097962	Deletion_24bp
Chr3	18267606	18267606	Insertion_87bp
Chr3	18277761	18277761	Insertion_2725bp
Chr3	18283163	18283163	Insertion_33bp
Chr3	18295153	18295202	Deletion_49bp
Chr3	18300203	18300236	Deletion_33bp
Chr3	18307000	18307060	Deletion_60bp
Chr3	16939999	16940084	Deletion_85bp
Chr3	10734766	10734799	Deletion_33bp
Chr3	10751116	10752364	Deletion_1248bp
Chr3	10762570	10762570	Insertion_1100bp
Chr3	10766914	10766914	Insertion_33bp
Chr3	10772586	10772586	Insertion_31bp
Chr3	18873587	18873890	Deletion_303bp
Chr3	7044883	7044917	Deletion_34bp
Chr3	7074758	7074758	Insertion_1025bp
Chr3	20132049	20132858	Deletion_809bp
Chr3	20144076	20144306	Deletion_230bp
Chr3	20144499	20144526	Deletion_27bp
Chr3	19944725	19944725	Insertion_28bp
Chr3	19946623	19946632	Insertion_53bp
Chr3	19982125	19982151	Deletion_26bp
Chr3	19984776	19984796	Deletion_20bp
Chr3	19987724	19987748	Deletion_24bp

Chr3	19991110	19991110	Insertion_20bp
Chr3	19991775	19991775	Insertion_477bp
Chr3	19992647	19992647	Insertion_25bp
Chr3	16486348	16486370	Deletion_22bp
Chr3	16489760	16489760	Insertion_25bp
Chr3	16504069	16504219	Deletion_150bp
Chr3	16508071	16508071	Insertion_310bp
Chr3	16510932	16510932	Insertion_20bp
Chr3	16538557	16538557	Insertion_27bp
Chr3	16350092	16350092	Insertion_123bp
Chr3	16350954	16350954	Insertion_192bp
Chr3	16353359	16353382	Deletion_23bp
Chr3	16353645	16353673	Deletion_28bp
Chr3	16366078	16366078	Insertion_41bp
Chr3	16380949	16380981	Deletion_32bp
Chr3	16381059	16381080	Deletion_21bp
Chr3	4856021	4856021	Insertion_495bp
Chr3	4857824	4857824	Insertion_22bp
Chr3	4881822	4881844	Deletion_22bp
Chr3	17687114	17687114	Insertion_51bp
Chr3	17970789	17970828	Deletion_39bp
Chr3	17972136	17972313	Deletion_177bp
Chr3	17981144	17981185	Deletion_41bp
Chr3	17986516	17986516	Insertion_29bp
Chr3	17991989	17991989	Insertion_73bp
Chr3	18014835	18015323	Deletion_488bp
Chr3	17876201	17876222	Deletion_21bp
Chr3	17881385	17881407	Deletion_22bp
Chr3	17898205	17898205	Insertion_39bp
Chr3	17904634	17904686	Deletion_52bp
Chr3	17914087	17914582	Deletion_495bp
Chr3	21277984	21278057	Deletion_73bp
Chr3	4197723	4197749	Deletion_26bp
Chr3	4199793	4199793	Insertion_83bp
Chr3	337093	337136	Deletion_43bp
Chr3	364278	364278	Insertion_33bp
Chr3	19750381	19750381	Insertion_131bp
Chr3	19754904	19754944	Deletion_40bp
Chr3	19758185	19758185	Insertion_717bp
Chr3	7645596	7645622	Deletion_26bp
Chr3	1316693	1316693	Insertion_1104bp
Chr3	15814159	15814203	Deletion_44bp
Chr3	15849665	15849665	Insertion_23bp
Chr3	15851107	15853549	Deletion_2442bp
Chr3	15859240	15861286	Deletion_2046bp
Chr3	15865701	15865701	Insertion_58bp
Chr3	8584064	8584108	Deletion_44bp
Chr3	4077759	4077793	Deletion_34bp
Chr3	4080998	4080998	Insertion_21bp

Chr3	4096587	4096617	Deletion_30bp
Chr3	4107864	4107864	Insertion_1087bp
Chr3	4114298	4114298	Insertion_46bp
Chr3	4119155	4119155	Insertion_27bp
Chr3	4124694	4124737	Deletion_43bp
Chr3	5296930	5296959	Deletion_29bp
Chr3	5297014	5297069	Deletion_55bp
Chr3	5305021	5305066	Deletion_45bp
Chr3	5309732	5309732	Insertion_29bp
Chr3	5327845	5327845	Insertion_26bp
Chr3	4492693	4493315	Deletion_622bp
Chr3	6215785	6215785	Insertion_561bp
Chr3	6218434	6218434	Insertion_22bp
Chr3	9051757	9051757	Insertion_28bp
Chr3	9078026	9078085	Deletion_59bp
Chr3	9081602	9081602	Insertion_23bp
Chr3	9848309	9848309	Insertion_4634bp
Chr3	9861862	9862123	Deletion_261bp
Chr3	9872105	9872105	Insertion_70bp
Chr3	12368005	12368530	Deletion_525bp
Chr3	12372384	12372384	Insertion_44bp
Chr3	12376715	12378425	Deletion_1710bp
Chr3	12404809	12404866	Deletion_57bp
Chr3	12408304	12408304	Insertion_24bp
Chr3	12410290	12410290	Insertion_21bp
Chr3	12419968	12420379	Deletion_411bp
Chr3	19874080	19874080	Insertion_33bp
Chr3	19885531	19885551	Deletion_20bp
Chr3	19886526	19886526	Insertion_45bp
Chr3	19888589	19888589	Insertion_315bp
Chr3	12115375	12115375	Insertion_42bp
Chr3	12118235	12118741	Deletion_506bp
Chr3	12120418	12120418	Insertion_604bp
Chr3	12132123	12132123	Insertion_30bp
Chr3	12134927	12135294	Deletion_367bp
Chr3	12136393	12136414	Deletion_21bp
Chr3	12141976	12141976	Insertion_40bp
Chr3	12156929	12156929	Insertion_20bp
Chr3	6632497	6632497	Insertion_20bp
Chr3	6633538	6633538	Insertion_22bp
Chr3	6663802	6664045	Deletion_243bp
Chr3	21945954	21945954	Insertion_20bp
Chr3	21953114	21953198	Deletion_84bp
Chr3	21981200	21982014	Deletion_814bp
Chr3	14858544	14858588	Deletion_44bp
Chr3	14859679	14859679	Insertion_37bp
Chr3	14880051	14880102	Deletion_51bp
Chr3	14882470	14882565	Deletion_95bp
Chr3	14882577	14883373	Deletion_796bp

Chr3	14884320	14884366	Deletion_46bp
Chr3	14887899	14888005	Deletion_106bp
Chr3	14894878	14895034	Deletion_156bp
Chr3	14896570	14896570	Insertion_45bp
Chr3	14902131	14902155	Deletion_24bp
Chr3	14912842	14912904	Deletion_62bp
Chr3	14913115	14913115	Insertion_30bp
Chr3	14914016	14914082	Deletion_66bp
Chr3	19555154	19555201	Deletion_47bp
Chr3	19573053	19573053	Insertion_36bp
Chr3	19577846	19578427	Deletion_581bp
Chr3	19596385	19596385	Insertion_28bp
Chr3	8066821	8066821	Insertion_43bp
Chr3	8093509	8095999	Deletion_2490bp
Chr3	8101030	8102911	Deletion_1881bp
Chr3	4806168	4806168	Insertion_30bp
Chr3	4807025	4807052	Deletion_27bp
Chr3	19052033	19052033	Insertion_24bp
Chr3	15075233	15075233	Insertion_22bp
Chr3	15075588	15075588	Insertion_23bp
Chr3	15086900	15086940	Deletion_40bp
Chr3	10891542	10891542	Insertion_36bp
Chr3	10899033	10899033	Insertion_26bp
Chr3	10921490	10921490	Insertion_537bp
Chr3	21901517	21901555	Deletion_38bp
Chr3	21903302	21903339	Deletion_37bp
Chr3	21911864	21911864	Insertion_28bp
Chr3	21936071	21936071	Insertion_44bp
Chr3	21937036	21937036	Insertion_34bp
Chr3	14932946	14932992	Deletion_46bp
Chr3	14952479	14952503	Deletion_24bp
Chr3	14956989	14962278	Deletion_5289bp
Chr3	14973351	14973351	Insertion_22bp
Chr3	14973403	14973482	Deletion_79bp
Chr3	14977500	14977500	Insertion_59bp
Chr3	14987906	14987906	Insertion_295bp
Chr3	14992193	14992230	Deletion_37bp
Chr3	15003016	15003016	Insertion_183bp
Chr3	22616643	22616643	Insertion_55bp
Chr3	22617114	22617114	Insertion_26bp
Chr3	22630232	22630260	Deletion_28bp
Chr3	9769389	9769432	Deletion_43bp
Chr3	9774445	9774445	Insertion_76bp
Chr3	12529130	12529130	Insertion_74bp
Chr3	12529989	12529989	Insertion_132bp
Chr3	12532274	12532274	Insertion_632bp
Chr3	12544745	12544745	Insertion_20bp
Chr3	12553598	12553930	Deletion_332bp
Chr3	12557814	12557872	Deletion_58bp

Chr3	12563131	12563131	Insertion_217bp
Chr3	12575264	12575264	Insertion_108bp
Chr3	12581070	12581070	Insertion_54bp
Chr3	19494124	19494124	Insertion_27bp
Chr3	23033201	23033231	Deletion_30bp
Chr3	23040094	23040142	Deletion_48bp
Chr3	23060986	23061105	Deletion_119bp
Chr3	23068327	23068327	Insertion_175bp
Chr3	23068444	23068444	Insertion_152bp
Chr3	23068518	23068518	Insertion_31bp
Chr3	9794617	9794617	Insertion_44bp
Chr3	9794688	9794688	Insertion_23bp
Chr3	9804457	9804494	Deletion_37bp
Chr3	9808112	9809190	Deletion_1078bp
Chr3	9831147	9831147	Insertion_2026bp
Chr3	9836732	9836732	Insertion_37bp
Chr3	9016497	9016631	Deletion_142bp
Chr3	9037769	9037789	Deletion_20bp
Chr3	19819174	19819174	Insertion_21bp
Chr3	19824507	19824507	Insertion_24bp
Chr3	2800951	2811432	Deletion_10481bp
Chr3	2825623	2825623	Insertion_144bp
Chr3	2828859	2828879	Deletion_20bp
Chr3	6264069	6264392	Deletion_323bp
Chr3	1780246	1780246	Insertion_29bp
Chr3	1781726	1781726	Insertion_35bp
Chr3	8155238	8155267	Deletion_29bp
Chr3	8169554	8169554	Insertion_42bp
Chr3	8175171	8175200	Deletion_29bp
Chr3	20957961	20957961	Insertion_21bp
Chr3	13042089	13042127	Deletion_38bp
Chr3	13044220	13044220	Insertion_40bp
Chr3	13055684	13055718	Deletion_34bp
Chr3	13058539	13058574	Deletion_35bp
Chr3	13059062	13059090	Deletion_28bp
Chr3	13059742	13059742	Insertion_407bp
Chr3	13073599	13073599	Insertion_40bp
Chr3	13080942	13088390	Deletion_7448bp
Chr3	13088893	13088917	Deletion_24bp
Chr3	13093821	13093821	Insertion_63bp
Chr3	13095700	13095700	Insertion_39bp
Chr3	13096715	13097697	Deletion_982bp
Chr3	5466074	5466120	Deletion_46bp
Chr3	5475618	5475618	Insertion_5860bp
Chr3	5476986	5476986	Insertion_22bp
Chr3	1282770	1282770	Insertion_125bp
Chr3	1291983	1292007	Deletion_24bp
Chr3	1293660	1293660	Insertion_729bp
Chr3	18790165	18790165	Insertion_146bp

Chr3	18791147	18796089	Deletion_4942bp
Chr3	22712502	22712502	Insertion_25bp
Chr3	18326152	18326152	Insertion_31bp
Chr3	18326204	18326204	Insertion_22bp
Chr3	18335016	18335037	Deletion_21bp
Chr3	4749029	4749055	Insertion_43bp
Chr3	4751580	4751580	Insertion_53bp
Chr3	4751760	4751793	Deletion_33bp
Chr3	4775672	4775672	Insertion_55bp
Chr3	4776371	4776408	Deletion_37bp
Chr3	21393760	21393786	Deletion_26bp
Chr3	21397700	21397700	Insertion_296bp
Chr3	15253746	15253879	Deletion_133bp
Chr3	8424578	8424578	Insertion_37bp
Chr3	8451270	8451313	Deletion_43bp
Chr3	5966896	5966896	Insertion_46bp
Chr3	5984122	5984165	Deletion_43bp
Chr3	5984620	5984620	Insertion_828bp
Chr3	5996712	5996733	Deletion_21bp
Chr3	21835206	21835206	Insertion_51bp
Chr3	21860689	21860689	Insertion_259bp
Chr3	5931494	5931494	Insertion_101bp
Chr3	5936619	5936619	Insertion_34bp
Chr3	5949249	5949432	Deletion_183bp
Chr3	18047419	18048047	Deletion_628bp
Chr3	18049442	18049442	Insertion_28bp
Chr3	18055261	18056033	Deletion_772bp
Chr3	18079184	18079184	Insertion_73bp
Chr3	8325698	8325722	Deletion_24bp
Chr3	6948795	6948836	Deletion_41bp
Chr3	6957598	6957633	Deletion_35bp
Chr3	1602240	1602291	Deletion_51bp
Chr3	6810092	6810436	Deletion_344bp
Chr3	6810541	6810541	Insertion_27bp
Chr3	22653731	22653731	Insertion_22bp
Chr3	22655905	22655905	Insertion_49bp
Chr3	22660291	22662570	Deletion_2279bp
Chr3	22662672	22662723	Deletion_51bp
Chr3	22683887	22683921	Deletion_34bp
Chr3	22685009	22685009	Insertion_542bp
Chr3	22685336	22685364	Deletion_28bp
Chr3	22687108	22687128	Deletion_20bp
Chr3	22695560	22700521	Deletion_4961bp
Chr3	21869703	21869819	Deletion_116bp
Chr3	21882947	21882947	Insertion_27bp
Chr3	21883002	21883002	Insertion_79bp
Chr3	7219379	7219379	Insertion_22bp
Chr3	6991496	6993215	Deletion_1719bp
Chr3	7005727	7005727	Insertion_21bp

Chr3	7013534	7015299	Deletion_1765bp
Chr3	17496331	17496331	Insertion_45bp
Chr3	17497344	17497374	Deletion_30bp
Chr3	6735638	6735660	Deletion_22bp
Chr3	6737626	6737626	Insertion_45bp
Chr3	6744379	6744409	Deletion_42bp
Chr3	9929397	9929467	Deletion_70bp
Chr3	22370102	22370331	Deletion_229bp
Chr3	2899047	2900615	Deletion_1568bp
Chr3	5405269	5405269	Insertion_34bp
Chr3	5410741	5410771	Deletion_30bp
Chr3	5419372	5419372	Insertion_26bp
Chr3	5421677	5421677	Insertion_2092bp
Chr3	3499452	3500472	Deletion_1020bp
Chr3	18843490	18844704	Deletion_1214bp
Chr3	18850570	18850642	Deletion_72bp
Chr3	18859124	18859156	Deletion_32bp
Chr3	4367052	4367105	Deletion_53bp
Chr3	1628862	1628862	Insertion_39bp
Chr3	1629199	1629199	Insertion_169bp
Chr3	1642383	1642416	Deletion_33bp
Chr3	1855908	1855929	Deletion_21bp
Chr3	20424297	20424319	Deletion_22bp
Chr3	20431917	20431917	Insertion_58bp
Chr3	20452802	20452802	Insertion_34bp
Chr3	20453270	20453270	Insertion_27bp
Chr3	10620402	10620402	Insertion_29bp
Chr3	10620503	10620503	Insertion_30bp
Chr3	10644534	10644534	Insertion_46bp
Chr3	8345594	8345594	Insertion_48bp
Chr3	8369114	8369156	Deletion_42bp
Chr3	5333829	5333829	Insertion_23bp
Chr3	5352672	5352695	Deletion_23bp
Chr3	5354317	5354317	Insertion_1682bp
Chr3	11224575	11224828	Deletion_253bp
Chr3	11244168	11244168	Insertion_130bp
Chr3	11246103	11246133	Deletion_30bp
Chr3	10330066	10330066	Insertion_73bp
Chr3	10337773	10337773	Insertion_376bp
Chr3	3143281	3143303	Deletion_22bp
Chr3	3153452	3153479	Deletion_27bp
Chr3	22048115	22048115	Insertion_44bp
Chr3	22048341	22048341	Insertion_45bp
Chr3	22054329	22054329	Insertion_39bp
Chr3	17354832	17354832	Insertion_516bp
Chr3	17361691	17361691	Insertion_35bp
Chr3	17366828	17366828	Insertion_30bp
Chr3	17371946	17371946	Insertion_23bp
Chr3	17372680	17372765	Deletion_85bp

Chr3	17377264	17377302	Deletion_38bp
Chr3	11195963	11195987	Deletion_24bp
Chr3	11213682	11213706	Deletion_24bp
Chr3	15658207	15658207	Insertion_22bp
Chr3	15665505	15665505	Insertion_702bp
Chr3	15676736	15677284	Deletion_548bp
Chr3	15687013	15687039	Deletion_26bp
Chr3	15690519	15690519	Insertion_26bp
Chr3	22439356	22439850	Deletion_494bp
Chr3	9468832	9468868	Deletion_36bp
Chr3	9468987	9469040	Deletion_53bp
Chr3	9471164	9472118	Deletion_954bp
Chr3	9474026	9474065	Deletion_39bp
Chr3	9474720	9475166	Deletion_446bp
Chr3	9481536	9481549	Insertion_72bp
Chr3	4952146	4952146	Insertion_859bp
Chr3	20357282	20357282	Insertion_2102bp
Chr3	20375296	20375332	Deletion_36bp
Chr3	22393160	22393184	Deletion_24bp
Chr3	22409371	22409412	Deletion_41bp
Chr3	22410098	22410221	Deletion_123bp
Chr3	22410298	22410298	Insertion_20bp
Chr3	5257808	5257808	Insertion_40bp
Chr3	5356570	5356570	Insertion_59bp
Chr3	5376259	5376283	Deletion_24bp
Chr3	5377197	5378217	Deletion_1020bp
Chr3	5379338	5380231	Deletion_893bp
Chr3	15886820	15886820	Insertion_948bp
Chr3	15896774	15896797	Deletion_23bp
Chr3	2102474	2102495	Deletion_21bp
Chr3	2106432	2106432	Insertion_23bp
Chr3	2115092	2115115	Deletion_23bp
Chr3	2124188	2124188	Insertion_26bp
Chr3	5608955	5608994	Deletion_39bp
Chr3	5632097	5632192	Deletion_95bp
Chr3	5633394	5633394	Insertion_25bp
Chr3	22615992	22615992	Insertion_318bp
Chr3	9713018	9713018	Insertion_132bp
Chr3	9713706	9713706	Insertion_29bp
Chr3	9718793	9718793	Insertion_24bp
Chr3	11136711	11136939	Deletion_228bp
Chr3	11138510	11138510	Insertion_51bp
Chr3	11143977	11144039	Deletion_62bp
Chr3	11146698	11146765	Deletion_67bp
Chr3	11147953	11147978	Deletion_25bp
Chr3	11151564	11151564	Insertion_27bp
Chr3	11153328	11153328	Insertion_1079bp
Chr3	11158174	11158207	Deletion_33bp
Chr3	11160436	11160464	Deletion_28bp

Chr3	2078586	2078586	Insertion_36bp
Chr3	2087911	2087911	Insertion_31bp
Chr3	20407339	20407339	Insertion_38bp
Chr3	20416109	20416109	Insertion_8022bp
Chr3	16855412	16855412	Insertion_64bp
Chr3	16855581	16855581	Insertion_31bp
Chr3	16866602	16866658	Deletion_56bp
Chr3	16876726	16876726	Insertion_60bp
Chr3	16877592	16877849	Deletion_266bp
Chr3	19605627	19605627	Insertion_577bp
Chr3	19608626	19608667	Deletion_41bp
Chr3	19622243	19622608	Deletion_365bp
Chr3	17853912	17854473	Deletion_561bp
Chr3	16995656	16995656	Insertion_255bp
Chr3	4902237	4902237	Insertion_21bp
Chr3	7441951	7441980	Deletion_29bp
Chr3	7455258	7455286	Deletion_28bp
Chr3	7457552	7457552	Insertion_135bp
Chr3	10137181	10137181	Insertion_29bp
Chr3	10137281	10137281	Insertion_42bp
Chr3	14785717	14785717	Insertion_32bp
Chr3	14790700	14790725	Deletion_25bp
Chr3	14797599	14797599	Insertion_26bp
Chr3	14804636	14805097	Deletion_461bp
Chr3	14805649	14805649	Insertion_61bp
Chr3	14807606	14807646	Deletion_40bp
Chr3	14810279	14810279	Insertion_52bp
Chr3	14810750	14810837	Deletion_87bp
Chr3	16979420	16979469	Deletion_49bp
Chr3	16989760	16989760	Insertion_341bp
Chr3	16990723	16990723	Insertion_21bp
Chr3	16991035	16991065	Deletion_30bp
Chr3	16991804	16991804	Insertion_48bp
Chr3	16991933	16991933	Insertion_445bp
Chr3	16993692	16993692	Insertion_57bp
Chr3	19803194	19803194	Insertion_79bp
Chr3	8378622	8378622	Insertion_39bp
Chr3	23219996	23219996	Insertion_28bp
Chr3	2251166	2251197	Deletion_31bp
Chr3	7626622	7626622	Insertion_25bp
Chr3	7635058	7635092	Deletion_34bp
Chr3	19520642	19521227	Deletion_585bp
Chr3	19533256	19533256	Insertion_141bp
Chr3	15154421	15160244	Deletion_5823bp
Chr3	16401967	16401987	Deletion_20bp
Chr3	16403187	16403187	Insertion_40bp
Chr3	16417083	16417083	Insertion_27bp
Chr3	9194020	9194176	Deletion_156bp
Chr3	9199107	9199133	Deletion_26bp

Chr3	9200763	9200801	Deletion_38bp
Chr3	15321809	15322061	Deletion_252bp
Chr3	15322764	15322764	Insertion_945bp
Chr3	15324897	15324897	Insertion_50bp
Chr3	15333951	15334000	Deletion_49bp
Chr3	15335552	15335552	Insertion_50bp
Chr3	15337432	15337465	Deletion_33bp
Chr3	15341791	15341791	Insertion_128bp
Chr3	22340176	22340176	Insertion_255bp
Chr3	22340289	22340289	Insertion_579bp
Chr3	22347560	22347560	Insertion_3386bp
Chr3	1255137	1255160	Deletion_23bp
Chr3	7308901	7308921	Deletion_20bp
Chr3	7322684	7322742	Deletion_58bp
Chr3	1818687	1818732	Deletion_45bp
Chr3	17946588	17946588	Insertion_5131bp
Chr3	2858184	2858184	Insertion_51bp
Chr3	2859664	2859981	Deletion_317bp
Chr3	10695968	10696007	Deletion_39bp
Chr3	10700931	10700979	Deletion_48bp
Chr3	10708232	10708232	Insertion_71bp
Chr3	10708626	10709179	Deletion_553bp
Chr3	10713088	10713088	Insertion_74bp
Chr3	2873004	2873004	Insertion_1715bp
Chr3	2876011	2876011	Insertion_24bp
Chr3	2877610	2877610	Insertion_36bp
Chr3	2892950	2892950	Insertion_20bp
Chr3	4501835	4501835	Insertion_4964bp
Chr3	4522070	4522256	Deletion_186bp
Chr3	6679048	6679048	Insertion_84bp
Chr3	6679246	6679246	Insertion_33bp
Chr3	6684085	6684410	Deletion_325bp
Chr3	17241741	17241741	Insertion_338bp
Chr3	17250283	17250354	Deletion_71bp
Chr3	17262638	17262638	Insertion_334bp
Chr3	17264026	17264079	Deletion_53bp
Chr3	17264258	17264258	Insertion_20bp
Chr3	17265219	17265219	Insertion_34bp
Chr3	2217560	2217642	Deletion_82bp
Chr3	16650465	16650465	Insertion_246bp
Chr3	16650861	16650861	Insertion_103bp
Chr3	16653770	16653809	Deletion_39bp
Chr3	4965732	4966476	Deletion_744bp
Chr3	4967034	4967074	Deletion_40bp
Chr3	4967896	4967948	Deletion_52bp
Chr3	21818283	21818283	Insertion_22bp
Chr3	11459328	11459792	Deletion_464bp
Chr3	11463110	11463110	Insertion_759bp
Chr3	11482681	11482707	Deletion_26bp

Chr3	19999404	19999470	Deletion_66bp
Chr3	6597010	6597010	Insertion_95bp
Chr3	6612529	6612529	Insertion_75bp
Chr3	11258005	11258005	Insertion_65bp
Chr3	11259018	11259038	Deletion_20bp
Chr3	11266221	11266221	Insertion_27bp
Chr3	7717414	7717414	Insertion_4740bp
Chr3	18516131	18516131	Insertion_456bp
Chr3	18517337	18517337	Insertion_25bp
Chr3	18524275	18524275	Insertion_30bp
Chr3	10821613	10821613	Insertion_32bp
Chr3	10824174	10824203	Deletion_29bp
Chr3	10834581	10835591	Deletion_1010bp
Chr3	13495209	13495209	Insertion_25bp
Chr3	13497175	13497245	Deletion_70bp
Chr3	13500286	13500286	Insertion_74bp
Chr3	13502117	13502117	Insertion_21bp
Chr3	13503022	13503114	Deletion_92bp
Chr3	13511794	13511802	Insertion_28bp
Chr3	18101271	18101327	Deletion_56bp
Chr3	18107861	18108583	Deletion_722bp
Chr3	12426062	12426083	Deletion_21bp
Chr3	12433027	12433081	Deletion_54bp
Chr3	12437683	12442727	Deletion_5044bp
Chr3	12450338	12450359	Deletion_21bp
Chr3	12454484	12454544	Deletion_60bp
Chr3	12455534	12455534	Insertion_28bp
Chr3	12459426	12459467	Deletion_41bp
Chr3	12466278	12466666	Deletion_388bp
Chr3	12467099	12467099	Insertion_32bp
Chr3	10216972	10216972	Insertion_2067bp
Chr3	10231988	10231988	Insertion_37bp
Chr3	15358744	15358744	Insertion_202bp
Chr3	15361025	15364730	Deletion_3705bp
Chr3	15383157	15383157	Insertion_35bp
Chr3	15384934	15384934	Insertion_3638bp
Chr3	15388591	15388611	Deletion_20bp
Chr3	18484372	18484416	Deletion_44bp
Chr3	18485710	18485743	Deletion_33bp
Chr3	18493839	18493872	Deletion_33bp
Chr3	18498503	18498527	Deletion_24bp
Chr3	22015682	22015703	Deletion_21bp
Chr3	22021085	22021142	Deletion_57bp
Chr3	22022885	22023034	Deletion_149bp
Chr3	22024216	22024249	Deletion_33bp
Chr3	20762222	20762243	Deletion_21bp
Chr3	20763034	20763070	Deletion_36bp
Chr3	5554676	5554676	Insertion_39bp
Chr3	5566709	5566764	Deletion_55bp

Chr3	5569374	5569374	Insertion_22bp
Chr3	15271924	15271924	Insertion_47bp
Chr3	15289899	15292612	Deletion_2713bp
Chr3	15297434	15297434	Insertion_45bp
Chr3	11409490	11409490	Insertion_36bp
Chr3	11410293	11410331	Deletion_38bp
Chr3	11413553	11413575	Deletion_22bp
Chr3	22743177	22743210	Deletion_33bp
Chr3	22748013	22748013	Insertion_70bp
Chr3	22748897	22749013	Deletion_116bp
Chr3	17299150	17301277	Deletion_2127bp
Chr3	17311831	17311831	Insertion_25bp
Chr3	10588652	10588676	Deletion_24bp
Chr3	16587378	16587766	Deletion_388bp
Chr3	16590621	16590621	Insertion_358bp
Chr3	16593335	16593335	Insertion_75bp
Chr3	11998684	11998684	Insertion_32bp
Chr3	11999509	11999604	Deletion_95bp
Chr3	12006744	12006744	Insertion_29bp
Chr3	12016307	12016338	Deletion_31bp
Chr3	7599564	7599644	Deletion_80bp
Chr3	14750600	14750600	Insertion_28bp
Chr3	16069438	16069438	Insertion_476bp
Chr3	20474061	20474061	Insertion_41bp
Chr3	17167713	17167713	Insertion_58bp
Chr3	17167811	17167838	Deletion_27bp
Chr3	17177329	17177535	Deletion_206bp
Chr3	17177700	17177730	Deletion_30bp
Chr3	17177781	17177830	Deletion_49bp
Chr3	17178447	17178595	Deletion_148bp
Chr3	17184695	17184695	Insertion_32bp
Chr3	9243118	9243118	Insertion_1044bp
Chr3	9657633	9657683	Deletion_50bp
Chr3	9660475	9660475	Insertion_26bp
Chr3	15618576	15618576	Insertion_599bp
Chr3	15618960	15618960	Insertion_257bp
Chr3	15634183	15634216	Deletion_33bp
Chr3	15635449	15635449	Insertion_23bp
Chr3	15637246	15637246	Insertion_2343bp
Chr3	15637899	15637899	Insertion_70bp
Chr3	15644026	15644026	Insertion_35bp
Chr3	6771338	6771390	Deletion_52bp
Chr3	6776059	6776059	Insertion_35bp
Chr3	9153702	9153702	Insertion_27bp
Chr3	7334749	7334769	Deletion_20bp
Chr3	7342494	7342521	Deletion_27bp
Chr3	7342835	7343200	Deletion_365bp
Chr3	7348555	7348578	Deletion_23bp
Chr3	16817888	16817888	Insertion_50bp

Chr3	10512131	10512154	Deletion_23bp
Chr3	10512879	10512903	Deletion_24bp
Chr3	10517678	10517947	Deletion_269bp
Chr3	15908807	15908807	Insertion_75bp
Chr3	15917172	15917172	Insertion_34bp
Chr3	18819671	18819746	Deletion_75bp
Chr3	18830059	18830090	Deletion_31bp
Chr3	3259398	3259398	Insertion_27bp
Chr3	3265765	3265765	Insertion_27bp
Chr3	6824113	6824143	Deletion_30bp
Chr3	23203557	23207582	Deletion_4025bp
Chr3	9509487	9509487	Insertion_22bp
Chr3	9516948	9516994	Deletion_46bp
Chr3	12196707	12196707	Insertion_132bp
Chr3	12199558	12199596	Deletion_38bp
Chr3	12200122	12200144	Deletion_22bp
Chr3	23089497	23089497	Insertion_26bp
Chr3	10847978	10847999	Deletion_21bp
Chr3	11740036	11740036	Insertion_94bp
Chr3	11747236	11747267	Deletion_31bp
Chr3	11747915	11747922	Insertion_96bp
Chr3	11748821	11748841	Deletion_20bp
Chr3	11749533	11749533	Insertion_32bp
Chr3	11751186	11751216	Deletion_30bp
Chr3	11757298	11757298	Insertion_3225bp
Chr3	11760700	11761025	Deletion_325bp
Chr3	9530406	9530447	Deletion_41bp
Chr3	9540460	9541248	Deletion_788bp
Chr3	9543450	9543481	Deletion_31bp
Chr3	9549300	9549341	Deletion_41bp
Chr3	23071793	23071793	Insertion_449bp
Chr3	15981230	15981230	Insertion_26bp
Chr3	15982973	15982997	Deletion_24bp
Chr3	15989899	15989899	Insertion_10635bp
Chr3	15991024	15991046	Deletion_22bp
Chr3	15991445	15991445	Insertion_35bp
Chr3	19455357	19455357	Insertion_36bp
Chr3	15127926	15127926	Insertion_20bp
Chr3	15131630	15131651	Deletion_21bp
Chr3	4737397	4737470	Deletion_73bp
Chr3	23031121	23031121	Insertion_26bp
Chr3	9599661	9599661	Insertion_452bp
Chr3	9607449	9607488	Deletion_39bp
Chr3	9607777	9607801	Deletion_24bp
Chr3	10662426	10662440	Insertion_21bp
Chr3	10340774	10340774	Insertion_24bp
Chr3	10341693	10341739	Deletion_46bp
Chr3	10343095	10343095	Insertion_41bp
Chr3	10353567	10355054	Deletion_1487bp

Chr3	10356974	10356995	Deletion_21bp
Chr3	20947005	20947029	Deletion_24bp
Chr3	7015773	7015773	Insertion_20bp
Chr3	7016379	7016379	Insertion_35bp
Chr3	7026568	7026614	Deletion_46bp
Chr3	11280469	11280469	Insertion_47bp
Chr3	11281826	11281826	Insertion_26bp
Chr3	11285671	11285695	Deletion_24bp
Chr3	11287504	11287531	Deletion_27bp
Chr3	11288239	11288239	Insertion_20bp
Chr3	11296701	11296701	Insertion_2095bp
Chr3	9965727	9965749	Deletion_22bp
Chr3	12240082	12240082	Insertion_26bp
Chr3	8332014	8332051	Deletion_37bp
Chr3	8338586	8338586	Insertion_26bp
Chr3	1812366	1812366	Insertion_24bp
Chr3	20092999	20093100	Deletion_101bp
Chr3	7925658	7925658	Insertion_26bp
Chr3	10377109	10377109	Insertion_814bp
Chr3	10377290	10377290	Insertion_23bp
Chr3	12965108	12965108	Insertion_221bp
Chr3	12969985	12970383	Deletion_398bp
Chr3	12971414	12971414	Insertion_23bp
Chr3	814172	814201	Deletion_29bp
Chr3	823892	823892	Insertion_43bp
Chr3	20290729	20290729	Insertion_32bp
Chr3	12022960	12022960	Insertion_22bp
Chr3	12028193	12028229	Deletion_36bp
Chr3	12028371	12028371	Insertion_20bp
Chr3	12033706	12033706	Insertion_571bp
Chr3	12036384	12036384	Insertion_5031bp
Chr3	12038088	12038120	Deletion_32bp
Chr3	12038710	12038710	Insertion_434bp
Chr3	17145708	17145757	Deletion_49bp
Chr3	17148037	17148069	Deletion_32bp
Chr3	5593594	5593633	Deletion_39bp
Chr3	5593783	5593822	Deletion_39bp
Chr3	10379797	10379823	Deletion_26bp
Chr3	10394126	10405353	Deletion_11227bp
Chr3	15949551	15949634	Deletion_83bp
Chr3	15963569	15963589	Deletion_20bp
Chr3	11001828	11001848	Deletion_20bp
Chr3	11005996	11006032	Deletion_36bp
Chr3	16251790	16251790	Insertion_5912bp
Chr3	14192768	14192812	Deletion_44bp
Chr3	14193400	14193482	Deletion_82bp
Chr3	14195140	14195161	Deletion_21bp
Chr3	14203809	14203891	Deletion_82bp
Chr3	9260363	9260391	Deletion_28bp

Chr3	9267985	9268002	Insertion_30bp
Chr3	10980720	10980720	Insertion_83bp
Chr3	10982713	10982752	Deletion_39bp
Chr3	10994194	10994194	Insertion_48bp
Chr3	5900708	5900772	Deletion_64bp
Chr3	14237740	14237740	Insertion_174bp
Chr3	6000407	6000407	Insertion_58bp
Chr3	12100199	12100223	Deletion_24bp
Chr3	12107751	12107751	Insertion_278bp
Chr3	18746056	18746100	Deletion_44bp
Chr3	20279337	20279337	Insertion_44bp
Chr3	7688529	7688529	Insertion_31bp
Chr3	15579182	15579209	Deletion_41bp
Chr3	15579278	15579326	Deletion_48bp
Chr3	15580426	15584898	Deletion_4472bp
Chr3	15588190	15588190	Insertion_21bp
Chr3	15588489	15588489	Insertion_88bp
Chr3	15590863	15590883	Deletion_20bp
Chr3	11490938	11490960	Deletion_22bp
Chr3	11496672	11496693	Deletion_21bp
Chr3	11499000	11499000	Insertion_131bp
Chr3	11501291	11501333	Deletion_42bp
Chr3	11513554	11513554	Insertion_21bp
Chr3	11520016	11520066	Deletion_50bp
Chr3	11521089	11521089	Insertion_143bp
Chr3	11524748	11524772	Deletion_24bp
Chr3	11525564	11525564	Insertion_22bp
Chr3	810195	810235	Deletion_40bp
Chr3	11023505	11023546	Deletion_41bp
Chr3	11032384	11032413	Deletion_29bp
Chr3	14193400	14193482	Deletion_82bp
Chr3	14193877	14193897	Deletion_20bp
Chr3	14194052	14194093	Deletion_41bp
Chr3	14195042	14195042	Insertion_185bp
Chr3	14203809	14203891	Deletion_82bp
Chr3	14204286	14204306	Deletion_20bp
Chr3	14204461	14204502	Deletion_41bp
Chr3	16625788	16625942	Deletion_154bp
Chr3	20729404	20729404	Insertion_30bp
Chr3	20740678	20740678	Insertion_2147bp
Chr3	20741125	20741153	Deletion_28bp
Chr3	14193400	14193482	Deletion_82bp
Chr3	14193877	14193897	Deletion_20bp
Chr3	14194052	14194093	Deletion_41bp
Chr3	14194450	14194450	Insertion_227bp
Chr3	14203809	14203891	Deletion_82bp
Chr3	14204286	14204306	Deletion_20bp
Chr3	14204461	14204502	Deletion_41bp
Chr3	16123392	16123392	Insertion_31bp

Chr3	11423521	11423557	Deletion_36bp
Chr3	1555402	1560694	Deletion_5292bp
Chr3	1569113	1569113	Insertion_48bp
Chr3	12629325	12643699	Deletion_14374bp
Chr3	14257872	14257893	Deletion_21bp
Chr3	14262475	14262475	Insertion_30bp
Chr3	14264122	14264157	Deletion_42bp
Chr3	14266903	14266903	Insertion_42bp
Chr3	14269751	14269778	Deletion_27bp
Chr3	16481093	16481127	Deletion_34bp
Chr3	12586426	12586426	Insertion_452bp
Chr3	6014081	6014111	Deletion_30bp
Chr3	14195140	14195161	Deletion_21bp
Chr3	14203809	14203891	Deletion_82bp
Chr3	9894428	9894428	Insertion_28bp
Chr3	9171875	9171983	Deletion_108bp
Chr3	10942119	10942119	Insertion_2016bp
Chr3	10944681	10944723	Deletion_42bp
Chr3	10947359	10947393	Deletion_34bp
Chr3	10947590	10947590	Insertion_40bp
Chr3	10948147	10948188	Deletion_41bp
Chr3	10949384	10949384	Insertion_1104bp
Chr3	10957227	10957227	Insertion_21bp
Chr3	10957266	10957318	Deletion_52bp
Chr3	10962573	10962582	Deletion_104bp
Chr3	13534591	13534625	Deletion_34bp
Chr3	13535935	13535982	Deletion_47bp
Chr3	13538777	13538831	Deletion_54bp
Chr3	13542576	13550912	Deletion_8336bp
Chr3	19505362	19505362	Insertion_64bp
Chr3	16838150	16838182	Deletion_32bp
Chr3	16846935	16847894	Deletion_959bp
Chr3	8407534	8409404	Deletion_1870bp
Chr3	8410984	8411014	Deletion_30bp
Chr3	8414098	8414124	Deletion_26bp
Chr3	8418129	8418129	Insertion_44bp
Chr3	8420019	8420019	Insertion_1028bp
Chr3	8421144	8421144	Insertion_41bp
Chr3	11095364	11095364	Insertion_28bp
Chr3	11097252	11099627	Deletion_2375bp
Chr3	11101030	11101030	Insertion_39bp
Chr3	11110313	11110313	Insertion_5438bp
Chr3	11117792	11117792	Insertion_66bp
Chr3	11122701	11127674	Deletion_4973bp
Chr3	11766788	11766820	Deletion_32bp
Chr3	14203809	14203891	Deletion_82bp
Chr3	22127228	22127228	Insertion_20bp
Chr3	22127539	22127566	Deletion_27bp
Chr3	22128814	22128814	Insertion_20bp

Chr3	629897	629966	Deletion_69bp
Chr3	637697	637697	Insertion_22bp
Chr3	16540574	16540604	Deletion_30bp
Chr3	16541535	16541535	Insertion_62bp
Chr3	16550051	16550051	Insertion_26bp
Chr3	16550265	16550265	Insertion_26bp
Chr3	16552749	16552749	Insertion_24bp
Chr3	16553357	16554448	Deletion_1091bp
Chr3	17522999	17522999	Insertion_39bp
Chr3	8957831	8957831	Insertion_73bp
Chr3	21425554	21425658	Deletion_104bp
Chr3	21425959	21425982	Deletion_23bp
Chr3	3009517	3009517	Insertion_22bp
Chr3	11965674	11966273	Deletion_599bp
Chr3	11969007	11969032	Deletion_25bp
Chr3	11969569	11970799	Deletion_1230bp
Chr3	11972122	11973052	Deletion_930bp
Chr3	11975022	11975052	Deletion_30bp
Chr3	11975350	11975350	Insertion_195bp
Chr3	11976791	11976791	Insertion_40bp
Chr3	11976792	11976848	Deletion_56bp
Chr3	11980698	11980734	Deletion_36bp
Chr3	11980752	11980780	Deletion_28bp
Chr3	15309080	15309371	Deletion_291bp
Chr3	15313000	15313028	Deletion_28bp
Chr3	15316816	15316849	Deletion_33bp
Chr3	16900172	16900172	Insertion_87bp
Chr3	16904529	16904556	Deletion_27bp
Chr3	17336425	17336451	Deletion_26bp
Chr3	12066603	12066603	Insertion_20bp
Chr3	19706263	19706263	Insertion_345bp
Chr3	19711632	19711653	Deletion_21bp
Chr3	10441989	10441989	Insertion_30bp
Chr3	15739278	15739278	Insertion_292bp
Chr3	15739406	15739438	Deletion_32bp
Chr3	10799095	10799095	Insertion_30bp
Chr3	754553	754581	Deletion_28bp
Chr3	18477293	18477327	Deletion_34bp
Chr3	9684710	9684743	Deletion_33bp
Chr3	14288141	14288141	Insertion_50bp
Chr3	14296458	14296480	Deletion_22bp
Chr3	10457743	10457743	Insertion_32bp
Chr3	10465078	10465078	Insertion_247bp
Chr3	14315773	14315773	Insertion_68bp
Chr3	14317988	14317988	Insertion_343bp
Chr3	14320615	14320641	Deletion_26bp
Chr3	14325610	14325610	Insertion_22bp
Chr3	1578121	1578121	Insertion_71bp
Chr3	1578340	1578463	Deletion_123bp

Chr3	1582844	1582909	Deletion_65bp
Chr3	19549154	19549180	Deletion_26bp
Chr3	19846180	19846180	Insertion_22bp
Chr3	11527474	11527503	Deletion_29bp
Chr3	11529430	11529430	Insertion_320bp
Chr3	11531178	11531178	Insertion_27bp
Chr3	11535644	11535665	Deletion_21bp
Chr3	11539959	11539959	Insertion_2087bp
Chr3	8125758	8125779	Deletion_21bp
Chr3	8129777	8131474	Deletion_1697bp
Chr3	8131676	8131701	Deletion_25bp
Chr3	9274316	9274316	Insertion_29bp
Chr3	9276679	9276679	Insertion_26bp
Chr3	9284632	9284632	Insertion_34bp
Chr3	16003760	16003794	Deletion_34bp
Chr3	16006208	16006249	Deletion_41bp
Chr3	11363439	11363469	Deletion_30bp
Chr3	11367530	11367589	Deletion_59bp
Chr3	11369862	11370573	Deletion_711bp
Chr3	22506536	22506536	Insertion_348bp
Chr3	22510821	22510821	Insertion_79bp
Chr3	16435861	16435891	Deletion_30bp
Chr3	16435975	16436298	Deletion_323bp
Chr3	16438550	16438642	Deletion_92bp
Chr3	16443557	16443557	Insertion_30bp
Chr3	16449117	16449117	Insertion_23bp
Chr3	16450787	16452580	Deletion_1793bp
Chr3	16453562	16453702	Deletion_140bp
Chr3	23106231	23106231	Insertion_54bp
Chr3	23109398	23109689	Deletion_291bp
Chr3	23111411	23111434	Deletion_23bp
Chr3	23112455	23112455	Insertion_54bp
Chr3	23113485	23113546	Deletion_61bp
Chr3	23113690	23113735	Deletion_45bp
Chr3	5576462	5576462	Insertion_33bp
Chr3	9300060	9300060	Insertion_7636bp
Chr3	10155275	10155275	Insertion_445bp
Chr3	10158234	10158277	Deletion_43bp
Chr3	10163822	10163822	Insertion_31bp
Chr3	10166150	10166172	Deletion_22bp
Chr3	10166811	10169179	Deletion_2368bp
Chr3	10173263	10173283	Deletion_20bp
Chr3	15701356	15701356	Insertion_1856bp
Chr3	15701428	15701428	Insertion_36bp
Chr3	10969694	10969694	Insertion_7470bp
Chr3	10977916	10977916	Insertion_22bp
Chr3	4922325	4922325	Insertion_818bp
Chr3	14705931	14705931	Insertion_22bp
Chr3	14709392	14709392	Insertion_132bp

Chr3	15554767	15554826	Deletion_59bp
Chr3	15555064	15555064	Insertion_29bp
Chr3	15557629	15557730	Deletion_101bp
Chr3	15561339	15561339	Insertion_58bp
Chr3	17516156	17516194	Deletion_38bp
Chr3	16606987	16606987	Insertion_36bp
Chr3	16611656	16611656	Insertion_26bp
Chr3	16614151	16614151	Insertion_52bp
Chr3	17223384	17223384	Insertion_361bp
Chr3	17223547	17223547	Insertion_3581bp
Chr3	17229338	17229376	Deletion_38bp
Chr3	14306800	14306831	Deletion_31bp
Chr3	14307521	14307521	Insertion_24bp
Chr3	14308927	14309110	Deletion_183bp
Chr3	14310240	14310295	Deletion_55bp
Chr3	14311667	14311667	Insertion_32bp
Chr3	4547573	4547573	Insertion_20bp
Chr3	4551326	4551357	Deletion_31bp
Chr3	9285728	9285751	Deletion_23bp
Chr3	21265051	21265051	Insertion_20bp
Chr3	21265141	21265300	Deletion_159bp
Chr3	21266979	21266979	Insertion_33bp
Chr3	21267227	21267227	Insertion_108bp
Chr3	11864464	11864464	Insertion_22bp
Chr3	11866408	11866431	Deletion_23bp
Chr3	11868111	11868132	Deletion_21bp
Chr3	12192884	12192904	Deletion_20bp
Chr3	12193438	12193476	Deletion_38bp
Chr3	9639109	9639134	Deletion_25bp
Chr3	9642383	9642421	Deletion_38bp
Chr3	9643604	9643627	Deletion_23bp
Chr3	15007418	15007479	Deletion_61bp
Chr3	15008155	15008155	Insertion_52bp
Chr3	15014416	15014416	Insertion_20bp
Chr3	15014417	15014437	Deletion_20bp
Chr3	1748683	1748716	Deletion_33bp
Chr3	1750766	1750766	Insertion_216bp
Chr3	1755907	1755907	Insertion_45bp
Chr3	22026997	22027017	Deletion_20bp
Chr3	22000773	22000799	Deletion_26bp
Chr3	12245225	12245225	Insertion_105bp
Chr3	12247938	12247998	Deletion_65bp
Chr3	12254904	12254904	Insertion_105bp
Chr3	13579587	13579587	Insertion_143bp
Chr3	13584787	13584787	Insertion_33bp
Chr3	7292985	7292985	Insertion_35bp
Chr3	18036772	18036811	Deletion_39bp
Chr3	16210946	16210946	Insertion_28bp
Chr3	15061705	15061729	Deletion_24bp

Chr3	15062570	15062597	Deletion_27bp
Chr3	15064938	15064938	Insertion_369bp
Chr3	12936451	12936451	Insertion_22bp
Chr3	12941831	12941831	Insertion_101bp
Chr3	12048673	12048880	Deletion_207bp
Chr3	12053299	12053323	Deletion_24bp
Chr3	16305566	16305566	Insertion_21bp
Chr3	16306165	16306165	Insertion_4749bp
Chr3	10871982	10871993	Insertion_48bp
Chr3	8209447	8213274	Deletion_3827bp
Chr3	8221399	8221428	Deletion_29bp
Chr3	8221441	8221461	Deletion_20bp
Chr3	10476486	10476548	Deletion_62bp
Chr3	10801464	10801527	Deletion_63bp
Chr3	10806873	10806909	Deletion_36bp
Chr3	10807264	10807288	Deletion_24bp
Chr3	5691969	5691969	Insertion_20bp
Chr3	5692284	5692284	Insertion_41bp
Chr3	5694042	5694055	Insertion_25bp
Chr3	5694624	5694667	Deletion_43bp
Chr3	11446994	11446994	Insertion_86bp
Chr3	11447150	11447189	Deletion_39bp
Chr3	16286038	16286156	Deletion_118bp
Chr3	15573754	15573754	Insertion_82bp
Chr3	11721732	11721732	Insertion_21bp
Chr3	11726352	11727555	Deletion_1203bp
Chr3	11733963	11733991	Deletion_28bp
Chr3	14606692	14606715	Deletion_23bp
Chr3	14606855	14606855	Insertion_38bp
Chr3	14608601	14608601	Insertion_34bp
Chr3	14614836	14615035	Deletion_199bp
Chr3	14617194	14617194	Insertion_36bp
Chr3	14621758	14624072	Deletion_2314bp
Chr3	14624577	14625019	Deletion_442bp
Chr3	16581673	16581673	Insertion_1249bp
Chr3	9139669	9139745	Deletion_76bp
Chr3	9139977	9140028	Deletion_51bp
Chr3	9142310	9142310	Insertion_43bp
Chr3	16077875	16077897	Deletion_22bp
Chr3	3472900	3472900	Insertion_24bp
Chr3	20016729	20016761	Deletion_32bp
Chr3	20020196	20020196	Insertion_616bp
Chr3	20024143	20024579	Deletion_436bp
Chr3	20025050	20025050	Insertion_23bp
Chr3	8976358	8976386	Deletion_28bp
Chr3	15927447	15927447	Insertion_25bp
Chr3	15930839	15930839	Insertion_24bp
Chr3	10292566	10292586	Deletion_20bp
Chr3	19539412	19539511	Deletion_99bp

Chr3	19246874	19246874	Insertion_111bp
Chr3	2999060	2999060	Insertion_31bp
Chr3	9577921	9577921	Insertion_20bp
Chr3	9580948	9580948	Insertion_33bp
Chr3	9582031	9582031	Insertion_106bp
Chr3	17019779	17019779	Insertion_21bp
Chr3	17025860	17025860	Insertion_203bp
Chr3	17026804	17026826	Deletion_22bp
Chr3	10878564	10878564	Insertion_138bp
Chr3	10880793	10880813	Deletion_20bp
Chr3	4373689	4373689	Insertion_34bp
Chr3	17442118	17442118	Insertion_43bp
Chr3	9685912	9685982	Deletion_70bp
Chr3	12488822	12488822	Insertion_65bp
Chr3	17380337	17380384	Deletion_47bp
Chr3	17383010	17383038	Deletion_28bp
Chr3	17383403	17383403	Insertion_28bp
Chr3	17383632	17383632	Insertion_48bp
Chr3	17433291	17433344	Deletion_53bp
Chr3	17436721	17436746	Deletion_25bp
Chr3	10721125	10721125	Insertion_173bp
Chr3	15753729	15753729	Insertion_24bp
Chr3	15753966	15754002	Deletion_36bp
Chr3	15760909	15760909	Insertion_21bp
Chr3	15761859	15761859	Insertion_33bp
Chr3	2094699	2094699	Insertion_55bp
Chr3	11508519	11508519	Insertion_877bp
Chr3	15790441	15790511	Deletion_70bp
Chr3	15791718	15791738	Deletion_20bp
Chr3	10411642	10411642	Insertion_439bp
Chr3	9783775	9783828	Deletion_53bp
Chr3	9783872	9785357	Deletion_1485bp
Chr3	14851773	14851773	Insertion_54bp
Chr3	9569767	9569767	Insertion_4712bp
Chr3	9569954	9569954	Insertion_23bp
Chr3	9571223	9571223	Insertion_67bp
Chr3	9573043	9573065	Deletion_22bp
Chr3	9575246	9575246	Insertion_22bp
Chr3	9575333	9575333	Insertion_26bp
Chr3	23184301	23184301	Insertion_5573bp
Chr3	14299352	14299352	Insertion_39bp
Chr3	14303567	14303567	Insertion_1174bp
Chr3	19776682	19779664	Deletion_2982bp
Chr3	19783417	19783595	Deletion_178bp
Chr3	16713248	16713337	Deletion_89bp
Chr3	16714928	16720067	Deletion_5139bp
Chr3	16725260	16725260	Insertion_5385bp
Chr3	16727569	16728684	Deletion_1115bp
Chr3	8984701	8984735	Deletion_34bp

Chr3	8984768	8984794	Deletion_26bp
Chr3	21611145	21612173	Deletion_1028bp
Chr3	21614212	21615577	Deletion_1365bp
Chr3	15401753	15401789	Deletion_36bp
Chr3	15405147	15405177	Deletion_30bp
Chr3	3155967	3155967	Insertion_21bp
Chr3	11327026	11327026	Insertion_2018bp
Chr3	11327496	11327496	Insertion_1248bp
Chr3	11328270	11328318	Deletion_48bp
Chr3	11333875	11333909	Deletion_34bp
Chr3	11335547	11341895	Deletion_6348bp
Chr3	11346434	11346480	Deletion_46bp
Chr3	11346931	11346995	Deletion_64bp
Chr3	20420156	20420156	Insertion_28bp
Chr3	9498268	9498268	Insertion_33bp
Chr3	12976058	12976058	Insertion_23bp
Chr3	14636326	14636326	Insertion_105bp
Chr3	10209609	10209644	Deletion_35bp
Chr3	7300134	7300134	Insertion_104bp
Chr3	15268429	15268429	Insertion_74bp
Chr3	17456743	17456769	Deletion_26bp
Chr3	17459630	17459630	Insertion_37bp
Chr3	17461734	17461972	Deletion_238bp
Chr3	9213489	9213568	Deletion_79bp
Chr3	9632486	9632486	Insertion_27bp
Chr3	9634860	9634860	Insertion_629bp
Chr3	15603874	15603874	Insertion_107bp
Chr3	15603903	15603903	Insertion_46bp
Chr3	16567763	16567792	Deletion_29bp
Chr3	16568169	16568745	Deletion_576bp
Chr3	16570129	16570129	Insertion_569bp
Chr3	16266813	16266836	Deletion_23bp
Chr3	16268191	16268392	Deletion_201bp
Chr3	16269672	16269672	Insertion_31bp
Chr3	16270081	16270081	Insertion_21bp
Chr3	10865404	10865404	Insertion_33bp
Chr3	10865837	10865881	Deletion_44bp
Chr3	14738443	14738574	Deletion_131bp
Chr3	9904932	9904954	Deletion_22bp
Chr3	20304445	20304445	Insertion_48bp
Chr3	20304941	20310168	Deletion_5227bp
Chr3	15025901	15025981	Deletion_80bp
Chr3	15026969	15026969	Insertion_36bp
Chr3	10198360	10198401	Deletion_41bp
Chr3	13209954	13209954	Insertion_21bp
Chr3	15609627	15609627	Insertion_23bp
Chr3	21990024	21990024	Insertion_20bp
Chr3	16254945	16254972	Deletion_27bp
Chr3	15491884	15500728	Deletion_8844bp

Chr3	17327503	17327503	Insertion_31bp
Chr3	16327423	16327423	Insertion_710bp
Chr3	16832194	16832194	Insertion_934bp
Chr3	16833829	16833829	Insertion_549bp
Chr3	2704878	2704878	Insertion_27bp
Chr3	2706361	2706386	Deletion_25bp
Chr3	11313450	11313481	Deletion_31bp
Chr3	11313610	11313633	Deletion_23bp
Chr3	9587504	9587551	Deletion_47bp
Chr3	15177929	15177929	Insertion_21bp
Chr3	15182715	15182715	Insertion_35bp
Chr3	15183073	15183073	Insertion_36bp
Chr3	16170597	16170630	Deletion_33bp
Chr3	16131848	16131894	Deletion_46bp
Chr3	10481992	10482019	Deletion_27bp
Chr3	10482332	10482332	Insertion_36bp
Chr3	10484176	10484197	Deletion_21bp
Chr3	10485812	10485812	Insertion_35bp
Chr3	10486355	10486377	Deletion_22bp
Chr3	14586878	14586878	Insertion_44bp
Chr3	14594489	14594527	Deletion_38bp
Chr3	12476662	12476716	Deletion_54bp
Chr3	2234537	2234573	Deletion_36bp
Chr3	20389487	20389487	Insertion_24bp
Chr3	14923221	14923241	Deletion_20bp
Chr3	14924396	14925497	Deletion_1101bp
Chr3	14929429	14929429	Insertion_661bp
Chr3	14931375	14931375	Insertion_68bp
Chr3	14932164	14932164	Insertion_4751bp
Chr3	8229705	8229749	Deletion_44bp
Chr3	20379928	20379928	Insertion_4210bp
Chr3	14246185	14246246	Deletion_61bp
Chr3	14248491	14249147	Deletion_656bp
Chr3	14250632	14250632	Insertion_1068bp
Chr3	10507536	10507536	Insertion_26bp
Chr3	12613882	12613882	Insertion_101bp
Chr3	12616477	12616503	Deletion_26bp
Chr3	12619092	12619092	Insertion_29bp
Chr3	15253385	15253385	Insertion_24bp
Chr3	15255650	15255691	Deletion_41bp
Chr3	14203809	14203891	Deletion_82bp
Chr3	9908608	9908608	Insertion_69bp
Chr3	4127400	4127400	Insertion_49bp
Chr3	10530478	10530503	Deletion_25bp
Chr3	10532109	10532109	Insertion_84bp
Chr3	17455612	17455636	Deletion_24bp
Chr3	17456121	17456159	Deletion_38bp
Chr3	17456188	17456212	Deletion_24bp
Chr3	5704518	5704575	Deletion_57bp

Chr3	22209847	22209867	Deletion_20bp
Chr3	21995092	21995092	Insertion_33bp
Chr3	16191155	16191187	Deletion_32bp
Chr3	16193063	16193063	Insertion_25bp
Chr3	20342551	20342551	Insertion_25bp
Chr3	20343237	20343260	Deletion_23bp
Chr3	17153113	17153141	Deletion_28bp
Chr3	10536203	10536203	Insertion_2729bp
Chr3	12979230	12979230	Insertion_58bp
Chr3	12980223	12980354	Deletion_131bp
Chr3	16558515	16558515	Insertion_23bp
Chr3	16559614	16559614	Insertion_84bp
Chr3	16561655	16563587	Deletion_1932bp
Chr3	16879811	16879865	Deletion_54bp
Chr3	10966023	10966023	Insertion_24bp
Chr3	21806786	21806786	Insertion_47bp
Chr3	9525125	9525125	Insertion_27bp
Chr3	8189735	8189735	Insertion_26bp
Chr3	8191673	8191673	Insertion_48bp
Chr3	16773279	16773279	Insertion_408bp
Chr3	8232818	8232818	Insertion_42bp
Chr3	8234015	8234045	Deletion_30bp
Chr3	8234742	8234742	Insertion_20bp
Chr3	11377853	11378306	Deletion_453bp
Chr3	14644652	14644687	Deletion_35bp
Chr3	14646710	14646753	Deletion_43bp
Chr3	14647158	14647158	Insertion_27bp
Chr3	13212544	13212544	Insertion_51bp
Chr3	12565966	12566002	Deletion_36bp
Chr3	16135441	16135473	Deletion_32bp
Chr3	6674302	6674326	Deletion_24bp
Chr3	6674999	6674999	Insertion_22bp
Chr3	16795786	16795786	Insertion_47bp
Chr3	16229646	16229646	Insertion_26bp
Chr3	19029997	19029997	Insertion_140bp
Chr3	5285468	5285468	Insertion_178bp
Chr3	10176967	10176987	Deletion_20bp
Chr3	10177441	10177441	Insertion_260bp
Chr3	5243814	5243814	Insertion_50bp
Chr3	16050773	16050773	Insertion_350bp
Chr3	16051393	16051393	Insertion_23bp
Chr3	22058884	22058884	Insertion_20bp
Chr3	22059530	22064330	Deletion_4800bp
Chr3	16097406	16097432	Deletion_26bp
Chr3	16097713	16097827	Deletion_114bp
Chr3	15720077	15720131	Deletion_54bp
Chr3	11649496	11649536	Deletion_40bp
Chr3	11651077	11651077	Insertion_28bp
Chr3	16765261	16765261	Insertion_21bp

Chr3	9179315	9179315	Insertion_24bp
Chr3	16690579	16690579	Insertion_22bp
Chr3	16691854	16697597	Deletion_5743bp
Chr3	9839623	9839655	Deletion_32bp
Chr3	9840884	9840911	Deletion_27bp
Chr3	9841824	9841824	Insertion_1814bp
Chr3	15747526	15747562	Deletion_36bp
Chr3	8929452	8929500	Deletion_48bp
Chr3	11899469	11899522	Deletion_53bp
Chr3	20315416	20315416	Insertion_38bp
Chr3	6187106	6187106	Insertion_1192bp
Chr3	12219596	12219596	Insertion_50bp
Chr3	12220582	12221110	Deletion_528bp
Chr3	12222288	12222312	Deletion_24bp
Chr3	16234660	16235710	Deletion_1050bp
Chr3	14197831	14197831	Insertion_34bp
Chr3	16030166	16030259	Deletion_93bp
Chr3	15258377	15258507	Deletion_130bp
Chr3	14217200	14217200	Insertion_34bp
Chr3	18085968	18086061	Deletion_93bp
Chr3	12495244	12495284	Deletion_40bp
Chr3	1441819	1441819	Insertion_25bp
Chr3	16096388	16096410	Deletion_22bp
Chr3	14736944	14736944	Insertion_20bp
Chr3	14737487	14737549	Deletion_62bp
Chr3	14596837	14596893	Deletion_56bp
Chr3	14194646	14194646	Insertion_115bp
Chr3	3583236	3583236	Insertion_25bp
Chr3	3583300	3583300	Insertion_44bp
Chr3	15703886	15703886	Insertion_25bp
Chr3	9628578	9628649	Deletion_71bp
Chr3	16733794	16733794	Insertion_20bp
Chr3	9104702	9104785	Deletion_83bp
Chr3	9106056	9106091	Deletion_35bp
Chr3	16292663	16292699	Deletion_36bp
Chr3	14203841	14203924	Deletion_83bp
Chr3	14204286	14204306	Deletion_20bp
Chr3	14204461	14204502	Deletion_41bp
Chr3	12497126	12497126	Insertion_20bp
Chr3	16647785	16647815	Deletion_30bp
Chr3	14193453	14193537	Deletion_84bp
Chr3	14193860	14193881	Deletion_21bp
Chr3	14194052	14194093	Deletion_41bp
Chr3	14194450	14194450	Insertion_225bp
Chr3	14195197	14195197	Insertion_184bp
Chr3	17451849	17451849	Insertion_37bp
Chr3	16837773	16837793	Deletion_20bp
Chr3	10544324	10544358	Deletion_34bp
Chr3	10447098	10447098	Insertion_29bp

Chr3	16791655	16791655	Insertion_32bp
Chr3	16277375	16279346	Deletion_1971bp
Chr3	16281686	16281686	Insertion_3479bp
Chr3	16282522	16282522	Insertion_41bp
Chr3	17118175	17118175	Insertion_37bp
Chr3	17118921	17118921	Insertion_20bp
Chr3	12044641	12044695	Deletion_54bp
Chr3	12044854	12044908	Deletion_54bp
Chr3	16226114	16226175	Deletion_61bp
Chr3	10725860	10725860	Insertion_49bp
Chr3	8932113	8932113	Insertion_34bp
Chr3	10294320	10294320	Insertion_42bp
Chr3	11591131	11591446	Deletion_315bp
Chr3	11592142	11592169	Deletion_27bp
Chr3	16091299	16091299	Insertion_32bp
Chr3	16091708	16091708	Insertion_26bp
Chr3	19598349	19598349	Insertion_32bp
Chr3	10605940	10605940	Insertion_232bp
Chr3	17320372	17320428	Deletion_56bp
Chr3	12738602	12738602	Insertion_182bp
Chr3	13650642	13650666	Deletion_24bp
Chr3	13650642	13650666	Deletion_24bp
Chr3	19498118	19498155	Deletion_37bp
Chr3	19498470	19498470	Insertion_40bp
Chr3	15348513	15348513	Insertion_51bp
Chr3	14193877	14193897	Deletion_20bp
Chr3	14194052	14194093	Deletion_41bp
Chr3	14194908	14194908	Insertion_40bp
Chr3	6697730	6697757	Deletion_27bp
Chr3	17345611	17345646	Deletion_35bp
Chr3	13074401	13074401	Insertion_376bp
Chr3	13075394	13075394	Insertion_47bp
Chr3	10431888	10431888	Insertion_20bp
Chr3	10432537	10433078	Deletion_541bp
Chr3	15781010	15781037	Deletion_27bp
Chr3	15782139	15782477	Deletion_338bp
Chr3	5687691	5687715	Deletion_24bp
Chr3	14193877	14193897	Deletion_20bp
Chr3	14194052	14194093	Deletion_41bp
Chr3	14194508	14194548	Deletion_40bp
Chr3	14194592	14194707	Deletion_115bp
Chr3	14194973	14195160	Deletion_187bp
Chr3	7698107	7698107	Insertion_28bp
Chr3	14193877	14193897	Deletion_20bp
Chr3	17503972	17503972	Insertion_37bp
Chr3	12681990	12682558	Deletion_568bp
Chr3	17447904	17448106	Deletion_202bp
Chr3	17448397	17448572	Deletion_175bp
Chr3	13805003	13805003	Insertion_33bp

Chr3	16090647	16090647	Insertion_26bp
Chr3	16090856	16090856	Insertion_21bp
Chr3	16046982	16047051	Deletion_69bp
Chr3	12254184	12254212	Deletion_28bp
Chr3	16316291	16316291	Insertion_29bp
Chr3	16316914	16316953	Deletion_39bp
Chr3	11696361	11696387	Deletion_26bp
Chr3	9241204	9241228	Deletion_24bp
Chr3	10418748	10418752	Insertion_41bp
Chr3	12736120	12736157	Deletion_37bp
Chr3	11541926	11542001	Deletion_75bp
Chr3	13489646	13489670	Deletion_24bp
Chr3	15774710	15774740	Deletion_30bp
Chr3	17690423	17690423	Insertion_31bp
Chr3	12997240	12997269	Deletion_29bp
Chr3	12998634	12998719	Deletion_85bp
Chr3	15800516	15800516	Insertion_112bp
Chr3	8192293	8192293	Insertion_36bp
Chr3	12730999	12731024	Deletion_25bp
Chr3	12733782	12733782	Insertion_26bp
Chr3	12730999	12731024	Deletion_25bp
Chr3	12733782	12733782	Insertion_26bp
Chr3	10446207	10446207	Insertion_28bp
Chr3	12479311	12479311	Insertion_38bp
Chr3	12485402	12485497	Deletion_95bp
Chr3	12485653	12485753	Deletion_100bp
Chr3	11543773	11543773	Insertion_125bp
Chr3	11544615	11544615	Insertion_37bp
Chr3	11545835	11545835	Insertion_37bp
Chr3	11546049	11546098	Deletion_49bp
Chr3	11546580	11546646	Deletion_66bp
Chr3	11547351	11547429	Deletion_78bp
Chr3	13955875	13956183	Deletion_308bp
Chr3	13807117	13807117	Insertion_33bp
Chr3	8211274	8211308	Deletion_34bp
Chr3	12468209	12468249	Deletion_40bp
Chr3	15318314	15318414	Deletion_100bp
Chr3	11963916	11963937	Deletion_21bp
Chr3	13807489	13807489	Insertion_40bp
Chr3	13808032	13808032	Insertion_43bp
Chr3	12052495	12052572	Deletion_77bp
Chr3	14099284	14099328	Deletion_44bp
Chr3	14107980	14107980	Insertion_55bp
Chr3	14108104	14108136	Deletion_32bp
Chr3	14114925	14114925	Insertion_25bp
Chr3	14117851	14117851	Insertion_109bp
Chr3	14118274	14118294	Deletion_20bp
Chr3	14143306	14143306	Insertion_22bp
Chr3	14149381	14149411	Deletion_30bp

Chr3	14150908	14150908	Insertion_148bp
Chr3	14151991	14151991	Insertion_22bp
Chr3	14156549	14156549	Insertion_36bp
Chr3	14157916	14157916	Insertion_24bp
Chr3	14054801	14054801	Insertion_24bp
Chr3	14055429	14055429	Insertion_341bp
Chr3	14057109	14057109	Insertion_74bp
Chr3	14057580	14058285	Deletion_705bp
Chr3	14068289	14073883	Deletion_5594bp
Chr3	14160846	14160846	Insertion_114bp
Chr3	14165581	14165601	Deletion_20bp
Chr3	14169867	14169867	Insertion_1840bp
Chr3	14171602	14171602	Insertion_39bp
Chr3	13985736	13985736	Insertion_1860bp
Chr3	13990890	13990890	Insertion_1636bp
Chr3	15253457	15253457	Insertion_66bp
Chr3	15254302	15254441	Deletion_139bp
Chr3	15259735	15259760	Deletion_25bp
Chr3	13209954	13209954	Insertion_21bp
Chr3	13210189	13210224	Deletion_35bp
Chr3	13827326	13827326	Insertion_584bp
Chr3	13212544	13212544	Insertion_51bp
Chr3	12254904	12254904	Insertion_105bp
Chr3	15260762	15260762	Insertion_59bp
Chr3	15255126	15255305	Repeat_contraction_31bp
Chr3	9616259	9618779	Repeat_expansion_483bp
Chr3	14073892	14074026	Repeat_contraction_32bp
Chr3	12249647	12250910	Repeat_contraction_319bp
Chr3	17110961	17113573	Repeat_contraction_449bp
Chr3	14197901	14199737	Tandem_expansion_1943bp
Chr3	14198066	14202500	Tandem_expansion_4549bp
Chr3	14198119	14203216	Tandem_expansion_5198bp
Chr3	14198568	14203496	Tandem_expansion_5029bp
Chr3	14198835	14202742	Tandem_expansion_4010bp
Chr3	14195970	14196014	Insertion_41bp
Chr3	14192869	14198478	Tandem_expansion_6152bp
Chr3	14193315	14194125	Repeat_contraction_23bp
Chr3	21611150	21612162	Tandem_expansion_2595bp
Chr3	15716773	15717645	Repeat_contraction_20bp
Chr3	17404787	17417226	Repeat_contraction_12368bp
Chr3	10143864	10144255	Tandem_expansion_4760bp
Chr3	325704	326557	Repeat_expansion_207bp
Chr3	370507	370767	Repeat_expansion_437bp
Chr3	626459	627048	Repeat_expansion_64bp
Chr3	637816	638158	Repeat_contraction_21bp
Chr3	754297	754386	Repeat_expansion_98bp
Chr3	811779	812054	Repeat_expansion_3942bp
Chr3	895661	899183	Repeat_contraction_63bp
Chr3	899475	900471	Repeat_contraction_92bp

Chr3	990208	990656	Tandem_expansion_1111bp
Chr3	1271560	1272187	Repeat_contraction_199bp
Chr3	1353455	1353611	Repeat_contraction_89bp
Chr3	1443592	1453068	Repeat_contraction_853bp
Chr3	1571341	1577093	Repeat_contraction_2295bp
Chr3	1587707	1588821	Repeat_contraction_25bp
Chr3	1619450	1619550	Repeat_contraction_33bp
Chr3	1674506	1674538	Insertion_415bp
Chr3	1748580	1748589	Insertion_40bp
Chr3	1860842	1861585	Repeat_contraction_261bp
Chr3	2068359	2068960	Repeat_expansion_57bp
Chr3	2093082	2094559	Repeat_contraction_1290bp
Chr3	2099222	2102317	Repeat_expansion_16513bp
Chr3	2214550	2214609	Repeat_expansion_25bp
Chr3	2238350	2238451	Deletion_70bp
Chr3	2259587	2260960	Repeat_contraction_928bp
Chr3	2378664	2379163	Repeat_expansion_586bp
Chr3	2702839	2702985	Repeat_expansion_37bp
Chr3	5245807	5245933	Repeat_expansion_39bp
Chr3	5067609	5069035	Repeat_contraction_516bp
Chr3	4960331	4960478	Repeat_expansion_24bp
Chr3	4927416	4932453	Deletion_5045bp
Chr3	4916313	4916417	Repeat_expansion_24bp
Chr3	4888340	4888853	Repeat_expansion_23bp
Chr3	4829383	4830269	Repeat_expansion_52bp
Chr3	4788366	4788704	Repeat_expansion_80bp
Chr3	4746717	4746742	Insertion_2399bp
Chr3	4724423	4731944	Repeat_contraction_3482bp
Chr3	4663213	4663234	Insertion_41bp
Chr3	4551550	4552316	Deletion_766bp
Chr3	4543198	4543490	Repeat_expansion_410bp
Chr3	4524818	4525051	Repeat_contraction_50bp
Chr3	4452804	4452807	Insertion_988bp
Chr3	4376951	4377985	Repeat_expansion_2188bp
Chr3	4369878	4370960	Repeat_contraction_20bp
Chr3	4343282	4343283	Insertion_1146bp
Chr3	4185728	4185768	Insertion_38bp
Chr3	4076597	4077195	Repeat_expansion_1475bp
Chr3	3964962	3965526	Tandem_expansion_559bp
Chr3	3578728	3583385	Tandem_expansion_4668bp
Chr3	3580465	3582160	Repeat_expansion_124bp
Chr3	3579096	3579836	Repeat_contraction_90bp
Chr3	3575652	3575853	Repeat_expansion_4309bp
Chr3	3520229	3520454	Repeat_contraction_51bp
Chr3	3511794	3512458	Repeat_expansion_76bp
Chr3	3464638	3466924	Repeat_expansion_435bp
Chr3	3452727	3453267	Repeat_contraction_72bp
Chr3	3450327	3450527	Repeat_contraction_21bp
Chr3	3383419	3383568	Repeat_contraction_53bp

Chr3	3273965	3274074	Repeat_contraction_29bp
Chr3	3256470	3258605	Repeat_contraction_354bp
Chr3	3045262	3045473	Repeat_expansion_104bp
Chr3	3015735	3016010	Repeat_contraction_109bp
Chr3	2864439	2867957	Repeat_expansion_406bp
Chr3	2844974	2845002	Insertion_20bp
Chr3	5277965	5286732	Deletion_8776bp
Chr3	5328645	5328693	Insertion_33bp
Chr3	5355686	5355992	Repeat_contraction_84bp
Chr3	5390289	5393140	Tandem_contraction_2988bp
Chr3	5437452	5439248	Repeat_expansion_192bp
Chr3	5440062	5442533	Repeat_contraction_41bp
Chr3	5493797	5494539	Repeat_contraction_510bp
Chr3	5573252	5573430	Repeat_expansion_33bp
Chr3	5573953	5575390	Repeat_expansion_52bp
Chr3	5584450	5584786	Repeat_expansion_321bp
Chr3	5587111	5587246	Deletion_96bp
Chr3	5587520	5588206	Repeat_contraction_164bp
Chr3	5608697	5608717	Insertion_38bp
Chr3	5686992	5687325	Repeat_contraction_252bp
Chr3	5688501	5689237	Repeat_contraction_50bp
Chr3	5700674	5702990	Repeat_contraction_773bp
Chr3	5793217	5793513	Repeat_expansion_1928bp
Chr3	5929399	5930748	Repeat_contraction_1288bp
Chr3	6010598	6010885	Repeat_expansion_955bp
Chr3	6011883	6012481	Repeat_expansion_1601bp
Chr3	6264529	6265267	Repeat_contraction_320bp
Chr3	6373646	6379182	Repeat_contraction_5187bp
Chr3	6405507	6406941	Repeat_contraction_122bp
Chr3	6490951	6491051	Repeat_contraction_38bp
Chr3	6494266	6495341	Repeat_expansion_406bp
Chr3	6595683	6595699	Insertion_1777bp
Chr3	6614238	6614786	Repeat_contraction_42bp
Chr3	6664190	6664308	Repeat_contraction_25bp
Chr3	6666424	6666683	Repeat_expansion_50bp
Chr3	6671604	6673801	Repeat_expansion_481bp
Chr3	6676918	6677051	Repeat_expansion_211bp
Chr3	6698761	6698849	Deletion_46bp
Chr3	6711172	6711533	Repeat_contraction_35bp
Chr3	6728336	6729533	Repeat_expansion_117bp
Chr3	6776302	6776698	Repeat_expansion_407bp
Chr3	6827668	6828006	Deletion_298bp
Chr3	6948152	6948401	Repeat_expansion_24bp
Chr3	7015398	7015648	Repeat_contraction_45bp
Chr3	7078725	7079583	Repeat_contraction_127bp
Chr3	7222614	7225179	Repeat_expansion_27bp
Chr3	7291098	7291967	Repeat_contraction_802bp
Chr3	7304572	7305230	Repeat_expansion_190bp
Chr3	7330297	7330590	Repeat_contraction_50bp

Chr3	7439777	7440009	Repeat_contraction_30bp
Chr3	7465069	7465469	Repeat_expansion_61bp
Chr3	7615683	7616370	Repeat_contraction_93bp
Chr3	7618787	7619029	Repeat_expansion_57bp
Chr3	7696216	7697955	Repeat_contraction_1681bp
Chr3	7699109	7700172	Repeat_contraction_52bp
Chr3	7721725	7722126	Tandem_contraction_2596bp
Chr3	7776240	7776425	Repeat_expansion_241bp
Chr3	7778170	7778793	Repeat_expansion_233bp
Chr3	7850503	7860929	Deletion_10435bp
Chr3	7935736	7939324	Repeat_contraction_765bp
Chr3	8040928	8041110	Repeat_expansion_35bp
Chr3	8138334	8139194	Repeat_contraction_34bp
Chr3	8140174	8140839	Repeat_expansion_147bp
Chr3	8176936	8177055	Repeat_expansion_3444bp
Chr3	8180124	8180298	Repeat_contraction_45bp
Chr3	8188934	8189248	Deletion_275bp
Chr3	8192734	8192802	Deletion_26bp
Chr3	8193526	8193989	Repeat_contraction_41bp
Chr3	8230437	8232026	Repeat_expansion_36bp
Chr3	8235519	8235925	Repeat_contraction_64bp
Chr3	8297312	8297839	Repeat_contraction_52bp
Chr3	8328600	8328710	Repeat_expansion_49bp
Chr3	8344161	8345372	Repeat_expansion_357bp
Chr3	8377817	8378563	Repeat_expansion_3696bp
Chr3	8400733	8401408	Repeat_expansion_180bp
Chr3	8456746	8457983	Repeat_expansion_68bp
Chr3	8526975	8542738	Repeat_contraction_6007bp
Chr3	8584768	8585203	Repeat_contraction_152bp
Chr3	8659796	8659912	Repeat_expansion_74bp
Chr3	8930963	8931777	Repeat_contraction_230bp
Chr3	8932792	8934634	Repeat_contraction_348bp
Chr3	8936232	8941151	Repeat_contraction_2380bp
Chr3	8962672	8962894	Repeat_contraction_48bp
Chr3	8968802	8968928	Repeat_expansion_64bp
Chr3	8979308	8979375	Deletion_20bp
Chr3	8985616	8985924	Repeat_contraction_173bp
Chr3	9006790	9006989	Repeat_expansion_47bp
Chr3	9045814	9046018	Repeat_expansion_28bp
Chr3	9096857	9097229	Repeat_expansion_237bp
Chr3	9098363	9099223	Repeat_expansion_33bp
Chr3	9102092	9104613	Repeat_contraction_648bp
Chr3	9106675	9121699	Repeat_contraction_11449bp
Chr3	9123405	9123944	Repeat_contraction_49bp
Chr3	9132476	9132586	Repeat_contraction_27bp
Chr3	9144043	9144276	Repeat_expansion_54bp
Chr3	9162431	9163297	Repeat_contraction_554bp
Chr3	9164224	9165731	Repeat_contraction_679bp
Chr3	9176932	9177984	Repeat_contraction_961bp

Chr3	9179658	9180328	Repeat_contraction_42bp
Chr3	9202273	9202611	Repeat_contraction_40bp
Chr3	9211869	9212815	Repeat_contraction_203bp
Chr3	9217974	9218710	Repeat_expansion_336bp
Chr3	9219772	9219943	Repeat_contraction_43bp
Chr3	9226632	9231387	Deletion_4750bp
Chr3	9232294	9232299	Insertion_4744bp
Chr3	9236765	9240990	Deletion_4212bp
Chr3	9241570	9241581	Insertion_2382bp
Chr3	9272899	9274169	Repeat_expansion_3296bp
Chr3	9284828	9284873	Insertion_46bp
Chr3	9444593	9459535	Repeat_contraction_8238bp
Chr3	9459862	9460068	Repeat_contraction_119bp
Chr3	9502263	9503695	Repeat_expansion_45bp
Chr3	9528006	9528787	Repeat_contraction_65bp
Chr3	9529697	9529862	Repeat_contraction_69bp
Chr3	9555640	9559749	Repeat_contraction_3637bp
Chr3	9563260	9564118	Repeat_expansion_661bp
Chr3	12976446	12976750	Repeat_expansion_1067bp
Chr3	9585369	9586608	Repeat_expansion_271bp
Chr3	9591269	9591432	Repeat_expansion_24bp
Chr3	9592326	9593171	Repeat_contraction_64bp
Chr3	9604390	9608076	Tandem_expansion_5488bp
Chr3	9606088	9627450	Repeat_contraction_15579bp
Chr3	9629383	9629542	Repeat_contraction_26bp
Chr3	9646465	9646774	Repeat_contraction_128bp
Chr3	9667775	9668457	Repeat_contraction_81bp
Chr3	9673909	9674195	Repeat_expansion_29bp
Chr3	9836855	9839410	Repeat_contraction_302bp
Chr3	9842914	9843310	Repeat_contraction_21bp
Chr3	9889839	9891020	Repeat_contraction_1034bp
Chr3	9907191	9907415	Repeat_expansion_63bp
Chr3	9908049	9908154	Repeat_contraction_49bp
Chr3	9956247	9956320	Repeat_expansion_5185bp
Chr3	9968854	9968924	Repeat_expansion_275bp
Chr3	9970989	9972311	Repeat_expansion_66bp
Chr3	9972730	9973964	Repeat_expansion_39bp
Chr3	10043129	10043341	Repeat_contraction_46bp
Chr3	10048484	10049226	Tandem_expansion_818bp
Chr3	10150157	10150893	Repeat_expansion_426bp
Chr3	10153175	10153542	Repeat_contraction_26bp
Chr3	10176673	10176810	Repeat_contraction_35bp
Chr3	10180591	10183385	Repeat_expansion_14989bp
Chr3	10185203	10185665	Repeat_expansion_379bp
Chr3	10199725	10203072	Repeat_contraction_2346bp
Chr3	10204051	10205777	Repeat_contraction_246bp
Chr3	10236577	10236809	Repeat_expansion_1976bp
Chr3	10245104	10245156	Repeat_expansion_3206bp
Chr3	10287991	10288085	Deletion_47bp

Chr3	10377434	10377681	Repeat_expansion_220bp
Chr3	10406550	10406954	Deletion_391bp
Chr3	10407927	10408088	Repeat_expansion_36bp
Chr3	10413979	10418261	Repeat_contraction_2202bp
Chr3	10419684	10431260	Repeat_contraction_3983bp
Chr3	10434122	10434724	Repeat_contraction_221bp
Chr3	10445244	10445951	Repeat_expansion_5843bp
Chr3	10446637	10446751	Repeat_expansion_158bp
Chr3	10448183	10450163	Repeat_contraction_425bp
Chr3	10468724	10470446	Repeat_contraction_785bp
Chr3	10480649	10481792	Repeat_contraction_909bp
Chr3	10486700	10504262	Repeat_contraction_9083bp
Chr3	10509129	10511971	Repeat_contraction_2165bp
Chr3	10530171	10530284	Repeat_expansion_1232bp
Chr3	10533776	10534817	Repeat_contraction_422bp
Chr3	10541847	10541850	Insertion_778bp
Chr3	10542888	10557842	Repeat_contraction_13659bp
Chr3	10544193	10558150	Tandem_expansion_14494bp
Chr3	10665573	10665792	Deletion_177bp
Chr3	10680103	10682047	Repeat_contraction_763bp
Chr3	10717807	10717932	Repeat_contraction_32bp
Chr3	10723933	10724537	Repeat_expansion_24bp
Chr3	10726936	10727427	Repeat_expansion_39bp
Chr3	10790800	10791588	Repeat_contraction_72bp
Chr3	10800589	10801139	Repeat_contraction_285bp
Chr3	10809928	10813139	Deletion_3199bp
Chr3	10839457	10847761	Repeat_expansion_5891bp
Chr3	10869466	10869929	Repeat_contraction_32bp
Chr3	10885122	10885282	Repeat_expansion_771bp
Chr3	10925893	10938419	Repeat_contraction_5935bp
Chr3	10963131	10964456	Repeat_contraction_320bp
Chr3	10967093	10968331	Repeat_expansion_48bp
Chr3	10979557	10980296	Repeat_expansion_454bp
Chr3	10996968	10997005	Insertion_1059bp
Chr3	11040025	11044978	Repeat_contraction_3573bp
Chr3	11048472	11050079	Repeat_contraction_78bp
Chr3	11086268	11088263	Repeat_contraction_494bp
Chr3	11093388	11094683	Repeat_contraction_730bp
Chr3	11132203	11132745	Deletion_542bp
Chr3	11269564	11269694	Repeat_expansion_1107bp
Chr3	11304716	11307296	Repeat_expansion_531bp
Chr3	11309086	11310097	Repeat_expansion_5908bp
Chr3	11319789	11321186	Repeat_contraction_573bp
Chr3	11324474	11324475	Insertion_1847bp
Chr3	11350491	11359418	Repeat_contraction_2185bp
Chr3	11373391	11373587	Repeat_expansion_71bp
Chr3	11374536	11374870	Repeat_contraction_20bp
Chr3	11378502	11380129	Repeat_contraction_159bp
Chr3	11387052	11394535	Repeat_expansion_1713bp

Chr3	11415805	11423219	Repeat_contraction_5133bp
Chr3	11436693	11438418	Repeat_contraction_133bp
Chr3	11445546	11445718	Repeat_expansion_114bp
Chr3	11455559	11456303	Deletion_744bp
Chr3	11501369	11502726	Repeat_contraction_311bp
Chr3	11511677	11512441	Tandem_expansion_769bp
Chr3	11526480	11527092	Repeat_expansion_1687bp
Chr3	11651508	11671432	Repeat_contraction_19156bp
Chr3	11672604	11695666	Repeat_contraction_19653bp
Chr3	11697050	11702406	Deletion_5318bp
Chr3	11734930	11737238	Repeat_expansion_631bp
Chr3	11765218	11765289	Deletion_63bp
Chr3	11789127	11789197	Repeat_expansion_60bp
Chr3	11791064	11792320	Repeat_expansion_1245bp
Chr3	11863228	11864325	Repeat_contraction_1018bp
Chr3	11874246	11895532	Repeat_contraction_13477bp
Chr3	11897098	11897478	Repeat_contraction_51bp
Chr3	11997091	11997150	Deletion_34bp
Chr3	12019132	12019170	Insertion_1118bp
Chr3	12043757	12043953	Repeat_expansion_1278bp
Chr3	12047207	12047327	Deletion_76bp
Chr3	12057217	12057498	Repeat_contraction_150bp
Chr3	12092966	12093090	Repeat_expansion_424bp
Chr3	12183071	12183938	Repeat_expansion_473bp
Chr3	12424354	12424402	Tandem_contraction_747bp
Chr3	12467197	12474778	Repeat_contraction_6473bp
Chr3	12478472	12486672	Repeat_contraction_7914bp
Chr3	12494076	12494936	Repeat_contraction_698bp
Chr3	12497895	12526614	Repeat_contraction_9043bp
Chr3	12582670	12582755	Tandem_expansion_6443bp
Chr3	12655476	12671667	Repeat_contraction_2505bp
Chr3	12675250	12679829	Repeat_expansion_16360bp
Chr3	13646062	13647362	Repeat_expansion_29bp
Chr3	13648354	13650209	Repeat_contraction_225bp
Chr3	12734151	12734270	Repeat_expansion_10613bp
Chr3	12736893	12737761	Repeat_contraction_154bp
Chr3	12934709	12935010	Repeat_contraction_33bp
Chr3	12943156	12954412	Repeat_expansion_1168bp
Chr3	13646062	13647362	Repeat_expansion_29bp
Chr3	13648354	13650209	Repeat_contraction_225bp
Chr3	13490086	13490265	Repeat_expansion_37bp
Chr3	13490692	13491082	Repeat_expansion_82bp
Chr3	13527284	13527541	Repeat_contraction_38bp
Chr3	13555140	13573518	Deletion_18339bp
Chr3	13585512	13585543	Insertion_742bp
Chr3	14218648	14225232	Deletion_6569bp
Chr3	14238694	14241211	Repeat_contraction_2465bp
Chr3	14245403	14245577	Repeat_expansion_67bp
Chr3	14254342	14255423	Repeat_contraction_50bp

Chr3	14315253	14316818	Tandem_expansion_1455bp
Chr3	15257715	15258159	Repeat_expansion_52bp
Chr3	12212742	12213697	Repeat_expansion_118bp
Chr3	12217201	12218012	Repeat_contraction_348bp
Chr3	15257567	15258360	Repeat_expansion_152bp
Chr3	15257567	15258436	Repeat_expansion_1439bp
Chr3	14558177	14560425	Repeat_contraction_1117bp
Chr3	14562369	14574508	Repeat_contraction_8958bp
Chr3	14578243	14584456	Repeat_expansion_13777bp
Chr3	14594764	14595653	Repeat_expansion_1182bp
Chr3	14597856	14605122	Repeat_expansion_19793bp
Chr3	14635263	14635283	Insertion_375bp
Chr3	14643609	14644160	Repeat_contraction_484bp
Chr3	14711716	14711807	Deletion_59bp
Chr3	14735304	14735627	Repeat_expansion_877bp
Chr3	14738026	14738148	Repeat_expansion_92bp
Chr3	14742331	14744858	Repeat_expansion_48bp
Chr3	14762150	14762285	Repeat_expansion_52bp
Chr3	14856177	14858368	Repeat_contraction_911bp
Chr3	14916914	14919008	Repeat_contraction_1012bp
Chr3	15005063	15005860	Repeat_expansion_8233bp
Chr3	15072013	15074106	Repeat_contraction_2027bp
Chr3	15117272	15118243	Deletion_973bp
Chr3	15173317	15177836	Repeat_contraction_3805bp
Chr3	15184847	15185577	Repeat_expansion_804bp
Chr3	15188386	15188595	Tandem_expansion_1463bp
Chr3	15204187	15204206	Insertion_4012bp
Chr3	15225126	15225704	Repeat_contraction_178bp
Chr3	15262826	15264747	Repeat_contraction_1849bp
Chr3	15299627	15306421	Repeat_contraction_6664bp
Chr3	15297966	15307252	Tandem_expansion_9801bp
Chr3	15299627	15306421	Repeat_contraction_6664bp
Chr3	15317831	15318974	Tandem_expansion_7102bp
Chr3	15347817	15347822	Insertion_3361bp
Chr3	15349479	15354261	Repeat_expansion_245bp
Chr3	15400713	15401712	Repeat_expansion_2364bp
Chr3	15474486	15483834	Repeat_expansion_4854bp
Chr3	15484266	15487020	Repeat_contraction_878bp
Chr3	15503966	15507424	Repeat_contraction_309bp
Chr3	15565996	15567723	Repeat_expansion_1431bp
Chr3	15576128	15576636	Repeat_expansion_511bp
Chr3	15609253	15609337	Repeat_contraction_25bp
Chr3	15692262	15692316	Repeat_expansion_426bp
Chr3	15701578	15702586	Repeat_expansion_118bp
Chr3	15704399	15705725	Repeat_contraction_811bp
Chr3	15710761	15733680	Repeat_contraction_11050bp
Chr3	15748274	15750897	Repeat_expansion_11480bp
Chr3	15753019	15753666	Repeat_expansion_62bp
Chr3	15763441	15773781	Repeat_expansion_993bp

Chr3	15775041	15775137	Repeat_expansion_65bp
Chr3	15775609	15778527	Repeat_expansion_5676bp
Chr3	15778951	15780929	Repeat_expansion_179bp
Chr3	15783111	15783669	Repeat_contraction_180bp
Chr3	15795832	15799935	Repeat_expansion_1406bp
Chr3	15866306	15868728	Repeat_contraction_530bp
Chr3	15871387	15874735	Repeat_expansion_5991bp
Chr3	15934039	15948472	Repeat_contraction_6427bp
Chr3	16021616	16023443	Repeat_expansion_364bp
Chr3	16023989	16024265	Repeat_contraction_29bp
Chr3	16024839	16029324	Repeat_expansion_8915bp
Chr3	16045589	16045724	Repeat_expansion_54bp
Chr3	16045997	16046941	Repeat_expansion_129bp
Chr3	16047672	16048407	Repeat_contraction_29bp
Chr3	16048759	16049124	Repeat_expansion_26bp
Chr3	16043447	16049111	Repeat_contraction_409bp
Chr3	16051672	16054760	Repeat_expansion_1159bp
Chr3	16072366	16073376	Repeat_contraction_29bp
Chr3	16080218	16080357	Repeat_contraction_43bp
Chr3	16086239	16094147	Repeat_expansion_1164bp
Chr3	16094186	16095728	Tandem_expansion_5916bp
Chr3	16098111	16106135	Repeat_expansion_7529bp
Chr3	16109383	16112561	Repeat_expansion_449bp
Chr3	16128019	16128547	Repeat_contraction_44bp
Chr3	16133241	16134269	Repeat_expansion_613bp
Chr3	16136266	16137807	Repeat_expansion_89bp
Chr3	16140337	16144727	Repeat_contraction_2334bp
Chr3	16152367	16153552	Repeat_expansion_590bp
Chr3	16154402	16165052	Repeat_contraction_7970bp
Chr3	16171814	16184002	Repeat_contraction_11386bp
Chr3	16185139	16187935	Repeat_contraction_1102bp
Chr3	16193118	16193743	Repeat_expansion_158bp
Chr3	16092778	16094243	Repeat_expansion_73bp
Chr3	16236475	16239177	Repeat_contraction_2357bp
Chr3	16253511	16253625	Repeat_expansion_55bp
Chr3	16273232	16273557	Repeat_contraction_45bp
Chr3	16282872	16285082	Repeat_expansion_172bp
Chr3	16291594	16291800	Repeat_contraction_70bp
Chr3	16295436	16298103	Repeat_expansion_250bp
Chr3	16299715	16305090	Repeat_contraction_361bp
Chr3	16315094	16316228	Repeat_expansion_439bp
Chr3	16317281	16318705	Repeat_expansion_4131bp
Chr3	16324095	16325731	Repeat_contraction_419bp
Chr3	16330768	16343106	Repeat_contraction_11314bp
Chr3	16426290	16426470	Repeat_contraction_35bp
Chr3	16459069	16463706	Repeat_expansion_327bp
Chr3	16471055	16471291	Repeat_contraction_68bp
Chr3	16485308	16486120	Repeat_expansion_34bp
Chr3	16539505	16539689	Repeat_contraction_26bp

Chr3	16558126	16558172	Insertion_26bp
Chr3	16565556	16565560	Insertion_10007bp
Chr3	16574051	16575217	Repeat_expansion_40bp
Chr3	15717240	15717804	Repeat_contraction_61bp
Chr3	16606686	16606857	Repeat_expansion_562bp
Chr3	16620516	16620582	Repeat_expansion_20bp
Chr3	16634991	16647755	Repeat_contraction_11414bp
Chr3	16649014	16649281	Repeat_expansion_30bp
Chr3	16684743	16687498	Repeat_contraction_610bp
Chr3	16698307	16700580	Repeat_contraction_1469bp
Chr3	16703818	16705959	Repeat_contraction_361bp
Chr3	16708181	16712073	Repeat_expansion_2651bp
Chr3	16755975	16756276	Repeat_contraction_34bp
Chr3	16764973	16765096	Repeat_expansion_833bp
Chr3	16767384	16768376	Repeat_expansion_2689bp
Chr3	16770346	16770604	Repeat_contraction_176bp
Chr3	16774483	16776176	Repeat_expansion_734bp
Chr3	16781207	16781879	Repeat_contraction_438bp
Chr3	16787016	16790844	Repeat_expansion_2952bp
Chr3	16792115	16792368	Repeat_expansion_44bp
Chr3	16796099	16796362	Repeat_expansion_59bp
Chr3	16797970	16802262	Repeat_contraction_3081bp
Chr3	16826250	16828139	Repeat_contraction_1722bp
Chr3	16837979	16838080	Repeat_expansion_45bp
Chr3	16853774	16854872	Repeat_expansion_966bp
Chr3	16878095	16879553	Repeat_contraction_1245bp
Chr3	16882846	16891636	Repeat_expansion_6110bp
Chr3	16897229	16897376	Repeat_contraction_20bp
Chr3	16898049	16898537	Repeat_expansion_151bp
Chr3	16910283	16910446	Repeat_expansion_38bp
Chr3	16911174	16911932	Repeat_contraction_681bp
Chr3	16995150	16995742	Tandem_expansion_1391bp
Chr3	16994392	16995742	Tandem_expansion_17117bp
Chr3	16994392	16995628	Tandem_expansion_1389bp
Chr3	17026853	17027788	Repeat_expansion_24bp
Chr3	17031247	17031439	Repeat_contraction_29bp
Chr3	17083848	17084174	Repeat_contraction_39bp
Chr3	17086934	17087430	Repeat_contraction_422bp
Chr3	17088015	17089088	Repeat_expansion_299bp
Chr3	17089794	17091315	Repeat_expansion_24bp
Chr3	17097177	17117953	Repeat_contraction_10153bp
Chr3	17119453	17119769	Repeat_expansion_26bp
Chr3	17122453	17123581	Repeat_contraction_815bp
Chr3	17129709	17131465	Repeat_contraction_103bp
Chr3	17133280	17133445	Repeat_expansion_56bp
Chr3	17150094	17152417	Repeat_expansion_166bp
Chr3	17156530	17157564	Repeat_contraction_226bp
Chr3	17196995	17197526	Repeat_contraction_170bp
Chr3	17199444	17200275	Repeat_contraction_692bp

Chr3	17202446	17206431	Repeat_contraction_1815bp
Chr3	17212305	17216103	Repeat_expansion_5442bp
Chr3	17231583	17237826	Repeat_expansion_11776bp
Chr3	17268444	17270787	Repeat_expansion_189bp
Chr3	17275397	17277813	Repeat_contraction_1951bp
Chr3	17297039	17297678	Repeat_contraction_29bp
Chr3	17344729	17345166	Repeat_contraction_34bp
Chr3	17379440	17380124	Repeat_expansion_41bp
Chr3	17388432	17388568	Repeat_expansion_37bp
Chr3	17429589	17438083	Repeat_contraction_7778bp
Chr3	17446071	17447385	Repeat_contraction_87bp
Chr3	17449086	17451362	Repeat_contraction_1221bp
Chr3	17453179	17453305	Repeat_expansion_25bp
Chr3	17469533	17471926	Repeat_contraction_978bp
Chr3	17502383	17502430	Insertion_75bp
Chr3	17508043	17509602	Repeat_expansion_1664bp
Chr3	17510049	17510278	Repeat_expansion_187bp
Chr3	17634609	17634714	Repeat_expansion_29bp
Chr3	17639703	17641763	Repeat_contraction_596bp
Chr3	17689530	17689690	Repeat_expansion_1405bp
Chr3	17690734	17691048	Repeat_contraction_35bp
Chr3	17791164	17791221	Repeat_expansion_495bp
Chr3	17846058	17846764	Tandem_expansion_2644bp
Chr3	17875608	17876065	Repeat_contraction_92bp
Chr3	18018784	18019933	Deletion_1145bp
Chr3	18025450	18027572	Repeat_contraction_1646bp
Chr3	18030403	18030686	Repeat_expansion_270bp
Chr3	18040060	18040820	Repeat_expansion_324bp
Chr3	18085196	18085451	Deletion_216bp
Chr3	18087048	18088824	Repeat_contraction_517bp
Chr3	18089297	18089336	Insertion_22bp
Chr3	18136903	18138129	Repeat_expansion_886bp
Chr3	18221187	18221202	Insertion_8485bp
Chr3	18308161	18310980	Repeat_contraction_2166bp
Chr3	18318402	18319082	Repeat_contraction_327bp
Chr3	18353717	18353743	Insertion_24bp
Chr3	18356434	18356697	Repeat_expansion_826bp
Chr3	18358288	18358800	Repeat_contraction_239bp
Chr3	18503231	18504076	Repeat_contraction_30bp
Chr3	18504753	18505866	Repeat_contraction_27bp
Chr3	18744184	18745704	Repeat_expansion_479bp
Chr3	18758566	18758748	Repeat_contraction_39bp
Chr3	18811708	18811936	Repeat_contraction_148bp
Chr3	18813112	18813236	Deletion_91bp
Chr3	18830903	18831924	Deletion_1016bp
Chr3	18869222	18872198	Repeat_expansion_77bp
Chr3	18925130	18928967	Repeat_contraction_1181bp
Chr3	18931729	18932987	Repeat_contraction_395bp
Chr3	19027016	19027716	Repeat_contraction_357bp

Chr3	19069072	19069135	Repeat_expansion_20bp
Chr3	19157435	19157615	Repeat_expansion_36bp
Chr3	19443339	19443385	Insertion_312bp
Chr3	19458811	19458928	Repeat_contraction_26bp
Chr3	19459486	19459553	Deletion_27bp
Chr3	19495043	19495243	Repeat_contraction_30bp
Chr3	19496775	19496911	Repeat_contraction_21bp
Chr3	19533871	19534674	Repeat_expansion_4721bp
Chr3	19551360	19551773	Repeat_contraction_197bp
Chr3	19599362	19599688	Repeat_contraction_82bp
Chr3	19629952	19630182	Repeat_contraction_24bp
Chr3	19701490	19701556	Deletion_20bp
Chr3	19711912	19714495	Repeat_expansion_624bp
Chr3	19765221	19772691	Repeat_contraction_1128bp
Chr3	19858323	19858621	Repeat_expansion_269bp
Chr3	19902649	19905672	Repeat_expansion_1358bp
Chr3	20014475	20014702	Repeat_contraction_53bp
Chr3	20090211	20091637	Repeat_contraction_532bp
Chr3	20106234	20107658	Repeat_contraction_235bp
Chr3	20159272	20159360	Repeat_expansion_40bp
Chr3	20202348	20203040	Repeat_contraction_150bp
Chr3	20278025	20278847	Repeat_contraction_67bp
Chr3	20313488	20313827	Repeat_contraction_40bp
Chr3	20315458	20320123	Repeat_expansion_301bp
Chr3	20338811	20339926	Repeat_expansion_2028bp
Chr3	20343401	20343552	Tandem_expansion_2147bp
Chr3	20344268	20344935	Repeat_contraction_165bp
Chr3	20393808	20394024	Repeat_expansion_65bp
Chr3	20423991	20424071	Repeat_expansion_253bp
Chr3	20483046	20485197	Repeat_contraction_2092bp
Chr3	20725888	20728112	Repeat_contraction_1323bp
Chr3	20728769	20729342	Repeat_expansion_539bp
Chr3	20745351	20745708	Repeat_contraction_214bp
Chr3	20956029	20956999	Repeat_contraction_400bp
Chr3	20989847	20991177	Repeat_contraction_1131bp
Chr3	21264075	21264617	Repeat_contraction_311bp
Chr3	21276314	21276334	Insertion_681bp
Chr3	21322158	21329632	Deletion_7491bp
Chr3	21387183	21387502	Repeat_contraction_23bp
Chr3	21422916	21424387	Tandem_contraction_1554bp
Chr3	21435069	21437051	Repeat_expansion_474bp
Chr3	21491529	21491822	Repeat_contraction_223bp
Chr3	21616772	21619287	Repeat_contraction_2451bp
Chr3	21802221	21802590	Repeat_expansion_317bp
Chr3	21862775	21863332	Repeat_contraction_39bp
Chr3	21939362	21939463	Repeat_expansion_108bp
Chr3	21990992	21991666	Repeat_expansion_44bp
Chr3	21995272	21995564	Repeat_contraction_46bp
Chr3	22002219	22006357	Repeat_contraction_99bp

Chr3	22024483	22024601	Repeat_expansion_679bp
Chr3	22031203	22031330	Deletion_92bp
Chr3	22057852	22058817	Repeat_contraction_219bp
Chr3	22065899	22066701	Repeat_contraction_329bp
Chr3	22123287	22124180	Repeat_expansion_1252bp
Chr3	22125525	22125693	Repeat_expansion_24bp
Chr3	22138228	22139145	Repeat_contraction_118bp
Chr3	22208418	22208630	Repeat_expansion_22bp
Chr3	22209540	22209768	Repeat_expansion_154bp
Chr3	22214608	22214852	Repeat_contraction_49bp
Chr3	22215969	22216180	Repeat_expansion_258bp
Chr3	22232176	22242466	Repeat_contraction_9875bp
Chr3	22384114	22390239	Tandem_contraction_7396bp
Chr3	22503371	22504000	Repeat_expansion_2081bp
Chr3	22616083	22616188	Repeat_expansion_278bp
Chr3	22652357	22653112	Repeat_expansion_223bp
Chr3	22767022	22768473	Repeat_contraction_33bp
Chr3	22787950	22787990	Insertion_35bp
Chr3	22797030	22797201	Repeat_expansion_22bp
Chr3	22798538	22798745	Repeat_expansion_54bp
Chr3	22815230	22815804	Repeat_contraction_49bp
Chr3	22913650	22914019	Repeat_expansion_206bp
Chr3	23018903	23019021	Repeat_contraction_42bp
Chr3	23085532	23086090	Deletion_518bp
Chr3	23100312	23105139	Repeat_contraction_3237bp
Chr3	23210605	23211197	Repeat_contraction_229bp
Chr3	23212319	23212626	Repeat_contraction_168bp
Chr3	23216893	23217456	Repeat_expansion_3314bp
Chr3	23219739	23219842	Repeat_contraction_31bp
Chr3	14192258	14194093	Repeat_expansion_535bp
Chr3	14194976	14205193	Tandem_expansion_10448bp
Chr3	14195203	14195973	Tandem_expansion_9990bp
Chr3	14194890	14204848	Tandem_expansion_10447bp
Chr3	14198110	14198273	Repeat_expansion_22bp
Chr3	14192413	14205193	Tandem_expansion_13114bp
Chr3	14194011	14194615	Repeat_expansion_88bp
Chr3	14196444	14196895	Repeat_expansion_35bp
Chr3	14200767	14205080	Tandem_expansion_4414bp
Chr3	14008196	14009848	Repeat_contraction_702bp
Chr3	17865896	17866681	Tandem_expansion_5670bp
Chr3	12469231	12469299	Repeat_expansion_20bp
Chr3	14999568	14999668	Repeat_expansion_53bp
Chr3	14081963	14082021	Repeat_expansion_698bp
Chr3	14119695	14141651	Repeat_contraction_15533bp
Chr4	3842775	3842869	Deletion_94bp
Chr4	3843974	3843974	Insertion_41bp
Chr4	3847808	3847842	Deletion_34bp
Chr4	3848005	3850090	Deletion_2085bp
Chr4	15013234	15013234	Insertion_21bp

Chr4	13887815	13887815	Insertion_43bp
Chr4	3851892	3851917	Deletion_25bp
Chr4	3089728	3089728	Insertion_35bp
Chr4	3461665	3462053	Deletion_388bp
Chr4	3463321	3463479	Deletion_158bp
Chr4	3464217	3464240	Deletion_23bp
Chr4	6168957	6169030	Deletion_73bp
Chr4	4271764	4272190	Deletion_426bp
Chr4	5330836	5330856	Deletion_20bp
Chr4	3994153	3994153	Insertion_57bp
Chr4	1677736	1677776	Deletion_40bp
Chr4	1678539	1678580	Deletion_41bp
Chr4	1678913	1678941	Deletion_28bp
Chr4	1685716	1685748	Deletion_32bp
Chr4	1843291	1843291	Insertion_95bp
Chr4	5572931	5572985	Deletion_54bp
Chr4	5575163	5575239	Deletion_76bp
Chr4	3850570	3850599	Deletion_29bp
Chr4	2606267	2606399	Deletion_132bp
Chr4	1802365	1802408	Deletion_43bp
Chr4	1803422	1803422	Insertion_43bp
Chr4	17774428	17774450	Deletion_22bp
Chr4	17785180	17785208	Deletion_28bp
Chr4	17789197	17789197	Insertion_31bp
Chr4	17789663	17789704	Deletion_41bp
Chr4	17798420	17798420	Insertion_24bp
Chr4	17817044	17817072	Deletion_28bp
Chr4	17821029	17821029	Insertion_24bp
Chr4	17837456	17837456	Insertion_64bp
Chr4	17841804	17841804	Insertion_144bp
Chr4	17845703	17845703	Insertion_24bp
Chr4	17883637	17883637	Insertion_24bp
Chr4	17944222	17944222	Insertion_56bp
Chr4	17951247	17951247	Insertion_23bp
Chr4	12430754	12430754	Insertion_156bp
Chr4	12435083	12435125	Deletion_42bp
Chr4	12459179	12459209	Deletion_30bp
Chr4	12460944	12460944	Insertion_1144bp
Chr4	12509903	12509926	Deletion_23bp
Chr4	12546964	12546964	Insertion_36bp
Chr4	12551611	12551644	Deletion_33bp
Chr4	1179975	1179975	Insertion_28bp
Chr4	1312216	1312243	Deletion_27bp
Chr4	15383062	15383062	Insertion_38bp
Chr4	15397734	15398695	Deletion_961bp
Chr4	15409119	15409119	Insertion_27bp
Chr4	15410974	15410974	Insertion_5050bp
Chr4	15411196	15411196	Insertion_37bp
Chr4	15411675	15411675	Insertion_34bp

Chr4	15464867	15464887	Deletion_20bp
Chr4	15490247	15490247	Insertion_30bp
Chr4	15512699	15512699	Insertion_22bp
Chr4	15544034	15544295	Deletion_261bp
Chr4	16473437	16473437	Insertion_24bp
Chr4	16513901	16513938	Deletion_37bp
Chr4	16536878	16536907	Deletion_29bp
Chr4	15922843	15922843	Insertion_58bp
Chr4	15932470	15932470	Insertion_35bp
Chr4	15960101	15960123	Deletion_22bp
Chr4	16037590	16037590	Insertion_31bp
Chr4	16044150	16044234	Deletion_84bp
Chr4	16044478	16044492	Insertion_27bp
Chr4	16050239	16050239	Insertion_444bp
Chr4	15566544	15566824	Deletion_280bp
Chr4	15591905	15591939	Deletion_34bp
Chr4	15596130	15596130	Insertion_141bp
Chr4	15631285	15631510	Deletion_225bp
Chr4	15680321	15680352	Deletion_31bp
Chr4	15688931	15688931	Insertion_51bp
Chr4	15692444	15692476	Deletion_32bp
Chr4	12635596	12635596	Insertion_46bp
Chr4	12693181	12693181	Insertion_20bp
Chr4	12713690	12714153	Deletion_463bp
Chr4	13418965	13418965	Insertion_56bp
Chr4	13421325	13421325	Insertion_32bp
Chr4	13436557	13436557	Insertion_60bp
Chr4	13460627	13460683	Deletion_56bp
Chr4	13460803	13460803	Insertion_38bp
Chr4	13473210	13473210	Insertion_54bp
Chr4	13473293	13473293	Insertion_31bp
Chr4	13486872	13487040	Deletion_168bp
Chr4	13503652	13503672	Deletion_20bp
Chr4	13511321	13511321	Insertion_27bp
Chr4	13515158	13515158	Insertion_26bp
Chr4	13540038	13540130	Deletion_92bp
Chr4	13540806	13540838	Deletion_32bp
Chr4	15786052	15786106	Deletion_54bp
Chr4	15790341	15790341	Insertion_26bp
Chr4	15816338	15816360	Deletion_22bp
Chr4	15820160	15820160	Insertion_36bp
Chr4	15849076	15849097	Deletion_21bp
Chr4	15906745	15906745	Insertion_20bp
Chr4	15907265	15907265	Insertion_20bp
Chr4	15908309	15908309	Insertion_385bp
Chr4	15153082	15153082	Insertion_26bp
Chr4	16707207	16707419	Deletion_212bp
Chr4	16718696	16718728	Deletion_32bp
Chr4	16720760	16720795	Deletion_35bp

Chr4	16727319	16727319	Insertion_73bp
Chr4	16729745	16729771	Deletion_26bp
Chr4	16748488	16748495	Insertion_759bp
Chr4	16750488	16750812	Deletion_324bp
Chr4	16754290	16754797	Deletion_507bp
Chr4	16768715	16768749	Deletion_34bp
Chr4	16785847	16785952	Deletion_105bp
Chr4	16827628	16827672	Deletion_44bp
Chr4	16827913	16827913	Insertion_50bp
Chr4	14415746	14415766	Deletion_20bp
Chr4	14432492	14432492	Insertion_87bp
Chr4	14434069	14434069	Insertion_41bp
Chr4	14449750	14449750	Insertion_36bp
Chr4	14450434	14450457	Deletion_23bp
Chr4	14455097	14455097	Insertion_12578bp
Chr4	14506743	14506743	Insertion_254bp
Chr4	14508559	14508559	Insertion_22bp
Chr4	14511480	14511480	Insertion_28bp
Chr4	14511524	14511524	Insertion_23bp
Chr4	14511691	14511691	Insertion_37bp
Chr4	14526797	14526797	Insertion_129bp
Chr4	14546079	14546079	Insertion_320bp
Chr4	14558582	14558612	Deletion_30bp
Chr4	14565321	14565321	Insertion_32bp
Chr4	14569546	14569600	Deletion_54bp
Chr4	13889551	13889571	Deletion_20bp
Chr4	13904549	13904549	Insertion_32bp
Chr4	13991064	13991064	Insertion_25bp
Chr4	6659485	6659485	Insertion_62bp
Chr4	6666200	6666243	Deletion_43bp
Chr4	6672098	6672098	Insertion_21bp
Chr4	6676501	6676501	Insertion_20bp
Chr4	17346462	17346462	Insertion_35bp
Chr4	17439166	17439166	Insertion_26bp
Chr4	17448319	17448319	Insertion_21bp
Chr4	17449273	17449273	Insertion_34bp
Chr4	16173980	16173980	Insertion_46bp
Chr4	12731057	12731162	Deletion_105bp
Chr4	12765697	12765697	Insertion_570bp
Chr4	12768880	12769284	Deletion_404bp
Chr4	12771971	12772012	Deletion_41bp
Chr4	12774504	12774504	Insertion_548bp
Chr4	12826939	12826939	Insertion_5024bp
Chr4	16277120	16277120	Insertion_33bp
Chr4	16277741	16277741	Insertion_57bp
Chr4	16282817	16282889	Deletion_72bp
Chr4	16287990	16288034	Deletion_44bp
Chr4	16293323	16293663	Deletion_340bp
Chr4	16313133	16313133	Insertion_247bp

Chr4	16329606	16329606	Insertion_58bp
Chr4	16355027	16355027	Insertion_31bp
Chr4	16363615	16363615	Insertion_22bp
Chr4	11946684	11946684	Insertion_44bp
Chr4	11966597	11966618	Deletion_21bp
Chr4	8422036	8422068	Deletion_32bp
Chr4	8437444	8437486	Deletion_42bp
Chr4	8453970	8453998	Deletion_28bp
Chr4	8457647	8457673	Deletion_26bp
Chr4	8459596	8459596	Insertion_20bp
Chr4	8461928	8461960	Deletion_32bp
Chr4	8463313	8463355	Deletion_42bp
Chr4	8510210	8510230	Deletion_20bp
Chr4	8166866	8166866	Insertion_798bp
Chr4	8175660	8175660	Insertion_52bp
Chr4	8176077	8176077	Insertion_22bp
Chr4	8189862	8189862	Insertion_26bp
Chr4	8211621	8211621	Insertion_112bp
Chr4	8235240	8235273	Deletion_33bp
Chr4	8235972	8235972	Insertion_36bp
Chr4	8253091	8253137	Deletion_46bp
Chr4	8255430	8255457	Deletion_27bp
Chr4	8260172	8260194	Deletion_22bp
Chr4	11499565	11499593	Deletion_28bp
Chr4	11505572	11505593	Deletion_21bp
Chr4	11506666	11506666	Insertion_54bp
Chr4	11524373	11524393	Deletion_20bp
Chr4	11549661	11549685	Deletion_24bp
Chr4	14188911	14189030	Deletion_119bp
Chr4	14216516	14216516	Insertion_39bp
Chr4	14229229	14229229	Insertion_356bp
Chr4	14245793	14245873	Deletion_80bp
Chr4	14250736	14250736	Insertion_46bp
Chr4	14254864	14254887	Deletion_23bp
Chr4	10021119	10021151	Deletion_32bp
Chr4	10021208	10021239	Deletion_31bp
Chr4	10036678	10038081	Deletion_1403bp
Chr4	10093349	10093349	Insertion_53bp
Chr4	10101156	10101156	Insertion_141bp
Chr4	10103521	10103614	Deletion_93bp
Chr4	10107529	10107529	Insertion_999bp
Chr4	16054654	16054738	Deletion_84bp
Chr4	16055306	16055474	Deletion_168bp
Chr4	16089598	16089598	Insertion_33bp
Chr4	16091002	16091046	Deletion_44bp
Chr4	16102552	16102552	Insertion_31bp
Chr4	18313920	18313920	Insertion_2254bp
Chr4	12332238	12332238	Insertion_41bp
Chr4	12336368	12336368	Insertion_27bp

Chr4	12340350	12340350	Insertion_1478bp
Chr4	12340582	12340582	Insertion_204bp
Chr4	12341271	12341513	Deletion_242bp
Chr4	12347553	12347585	Deletion_32bp
Chr4	12354513	12354513	Insertion_744bp
Chr4	13191752	13191778	Deletion_26bp
Chr4	17018980	17019001	Deletion_21bp
Chr4	14125213	14125233	Deletion_20bp
Chr4	15717972	15717972	Insertion_44bp
Chr4	15720873	15720905	Deletion_32bp
Chr4	15721166	15721241	Deletion_75bp
Chr4	15730413	15730438	Deletion_25bp
Chr4	15763117	15763117	Insertion_857bp
Chr4	13332725	13332790	Deletion_65bp
Chr4	13354912	13354912	Insertion_24bp
Chr4	15287872	15287872	Insertion_45bp
Chr4	16859754	16859781	Deletion_27bp
Chr4	16860009	16860009	Insertion_33bp
Chr4	16863263	16865069	Deletion_1806bp
Chr4	16881372	16881396	Deletion_24bp
Chr4	16899423	16899498	Deletion_75bp
Chr4	14602167	14602255	Deletion_88bp
Chr4	14620678	14620752	Deletion_74bp
Chr4	14631259	14631259	Insertion_26bp
Chr4	17255207	17255207	Insertion_33bp
Chr4	17261759	17261759	Insertion_20bp
Chr4	17324229	17324229	Insertion_56bp
Chr4	14923848	14923914	Deletion_66bp
Chr4	14924899	14924899	Insertion_32bp
Chr4	14937536	14937536	Insertion_59bp
Chr4	14939533	14939533	Insertion_24bp
Chr4	14984253	14984281	Deletion_28bp
Chr4	14985528	14985528	Insertion_32bp
Chr4	1093167	1093167	Insertion_21bp
Chr4	1094816	1095021	Deletion_205bp
Chr4	1097407	1100139	Deletion_2732bp
Chr4	17494591	17494591	Insertion_30bp
Chr4	17519285	17519285	Insertion_30bp
Chr4	17523926	17524225	Deletion_299bp
Chr4	17544460	17544460	Insertion_20bp
Chr4	14740943	14740971	Deletion_28bp
Chr4	13823464	13823514	Deletion_50bp
Chr4	12064289	12064334	Deletion_45bp
Chr4	12064547	12064570	Deletion_23bp
Chr4	12078887	12078911	Deletion_24bp
Chr4	13041034	13041034	Insertion_99bp
Chr4	13067165	13067201	Deletion_36bp
Chr4	13120832	13120832	Insertion_24bp
Chr4	13129248	13129248	Insertion_46bp

Chr4	16694403	16694403	Insertion_26bp
Chr4	279313	279382	Deletion_69bp
Chr4	290008	290008	Insertion_26bp
Chr4	310717	310717	Insertion_55bp
Chr4	311883	312202	Deletion_319bp
Chr4	312245	312279	Deletion_34bp
Chr4	14863725	14863771	Deletion_46bp
Chr4	14880674	14880674	Insertion_36bp
Chr4	14880718	14880738	Deletion_20bp
Chr4	14884999	14884999	Insertion_118bp
Chr4	14887251	14887299	Deletion_48bp
Chr4	14892372	14892393	Deletion_21bp
Chr4	14902892	14902892	Insertion_1884bp
Chr4	12168929	12168960	Deletion_31bp
Chr4	5528271	5528271	Insertion_35bp
Chr4	5530428	5530459	Deletion_31bp
Chr4	5534296	5534344	Deletion_48bp
Chr4	5549059	5549059	Insertion_60bp
Chr4	5562376	5562396	Deletion_20bp
Chr4	5564617	5564617	Insertion_32bp
Chr4	5567812	5567833	Deletion_21bp
Chr4	5575383	5575383	Insertion_27bp
Chr4	13736308	13736352	Deletion_44bp
Chr4	13761759	13761791	Deletion_32bp
Chr4	13778037	13781596	Deletion_3559bp
Chr4	13788336	13788336	Insertion_35bp
Chr4	13793668	13793702	Deletion_34bp
Chr4	21405	21405	Insertion_8308bp
Chr4	47205	47260	Deletion_55bp
Chr4	13649310	13649331	Deletion_21bp
Chr4	13656971	13657005	Deletion_34bp
Chr4	11101362	11102693	Deletion_1331bp
Chr4	11137567	11137603	Deletion_36bp
Chr4	11137658	11137684	Deletion_26bp
Chr4	12254740	12254762	Deletion_22bp
Chr4	12267846	12270084	Deletion_2238bp
Chr4	12273404	12273444	Deletion_40bp
Chr4	12275061	12275061	Insertion_2056bp
Chr4	18436809	18436809	Insertion_23bp
Chr4	18466953	18466982	Deletion_29bp
Chr4	18484400	18484400	Insertion_33bp
Chr4	9598497	9598497	Insertion_20bp
Chr4	9637168	9637168	Insertion_33bp
Chr4	9644192	9644213	Deletion_21bp
Chr4	15059811	15059811	Insertion_27bp
Chr4	11153703	11153734	Deletion_31bp
Chr4	11159685	11159714	Deletion_29bp
Chr4	11201601	11201601	Insertion_25bp
Chr4	15336253	15336277	Deletion_24bp

Chr4	15362242	15362242	Insertion_21bp
Chr4	15363199	15363803	Deletion_604bp
Chr4	15366461	15366461	Insertion_25bp
Chr4	15373739	15373739	Insertion_24bp
Chr4	14031555	14031956	Deletion_401bp
Chr4	14045618	14045717	Deletion_99bp
Chr4	10624321	10624397	Deletion_76bp
Chr4	10644400	10644400	Insertion_20bp
Chr4	2017821	2017821	Insertion_56bp
Chr4	2019358	2019611	Deletion_253bp
Chr4	2032138	2032161	Deletion_23bp
Chr4	2035704	2035704	Insertion_30bp
Chr4	2048962	2049014	Deletion_52bp
Chr4	2053620	2053675	Deletion_55bp
Chr4	2060995	2060995	Insertion_21bp
Chr4	18256182	18256182	Insertion_255bp
Chr4	18290807	18290807	Insertion_41bp
Chr4	18293685	18293685	Insertion_26bp
Chr4	595726	595726	Insertion_28bp
Chr4	626812	626812	Insertion_23bp
Chr4	630222	630222	Insertion_23bp
Chr4	5107311	5109212	Deletion_1901bp
Chr4	5111509	5112962	Deletion_1453bp
Chr4	5114536	5114591	Deletion_55bp
Chr4	5122915	5123072	Deletion_157bp
Chr4	5125916	5125916	Insertion_62bp
Chr4	5129476	5129476	Insertion_43bp
Chr4	5133013	5133013	Insertion_185bp
Chr4	5138503	5138503	Insertion_39bp
Chr4	3782475	3782539	Deletion_64bp
Chr4	3785849	3785872	Deletion_23bp
Chr4	3790249	3790286	Deletion_37bp
Chr4	11223746	11223746	Insertion_74bp
Chr4	11252950	11252995	Deletion_45bp
Chr4	18131944	18131944	Insertion_345bp
Chr4	13578262	13578308	Deletion_46bp
Chr4	13580264	13580293	Deletion_29bp
Chr4	3373743	3376202	Deletion_2459bp
Chr4	3399186	3399186	Insertion_760bp
Chr4	3405777	3405777	Insertion_1643bp
Chr4	3408896	3408896	Insertion_40bp
Chr4	3409577	3409577	Insertion_277bp
Chr4	3413999	3413999	Insertion_27bp
Chr4	3418208	3418252	Deletion_44bp
Chr4	3423443	3423686	Deletion_243bp
Chr4	3431000	3431027	Deletion_27bp
Chr4	10871999	10872026	Deletion_27bp
Chr4	10898207	10898233	Deletion_26bp
Chr4	324630	324630	Insertion_624bp

Chr4	346699	346699	Insertion_48bp
Chr4	348232	348232	Insertion_165bp
Chr4	5516280	5516300	Deletion_20bp
Chr4	5516761	5516793	Deletion_32bp
Chr4	7497369	7497393	Deletion_24bp
Chr4	7511738	7511773	Deletion_35bp
Chr4	14793548	14793548	Insertion_409bp
Chr4	14794894	14794894	Insertion_36bp
Chr4	14796222	14796222	Insertion_90bp
Chr4	14802650	14802650	Insertion_4900bp
Chr4	14824827	14824827	Insertion_37bp
Chr4	4810001	4810039	Deletion_38bp
Chr4	4811000	4811000	Insertion_84bp
Chr4	4814878	4815582	Deletion_704bp
Chr4	4816598	4816598	Insertion_39bp
Chr4	4819591	4819620	Deletion_29bp
Chr4	11777327	11777366	Deletion_39bp
Chr4	11791825	11791825	Insertion_32bp
Chr4	14390882	14390926	Deletion_44bp
Chr4	3920416	3920416	Insertion_21bp
Chr4	3923102	3923382	Deletion_280bp
Chr4	3929911	3930763	Deletion_852bp
Chr4	3938735	3938735	Insertion_221bp
Chr4	3941242	3941277	Deletion_35bp
Chr4	11638066	11638066	Insertion_23bp
Chr4	11649988	11649988	Insertion_92bp
Chr4	11675702	11675702	Insertion_24bp
Chr4	11676463	11681341	Deletion_4878bp
Chr4	9254342	9254342	Insertion_33bp
Chr4	7432681	7432681	Insertion_20bp
Chr4	7458028	7458049	Deletion_21bp
Chr4	12862244	12862244	Insertion_750bp
Chr4	12892350	12892759	Deletion_409bp
Chr4	11293784	11293784	Insertion_36bp
Chr4	11294054	11294080	Deletion_26bp
Chr4	11301077	11301105	Deletion_28bp
Chr4	9343616	9343616	Insertion_525bp
Chr4	9345767	9345767	Insertion_133bp
Chr4	9362630	9362662	Deletion_32bp
Chr4	9368717	9369343	Deletion_626bp
Chr4	2830981	2830981	Insertion_29bp
Chr4	2835696	2835696	Insertion_22bp
Chr4	2838346	2856727	Deletion_18381bp
Chr4	2860719	2860719	Insertion_35bp
Chr4	2867646	2867646	Insertion_24bp
Chr4	2870974	2871093	Deletion_126bp
Chr4	2888454	2888454	Insertion_308bp
Chr4	2903305	2903305	Insertion_2646bp
Chr4	2912961	2913401	Deletion_440bp

Chr4	2915868	2915868	Insertion_488bp
Chr4	2917324	2917347	Deletion_23bp
Chr4	2921661	2921839	Deletion_178bp
Chr4	11398060	11398060	Insertion_30bp
Chr4	11416564	11417138	Deletion_574bp
Chr4	11425631	11425631	Insertion_56bp
Chr4	1371629	1371629	Insertion_34bp
Chr4	1380231	1380270	Deletion_39bp
Chr4	1382783	1382783	Insertion_42bp
Chr4	1394380	1394380	Insertion_33bp
Chr4	1394694	1394694	Insertion_20bp
Chr4	16920947	16921193	Deletion_246bp
Chr4	16924162	16924263	Deletion_101bp
Chr4	16951534	16951677	Deletion_143bp
Chr4	13293999	13293999	Insertion_487bp
Chr4	13301366	13301461	Deletion_95bp
Chr4	3580953	3581538	Deletion_585bp
Chr4	3582872	3582919	Deletion_47bp
Chr4	3603672	3603672	Insertion_33bp
Chr4	3615693	3615903	Deletion_216bp
Chr4	3622384	3622384	Insertion_21bp
Chr4	9845829	9845897	Deletion_68bp
Chr4	9849705	9849739	Deletion_34bp
Chr4	9852035	9852080	Deletion_45bp
Chr4	9859585	9859585	Insertion_64bp
Chr4	8672378	8672378	Insertion_25bp
Chr4	1349023	1349047	Deletion_24bp
Chr4	14663080	14663106	Deletion_26bp
Chr4	14675400	14675422	Deletion_22bp
Chr4	14676217	14676217	Insertion_36bp
Chr4	14692509	14692509	Insertion_23bp
Chr4	14701384	14701384	Insertion_31bp
Chr4	3531126	3531126	Insertion_262bp
Chr4	3531731	3531731	Insertion_48bp
Chr4	3533129	3533727	Deletion_598bp
Chr4	3536392	3536392	Insertion_566bp
Chr4	3537447	3537501	Deletion_54bp
Chr4	3541266	3541289	Deletion_23bp
Chr4	3546285	3546285	Insertion_484bp
Chr4	3548788	3548848	Deletion_60bp
Chr4	3549468	3549508	Deletion_40bp
Chr4	3549935	3549973	Deletion_38bp
Chr4	3567450	3567450	Insertion_21bp
Chr4	3570329	3570403	Deletion_74bp
Chr4	18566502	18566502	Insertion_1579bp
Chr4	18572971	18572971	Insertion_103bp
Chr4	18573080	18573105	Deletion_25bp
Chr4	5266459	5266459	Insertion_32bp
Chr4	5275400	5275423	Deletion_23bp

Chr4	5275452	5275480	Deletion_28bp
Chr4	5278936	5278936	Insertion_22bp
Chr4	5279267	5279295	Deletion_28bp
Chr4	5280757	5281055	Deletion_298bp
Chr4	2076804	2076804	Insertion_94bp
Chr4	2079095	2079387	Deletion_292bp
Chr4	2082683	2082683	Insertion_66bp
Chr4	2089864	2089864	Insertion_57bp
Chr4	2092823	2092859	Deletion_36bp
Chr4	2111017	2111711	Deletion_694bp
Chr4	2113385	2113433	Deletion_48bp
Chr4	2114053	2114053	Insertion_21bp
Chr4	2116213	2116213	Insertion_36bp
Chr4	10774735	10774735	Insertion_32bp
Chr4	10774855	10774855	Insertion_254bp
Chr4	10775266	10775266	Insertion_61bp
Chr4	10806263	10806458	Deletion_195bp
Chr4	11333682	11333698	Insertion_22bp
Chr4	8337487	8337487	Insertion_21bp
Chr4	8353654	8353697	Deletion_43bp
Chr4	7115766	7115766	Insertion_63bp
Chr4	7118625	7118745	Deletion_120bp
Chr4	7131580	7131613	Deletion_33bp
Chr4	7136138	7136174	Deletion_36bp
Chr4	17602172	17602172	Insertion_82bp
Chr4	17611325	17611325	Insertion_20bp
Chr4	17632539	17632576	Deletion_37bp
Chr4	17115828	17115893	Deletion_65bp
Chr4	17117454	17117454	Insertion_36bp
Chr4	17126999	17126999	Insertion_793bp
Chr4	17127438	17127438	Insertion_24bp
Chr4	5433367	5433394	Deletion_27bp
Chr4	5436885	5436885	Insertion_49bp
Chr4	10249499	10249499	Insertion_29bp
Chr4	10254947	10254971	Deletion_24bp
Chr4	10256920	10256920	Insertion_40bp
Chr4	6232456	6232463	Insertion_32bp
Chr4	6235844	6235844	Insertion_168bp
Chr4	6238178	6238203	Deletion_25bp
Chr4	11616038	11616038	Insertion_1834bp
Chr4	11625924	11625924	Insertion_42bp
Chr4	11634416	11634416	Insertion_1065bp
Chr4	9390456	9390456	Insertion_47bp
Chr4	9401959	9401983	Deletion_27bp
Chr4	9414226	9414300	Deletion_74bp
Chr4	9415917	9415917	Insertion_85bp
Chr4	11690290	11690586	Deletion_296bp
Chr4	3056752	3056752	Insertion_31bp
Chr4	3059518	3059518	Insertion_430bp

Chr4	3061551	3061551	Insertion_237bp
Chr4	3074226	3074251	Deletion_25bp
Chr4	3088488	3088488	Insertion_58bp
Chr4	17230483	17230504	Deletion_21bp
Chr4	7845080	7845310	Deletion_230bp
Chr4	7849529	7849529	Insertion_5128bp
Chr4	7849804	7849804	Insertion_21bp
Chr4	7852872	7853532	Deletion_660bp
Chr4	7861070	7861070	Insertion_27bp
Chr4	7877665	7877665	Insertion_48bp
Chr4	7887723	7887738	Insertion_42bp
Chr4	7889471	7889471	Insertion_55bp
Chr4	10210789	10210789	Insertion_255bp
Chr4	10211543	10211543	Insertion_20bp
Chr4	3467655	3467675	Deletion_20bp
Chr4	3468944	3468944	Insertion_52bp
Chr4	3474138	3474161	Deletion_23bp
Chr4	3486114	3486114	Insertion_51bp
Chr4	3489712	3491190	Deletion_1478bp
Chr4	3496634	3497029	Deletion_395bp
Chr4	3497419	3497419	Insertion_35bp
Chr4	3502670	3502693	Deletion_23bp
Chr4	82216	82244	Deletion_28bp
Chr4	82433	82471	Deletion_38bp
Chr4	95095	95095	Insertion_58bp
Chr4	10373471	10373521	Deletion_50bp
Chr4	2727250	2727731	Deletion_481bp
Chr4	2494494	2494587	Deletion_93bp
Chr4	2499277	2499277	Insertion_1368bp
Chr4	2514789	2514809	Deletion_20bp
Chr4	2531139	2531139	Insertion_32bp
Chr4	16574205	16574205	Insertion_380bp
Chr4	9742840	9742840	Insertion_21bp
Chr4	9747245	9747245	Insertion_95bp
Chr4	9749501	9749501	Insertion_240bp
Chr4	9756143	9756255	Deletion_112bp
Chr4	9763704	9763704	Insertion_146bp
Chr4	9768793	9768824	Deletion_31bp
Chr4	1489576	1489600	Deletion_24bp
Chr4	1507152	1507152	Insertion_1103bp
Chr4	1745290	1745466	Deletion_176bp
Chr4	1751500	1751500	Insertion_22bp
Chr4	1759686	1759761	Deletion_75bp
Chr4	1761415	1761437	Deletion_22bp
Chr4	1761502	1761527	Deletion_25bp
Chr4	1761675	1761675	Insertion_21bp
Chr4	1767882	1767882	Insertion_21bp
Chr4	1779080	1779080	Insertion_36bp
Chr4	1779751	1779751	Insertion_23bp

Chr4	1780965	1780965	Insertion_35bp
Chr4	1782877	1782877	Insertion_35bp
Chr4	18497445	18497499	Deletion_54bp
Chr4	18505646	18505646	Insertion_156bp
Chr4	18510485	18510485	Insertion_29bp
Chr4	8585344	8585344	Insertion_24bp
Chr4	8593538	8593558	Deletion_20bp
Chr4	8595932	8595932	Insertion_605bp
Chr4	8599769	8599789	Deletion_20bp
Chr4	8601880	8601880	Insertion_5457bp
Chr4	8607659	8607703	Deletion_44bp
Chr4	6308261	6308312	Deletion_51bp
Chr4	6310955	6310955	Insertion_35bp
Chr4	7800328	7800328	Insertion_20bp
Chr4	7807196	7807196	Insertion_42bp
Chr4	8383787	8383787	Insertion_20bp
Chr4	8386176	8386176	Insertion_21bp
Chr4	8401673	8401757	Deletion_84bp
Chr4	8408211	8409136	Deletion_925bp
Chr4	5220480	5220570	Deletion_90bp
Chr4	5221534	5221574	Deletion_40bp
Chr4	5223510	5223542	Deletion_32bp
Chr4	5228828	5228828	Insertion_30bp
Chr4	5230945	5230945	Insertion_51bp
Chr4	18087200	18087443	Deletion_243bp
Chr4	18096196	18096228	Deletion_32bp
Chr4	18096756	18096793	Deletion_37bp
Chr4	18097520	18097565	Deletion_45bp
Chr4	3133257	3133257	Insertion_28bp
Chr4	3133664	3133664	Insertion_27bp
Chr4	3144655	3144655	Insertion_330bp
Chr4	3819723	3819784	Deletion_61bp
Chr4	3831216	3831254	Deletion_38bp
Chr4	3833276	3833317	Deletion_41bp
Chr4	11887600	11887634	Deletion_34bp
Chr4	4889422	4889422	Insertion_145bp
Chr4	4915139	4915139	Insertion_68bp
Chr4	4915182	4915182	Insertion_2107bp
Chr4	4916495	4916515	Deletion_20bp
Chr4	4917900	4917928	Deletion_28bp
Chr4	4922631	4922631	Insertion_35bp
Chr4	4927938	4928061	Deletion_123bp
Chr4	4928085	4928085	Insertion_22bp
Chr4	4939269	4941035	Deletion_1766bp
Chr4	4943587	4943610	Deletion_23bp
Chr4	4945016	4945069	Deletion_53bp
Chr4	7549127	7549167	Deletion_40bp
Chr4	17677673	17677673	Insertion_21bp
Chr4	17681684	17681812	Deletion_128bp

Chr4	17699063	17699063	Insertion_192bp
Chr4	17078146	17078146	Insertion_47bp
Chr4	17080125	17080149	Deletion_24bp
Chr4	17081499	17081499	Insertion_53bp
Chr4	12952584	12952606	Deletion_22bp
Chr4	12974818	12974840	Deletion_22bp
Chr4	12275544	12275578	Deletion_34bp
Chr4	12293106	12293126	Deletion_20bp
Chr4	12303423	12303423	Insertion_1169bp
Chr4	2277479	2278029	Deletion_550bp
Chr4	2282352	2282352	Insertion_277bp
Chr4	2282372	2282649	Deletion_277bp
Chr4	2283863	2283871	Deletion_49bp
Chr4	2287394	2287422	Deletion_28bp
Chr4	2308870	2310631	Deletion_1761bp
Chr4	2314157	2314157	Insertion_61bp
Chr4	2314386	2314425	Deletion_39bp
Chr4	10817952	10817952	Insertion_31bp
Chr4	10822167	10822365	Deletion_198bp
Chr4	10844813	10844813	Insertion_45bp
Chr4	173214	173239	Deletion_25bp
Chr4	180721	180721	Insertion_20bp
Chr4	7716200	7716200	Insertion_89bp
Chr4	7716597	7716617	Deletion_20bp
Chr4	4005813	4006167	Deletion_354bp
Chr4	4006859	4007037	Deletion_178bp
Chr4	4009055	4009411	Deletion_356bp
Chr4	4010104	4010460	Deletion_356bp
Chr4	4012223	4012223	Insertion_69bp
Chr4	4017480	4017519	Deletion_39bp
Chr4	4019506	4019534	Deletion_28bp
Chr4	4019606	4020030	Deletion_424bp
Chr4	4023265	4023351	Deletion_86bp
Chr4	4026365	4026365	Insertion_35bp
Chr4	4034812	4034812	Insertion_48bp
Chr4	4039466	4039555	Deletion_89bp
Chr4	4041070	4041078	Insertion_57bp
Chr4	4044995	4045146	Deletion_151bp
Chr4	4047025	4047025	Insertion_614bp
Chr4	9935861	9935861	Insertion_763bp
Chr4	9936024	9936024	Insertion_28bp
Chr4	379856	379880	Deletion_24bp
Chr4	3277333	3277357	Deletion_32bp
Chr4	5651976	5652010	Deletion_34bp
Chr4	5662371	5662393	Deletion_22bp
Chr4	18068447	18068447	Insertion_46bp
Chr4	18069654	18069680	Deletion_26bp
Chr4	18078509	18078544	Deletion_35bp
Chr4	10141981	10141981	Insertion_238bp

Chr4	10145858	10145895	Deletion_37bp
Chr4	10155345	10155345	Insertion_146bp
Chr4	2375358	2375358	Insertion_28bp
Chr4	2387729	2387729	Insertion_20bp
Chr4	2388434	2388463	Deletion_29bp
Chr4	2394551	2394573	Deletion_22bp
Chr4	2402717	2402748	Deletion_31bp
Chr4	11566645	11566666	Deletion_21bp
Chr4	11573373	11573452	Deletion_79bp
Chr4	17212069	17212093	Deletion_24bp
Chr4	17212506	17212506	Insertion_49bp
Chr4	17216782	17216782	Insertion_26bp
Chr4	14992674	14992674	Insertion_36bp
Chr4	14994212	14994236	Deletion_24bp
Chr4	10271600	10271637	Deletion_37bp
Chr4	10276555	10276555	Insertion_27bp
Chr4	10283878	10283878	Insertion_323bp
Chr4	10295650	10295680	Deletion_30bp
Chr4	18175274	18175315	Deletion_41bp
Chr4	18179550	18179550	Insertion_23bp
Chr4	9815394	9815394	Insertion_564bp
Chr4	3693404	3693428	Deletion_24bp
Chr4	3702174	3702174	Insertion_21bp
Chr4	3706362	3706362	Insertion_128bp
Chr4	3708202	3708265	Deletion_63bp
Chr4	460370	460370	Insertion_542bp
Chr4	464186	464186	Insertion_31bp
Chr4	6835064	6835064	Insertion_1803bp
Chr4	6837039	6837039	Insertion_405bp
Chr4	6854309	6854350	Deletion_41bp
Chr4	6432718	6432718	Insertion_67bp
Chr4	6433380	6433403	Deletion_23bp
Chr4	6438899	6438899	Insertion_51bp
Chr4	6441913	6441935	Deletion_22bp
Chr4	6459139	6459155	Insertion_227bp
Chr4	9192432	9192432	Insertion_1466bp
Chr4	10919259	10919674	Deletion_415bp
Chr4	10920213	10920213	Insertion_20bp
Chr4	10921124	10921124	Insertion_100bp
Chr4	10925317	10925317	Insertion_36bp
Chr4	17450635	17450635	Insertion_21bp
Chr4	17451479	17451513	Deletion_34bp
Chr4	14783262	14783284	Deletion_22bp
Chr4	14785283	14785283	Insertion_26bp
Chr4	2181404	2181404	Insertion_35bp
Chr4	2183821	2183866	Deletion_45bp
Chr4	2193833	2193874	Deletion_41bp
Chr4	2202397	2202397	Insertion_393bp
Chr4	7951446	7951446	Insertion_373bp

Chr4	7963546	7963546	Insertion_316bp
Chr4	719150	719150	Insertion_23bp
Chr4	727280	727280	Insertion_591bp
Chr4	17491311	17491311	Insertion_21bp
Chr4	7687980	7687980	Insertion_339bp
Chr4	8881911	8881976	Deletion_65bp
Chr4	8890451	8890451	Insertion_139bp
Chr4	11916448	11916448	Insertion_648bp
Chr4	11924764	11924797	Deletion_33bp
Chr4	123609	123609	Insertion_45bp
Chr4	126491	126491	Insertion_32bp
Chr4	3150593	3150593	Insertion_3164bp
Chr4	3156985	3156985	Insertion_276bp
Chr4	3157331	3157331	Insertion_45bp
Chr4	3162253	3162253	Insertion_52bp
Chr4	16617603	16618449	Deletion_846bp
Chr4	16631352	16631352	Insertion_34bp
Chr4	16636809	16637031	Deletion_222bp
Chr4	7087378	7087378	Insertion_22bp
Chr4	7102103	7102239	Deletion_136bp
Chr4	7103106	7103270	Deletion_164bp
Chr4	7104514	7104514	Insertion_28bp
Chr4	9284784	9284939	Deletion_155bp
Chr4	9286352	9286376	Deletion_24bp
Chr4	9286980	9286980	Insertion_3954bp
Chr4	10523582	10523606	Deletion_24bp
Chr4	10934619	10935373	Deletion_754bp
Chr4	10941746	10941746	Insertion_248bp
Chr4	10958610	10958610	Insertion_22bp
Chr4	10766967	10767322	Deletion_355bp
Chr4	7904394	7904394	Insertion_542bp
Chr4	7907340	7907365	Deletion_25bp
Chr4	7913294	7913323	Deletion_29bp
Chr4	7914169	7914169	Insertion_20bp
Chr4	7914170	7914203	Deletion_33bp
Chr4	15082010	15082045	Deletion_35bp
Chr4	6339154	6340309	Deletion_1155bp
Chr4	6342498	6342524	Deletion_26bp
Chr4	6344092	6344092	Insertion_38bp
Chr4	6350835	6350835	Insertion_1114bp
Chr4	6355215	6355247	Deletion_32bp
Chr4	3359485	3359485	Insertion_34bp
Chr4	6768133	6768133	Insertion_735bp
Chr4	6785984	6785984	Insertion_4747bp
Chr4	6788330	6788330	Insertion_143bp
Chr4	6802120	6802120	Insertion_28bp
Chr4	6806950	6806984	Deletion_34bp
Chr4	6810319	6810319	Insertion_1705bp
Chr4	6811083	6811083	Insertion_28bp

Chr4	5792819	5792819	Insertion_33bp
Chr4	5793010	5793010	Insertion_20bp
Chr4	11040137	11040367	Deletion_233bp
Chr4	11042195	11042252	Deletion_57bp
Chr4	11043137	11043137	Insertion_29bp
Chr4	11046688	11046688	Insertion_285bp
Chr4	3641213	3641213	Insertion_31bp
Chr4	3642235	3642264	Deletion_29bp
Chr4	3646886	3646886	Insertion_6808bp
Chr4	3648132	3648132	Insertion_958bp
Chr4	3651082	3651300	Deletion_218bp
Chr4	3652502	3652555	Deletion_53bp
Chr4	3654717	3654739	Deletion_22bp
Chr4	1871929	1871959	Deletion_30bp
Chr4	1883859	1883882	Deletion_23bp
Chr4	1887016	1887040	Deletion_24bp
Chr4	1887666	1887666	Insertion_23bp
Chr4	9080137	9080722	Deletion_585bp
Chr4	9086776	9086797	Deletion_21bp
Chr4	9089536	9089536	Insertion_492bp
Chr4	9090996	9090996	Insertion_34bp
Chr4	9093797	9093821	Deletion_24bp
Chr4	9096196	9096240	Deletion_44bp
Chr4	9101603	9101603	Insertion_5326bp
Chr4	9105259	9105259	Insertion_2097bp
Chr4	9111580	9112129	Deletion_549bp
Chr4	9124384	9124384	Insertion_25bp
Chr4	8370402	8370402	Insertion_40bp
Chr4	8372057	8372057	Insertion_23bp
Chr4	8378252	8378252	Insertion_494bp
Chr4	8383197	8383197	Insertion_3220bp
Chr4	2671876	2671987	Deletion_111bp
Chr4	2677233	2677257	Deletion_24bp
Chr4	2688754	2688754	Insertion_52bp
Chr4	3882065	3882095	Deletion_30bp
Chr4	3896416	3896467	Deletion_51bp
Chr4	3896729	3896729	Insertion_22bp
Chr4	5380093	5380093	Insertion_25bp
Chr4	5382677	5382699	Deletion_22bp
Chr4	5384043	5384043	Insertion_98bp
Chr4	5384727	5384868	Deletion_141bp
Chr4	5386894	5386915	Deletion_21bp
Chr4	748744	748794	Deletion_50bp
Chr4	752188	756048	Deletion_3860bp
Chr4	764246	764315	Deletion_69bp
Chr4	6702045	6702045	Insertion_165bp
Chr4	6711183	6711226	Deletion_43bp
Chr4	6713378	6713399	Deletion_21bp
Chr4	683219	684358	Deletion_1139bp

Chr4	8837273	8837273	Insertion_34bp
Chr4	8838741	8838741	Insertion_20bp
Chr4	8850528	8850574	Deletion_46bp
Chr4	8852218	8852281	Deletion_63bp
Chr4	8854567	8854567	Insertion_3749bp
Chr4	8860255	8860255	Insertion_280bp
Chr4	8926865	8926865	Insertion_22bp
Chr4	8942259	8942299	Deletion_40bp
Chr4	2133790	2133860	Deletion_70bp
Chr4	7174554	7174554	Insertion_49bp
Chr4	11033734	11033734	Insertion_21bp
Chr4	9016267	9016267	Insertion_70bp
Chr4	9027862	9027862	Insertion_35bp
Chr4	8979001	8979027	Deletion_26bp
Chr4	8981964	8981964	Insertion_136bp
Chr4	8984499	8984499	Insertion_51bp
Chr4	9890639	9890639	Insertion_31bp
Chr4	9903905	9903943	Deletion_38bp
Chr4	9908329	9908385	Deletion_56bp
Chr4	5815596	5815681	Deletion_93bp
Chr4	5822419	5827299	Deletion_4880bp
Chr4	5836584	5836584	Insertion_20bp
Chr4	5843985	5843985	Insertion_39bp
Chr4	16598291	16598291	Insertion_59bp
Chr4	16613537	16613557	Deletion_20bp
Chr4	18411118	18411165	Deletion_47bp
Chr4	1548270	1548310	Deletion_40bp
Chr4	1550271	1550313	Deletion_42bp
Chr4	1553665	1553665	Insertion_39bp
Chr4	12933605	12933605	Insertion_56bp
Chr4	12947127	12947127	Insertion_1137bp
Chr4	12948908	12949455	Deletion_547bp
Chr4	13314412	13314433	Deletion_21bp
Chr4	13316593	13317049	Deletion_456bp
Chr4	13318506	13318506	Insertion_48bp
Chr4	529544	529544	Insertion_5270bp
Chr4	5088627	5088627	Insertion_54bp
Chr4	5090340	5090374	Deletion_34bp
Chr4	5096434	5096474	Deletion_40bp
Chr4	5097012	5097033	Deletion_21bp
Chr4	5097231	5097231	Insertion_31bp
Chr4	5098790	5098790	Insertion_23bp
Chr4	5100991	5101244	Deletion_253bp
Chr4	16252895	16252895	Insertion_26bp
Chr4	16260064	16260095	Deletion_31bp
Chr4	16263065	16263116	Deletion_51bp
Chr4	16264945	16264969	Deletion_24bp
Chr4	1984666	1984758	Deletion_92bp
Chr4	1987211	1987252	Deletion_41bp

Chr4	1990407	1990432	Deletion_25bp
Chr4	1996145	1996145	Insertion_21bp
Chr4	1999339	1999615	Deletion_276bp
Chr4	2006471	2006471	Insertion_28bp
Chr4	2007531	2007531	Insertion_25bp
Chr4	985715	985715	Insertion_22bp
Chr4	8070154	8070176	Deletion_22bp
Chr4	8086117	8086144	Deletion_27bp
Chr4	11853894	11853894	Insertion_102bp
Chr4	201890	201915	Deletion_25bp
Chr4	5604461	5606168	Deletion_1707bp
Chr4	17663718	17663810	Deletion_97bp
Chr4	17667291	17667291	Insertion_22bp
Chr4	17669018	17669056	Deletion_38bp
Chr4	8798011	8798065	Deletion_54bp
Chr4	6125933	6125971	Deletion_38bp
Chr4	6135832	6135868	Deletion_36bp
Chr4	6142499	6142499	Insertion_64bp
Chr4	6143803	6143825	Deletion_22bp
Chr4	6145535	6145535	Insertion_34bp
Chr4	6146493	6146499	Insertion_56bp
Chr4	6197615	6197637	Deletion_22bp
Chr4	6198291	6198291	Insertion_63bp
Chr4	6207560	6207560	Insertion_56bp
Chr4	6212649	6212670	Deletion_21bp
Chr4	7291637	7291637	Insertion_20bp
Chr4	7298986	7299366	Deletion_380bp
Chr4	7300375	7301664	Deletion_1289bp
Chr4	3011943	3011943	Insertion_37bp
Chr4	3012191	3012339	Deletion_148bp
Chr4	3021842	3021842	Insertion_44bp
Chr4	3023222	3023246	Deletion_24bp
Chr4	566428	566428	Insertion_1240bp
Chr4	566519	566519	Insertion_28bp
Chr4	580018	580018	Insertion_20bp
Chr4	3446233	3446276	Deletion_43bp
Chr4	3446992	3446992	Insertion_35bp
Chr4	3447350	3447385	Deletion_35bp
Chr4	3667909	3667929	Deletion_20bp
Chr4	3671843	3671843	Insertion_472bp
Chr4	3672241	3672241	Insertion_1595bp
Chr4	3673523	3674119	Deletion_596bp
Chr4	9163546	9163546	Insertion_1529bp
Chr4	9164095	9164115	Deletion_20bp
Chr4	7319253	7319253	Insertion_4658bp
Chr4	7322564	7322645	Deletion_81bp
Chr4	12830183	12830212	Deletion_29bp
Chr4	12836689	12836689	Insertion_184bp
Chr4	12842354	12842410	Deletion_56bp

Chr4	7989355	7989355	Insertion_39bp
Chr4	7233637	7233637	Insertion_37bp
Chr4	7233683	7233683	Insertion_35bp
Chr4	7246314	7246314	Insertion_1420bp
Chr4	7254709	7254709	Insertion_26bp
Chr4	8118752	8118752	Insertion_45bp
Chr4	8121259	8121282	Deletion_23bp
Chr4	8126670	8126670	Insertion_12653bp
Chr4	8139657	8139792	Deletion_135bp
Chr4	8143468	8143505	Deletion_37bp
Chr4	4977165	4977165	Insertion_28bp
Chr4	4982867	4983112	Deletion_245bp
Chr4	4983385	4983385	Insertion_24bp
Chr4	15319788	15319828	Deletion_40bp
Chr4	237837	237837	Insertion_34bp
Chr4	238045	238045	Insertion_21bp
Chr4	488411	488431	Deletion_20bp
Chr4	498878	498878	Insertion_47bp
Chr4	11732800	11732846	Deletion_46bp
Chr4	11735049	11735049	Insertion_90bp
Chr4	1933946	1933985	Deletion_39bp
Chr4	1942520	1942604	Deletion_84bp
Chr4	1524524	1524554	Deletion_30bp
Chr4	10563144	10563165	Deletion_21bp
Chr4	10565634	10565655	Deletion_21bp
Chr4	10574301	10574301	Insertion_22bp
Chr4	17571947	17571968	Deletion_21bp
Chr4	2828976	2828976	Insertion_22bp
Chr4	3181758	3181758	Insertion_49bp
Chr4	3182852	3182852	Insertion_41bp
Chr4	3184743	3184743	Insertion_28bp
Chr4	7346926	7348635	Deletion_1709bp
Chr4	7355492	7356406	Deletion_914bp
Chr4	7359456	7364591	Deletion_5135bp
Chr4	7364726	7364726	Insertion_42bp
Chr4	7368525	7368525	Insertion_21bp
Chr4	5954674	5954698	Deletion_24bp
Chr4	5955310	5955310	Insertion_46bp
Chr4	5965688	5970868	Deletion_5180bp
Chr4	5976229	5976229	Insertion_53bp
Chr4	5978045	5978665	Deletion_620bp
Chr4	5983044	5983095	Deletion_51bp
Chr4	5986774	5986774	Insertion_100bp
Chr4	7389509	7389509	Insertion_24bp
Chr4	7396214	7396256	Deletion_42bp
Chr4	14258415	14258415	Insertion_40bp
Chr4	6405236	6405259	Deletion_23bp
Chr4	2324197	2324197	Insertion_2458bp
Chr4	2325847	2325847	Insertion_420bp

Chr4	2327757	2327757	Insertion_26bp
Chr4	2330825	2330825	Insertion_47bp
Chr4	9003749	9003770	Deletion_21bp
Chr4	9005561	9005593	Deletion_32bp
Chr4	4872281	4872281	Insertion_33bp
Chr4	4872888	4872888	Insertion_53bp
Chr4	4883016	4883037	Deletion_21bp
Chr4	10971245	10971245	Insertion_32bp
Chr4	14273502	14273502	Insertion_20bp
Chr4	14280172	14288306	Deletion_8134bp
Chr4	10341385	10341756	Deletion_371bp
Chr4	10344353	10344375	Deletion_22bp
Chr4	10354115	10354146	Deletion_31bp
Chr4	11140930	11140996	Deletion_66bp
Chr4	11146475	11146519	Deletion_44bp
Chr4	11149567	11149598	Deletion_31bp
Chr4	8819849	8819849	Insertion_31bp
Chr4	2165712	2165876	Deletion_164bp
Chr4	2176628	2176628	Insertion_80bp
Chr4	2179567	2179602	Deletion_35bp
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Chr4	9962288	9962288	Insertion_36bp
Chr4	9969165	9969220	Deletion_55bp
Chr4	9971055	9971055	Insertion_4936bp
Chr4	9973999	9973999	Insertion_556bp
Chr4	9978612	9978612	Insertion_22bp
Chr4	6009664	6009664	Insertion_37bp
Chr4	6017288	6017318	Deletion_30bp
Chr4	14163489	14164890	Deletion_1401bp
Chr4	15233562	15233562	Insertion_139bp
Chr4	17758098	17758098	Insertion_5196bp
Chr4	9988297	9988297	Insertion_46bp
Chr4	9989030	9989055	Deletion_25bp
Chr4	9989528	9989528	Insertion_1693bp
Chr4	9999064	9999064	Insertion_42bp
Chr4	1630034	1630034	Insertion_362bp
Chr4	1633468	1633857	Deletion_389bp
Chr4	1634877	1634877	Insertion_21bp
Chr4	1668979	1668979	Insertion_45bp
Chr4	1669952	1669986	Deletion_34bp
Chr4	1675093	1675118	Deletion_25bp
Chr4	1677570	1677570	Insertion_10144bp
Chr4	1677874	1677909	Deletion_35bp
Chr4	1684002	1684069	Deletion_67bp
Chr4	1686256	1686256	Insertion_50bp
Chr4	1688416	1688448	Deletion_32bp
Chr4	1690378	1691700	Deletion_1322bp
Chr4	1694956	1694993	Deletion_37bp
Chr4	1695178	1695178	Insertion_28bp

Chr4	1697177	1697177	Insertion_1528bp
Chr4	10716399	10717042	Deletion_643bp
Chr4	10718455	10718455	Insertion_37bp
Chr4	10718527	10718527	Insertion_30bp
Chr4	10720638	10720681	Deletion_43bp
Chr4	10723044	10723044	Insertion_502bp
Chr4	6992604	6994364	Deletion_1760bp
Chr4	6996038	6996127	Deletion_89bp
Chr4	6999767	6999787	Deletion_20bp
Chr4	1012021	1012103	Deletion_82bp
Chr4	1013345	1013909	Deletion_564bp
Chr4	1016799	1021356	Deletion_4557bp
Chr4	1897747	1897747	Insertion_24bp
Chr4	1899116	1899142	Deletion_26bp
Chr4	1900404	1900424	Deletion_20bp
Chr4	1902082	1902082	Insertion_10710bp
Chr4	1907998	1908019	Deletion_21bp
Chr4	1910430	1910430	Insertion_315bp
Chr4	1914853	1915377	Deletion_524bp
Chr4	798951	798951	Insertion_54bp
Chr4	799761	799873	Deletion_112bp
Chr4	800858	800858	Insertion_211bp
Chr4	949445	949445	Insertion_526bp
Chr4	950033	950053	Deletion_20bp
Chr4	11832368	11832368	Insertion_20bp
Chr4	11832490	11832522	Deletion_32bp
Chr4	11834124	11838648	Deletion_4524bp
Chr4	11840148	11840185	Deletion_37bp
Chr4	11842438	11842438	Insertion_21bp
Chr4	11843299	11843299	Insertion_135bp
Chr4	6885662	6885662	Insertion_22bp
Chr4	4179325	4179325	Insertion_1561bp
Chr4	4181146	4181169	Deletion_23bp
Chr4	4184418	4184418	Insertion_280bp
Chr4	6089632	6089632	Insertion_32bp
Chr4	6092901	6092901	Insertion_4244bp
Chr4	6103666	6106851	Deletion_3185bp
Chr4	1511824	1511824	Insertion_32bp
Chr4	4172640	4172640	Insertion_191bp
Chr4	6743887	6743920	Deletion_33bp
Chr4	6748487	6748508	Deletion_21bp
Chr4	9058826	9058853	Deletion_27bp
Chr4	2607858	2607878	Deletion_20bp
Chr4	2608065	2608102	Deletion_37bp
Chr4	2608796	2608796	Insertion_23bp
Chr4	2611249	2611314	Deletion_65bp
Chr4	2615118	2615118	Insertion_504bp
Chr4	2616340	2617552	Deletion_1212bp
Chr4	2619520	2619550	Deletion_30bp

Chr4	514776	514957	Deletion_181bp
Chr4	6527367	6527397	Deletion_30bp
Chr4	6529310	6537161	Deletion_7851bp
Chr4	1963849	1963849	Insertion_396bp
Chr4	1965106	1965106	Insertion_319bp
Chr4	11211517	11211517	Insertion_38bp
Chr4	11214372	11214419	Deletion_47bp
Chr4	6822906	6822906	Insertion_46bp
Chr4	6827464	6829604	Deletion_2140bp
Chr4	6508893	6508893	Insertion_22bp
Chr4	6510762	6510762	Insertion_36bp
Chr4	3723707	3723733	Deletion_26bp
Chr4	3723963	3723963	Insertion_42bp
Chr4	479911	479911	Insertion_33bp
Chr4	479946	479946	Insertion_26bp
Chr4	5341807	5341807	Insertion_25bp
Chr4	5342717	5342717	Insertion_27bp
Chr4	5346634	5346686	Deletion_52bp
Chr4	5351681	5351681	Insertion_32bp
Chr4	6158776	6158776	Insertion_181bp
Chr4	6164816	6164842	Deletion_26bp
Chr4	6167758	6167779	Deletion_21bp
Chr4	4859675	4860042	Deletion_367bp
Chr4	7929345	7929405	Deletion_60bp
Chr4	7930239	7930239	Insertion_53bp
Chr4	7938734	7938734	Insertion_5973bp
Chr4	7627077	7627077	Insertion_68bp
Chr4	7627744	7627744	Insertion_23bp
Chr4	1355761	1355761	Insertion_37bp
Chr4	1357168	1357168	Insertion_27bp
Chr4	1358892	1358892	Insertion_23bp
Chr4	15221333	15221333	Insertion_27bp
Chr4	15225402	15225443	Deletion_41bp
Chr4	15226333	15226820	Deletion_487bp
Chr4	15226934	15227421	Deletion_487bp
Chr4	2219130	2219162	Deletion_32bp
Chr4	2219726	2219770	Deletion_44bp
Chr4	2220197	2220197	Insertion_129bp
Chr4	8637472	8638249	Deletion_777bp
Chr4	5935124	5935474	Deletion_357bp
Chr4	5936030	5936055	Deletion_25bp
Chr4	4070771	4070819	Deletion_48bp
Chr4	4077733	4077754	Deletion_21bp
Chr4	17081499	17081499	Insertion_53bp
Chr4	17091026	17091062	Deletion_36bp
Chr4	3050779	3050779	Insertion_147bp
Chr4	218459	218459	Insertion_29bp
Chr4	910722	910722	Insertion_44bp
Chr4	910776	910776	Insertion_69bp

Chr4	911295	911295	Insertion_21bp
Chr4	920685	920817	Deletion_132bp
Chr4	921091	921091	Insertion_4992bp
Chr4	7760026	7760074	Deletion_48bp
Chr4	6895680	6895680	Insertion_769bp
Chr4	6898625	6898705	Deletion_80bp
Chr4	18522762	18522762	Insertion_111bp
Chr4	18526361	18526520	Deletion_159bp
Chr4	18526569	18526593	Deletion_24bp
Chr4	10701511	10701532	Deletion_21bp
Chr4	8267414	8267414	Insertion_26bp
Chr4	2989839	2994784	Deletion_4945bp
Chr4	2997402	2997423	Deletion_21bp
Chr4	3002970	3002970	Insertion_24bp
Chr4	5763772	5763772	Insertion_3066bp
Chr4	2543917	2544317	Deletion_400bp
Chr4	2551985	2551985	Insertion_36bp
Chr4	10359421	10359421	Insertion_729bp
Chr4	9128784	9128784	Insertion_31bp
Chr4	6173125	6173125	Insertion_21bp
Chr4	6178449	6179575	Deletion_1126bp
Chr4	6179738	6179762	Deletion_24bp
Chr4	7028531	7032555	Deletion_4024bp
Chr4	7034251	7034792	Deletion_541bp
Chr4	7036084	7036084	Insertion_41bp
Chr4	7039449	7039492	Deletion_43bp
Chr4	797543	797578	Deletion_35bp
Chr4	185991	185991	Insertion_67bp
Chr4	18169188	18169210	Deletion_22bp
Chr4	6925644	6925679	Deletion_35bp
Chr4	6927139	6927184	Deletion_45bp
Chr4	4151732	4151804	Deletion_72bp
Chr4	11757264	11757264	Insertion_20bp
Chr4	11759140	11759140	Insertion_20bp
Chr4	10171516	10175297	Deletion_3781bp
Chr4	18534304	18534304	Insertion_32bp
Chr4	3846060	3846081	Deletion_21bp
Chr4	5742313	5742399	Deletion_86bp
Chr4	5742439	5742485	Deletion_46bp
Chr4	5744792	5744792	Insertion_4548bp
Chr4	5753183	5753183	Insertion_5692bp
Chr4	936740	936740	Insertion_36bp
Chr4	5038239	5038239	Insertion_34bp
Chr4	5041702	5041981	Deletion_279bp
Chr4	11008300	11008300	Insertion_21bp
Chr4	11008494	11008494	Insertion_26bp
Chr4	11009063	11009085	Deletion_22bp
Chr4	11015702	11015702	Insertion_32bp
Chr4	6365763	6367674	Deletion_1911bp

Chr4	6368348	6368348	Insertion_23bp
Chr4	6376606	6379047	Deletion_2441bp
Chr4	9556059	9556059	Insertion_518bp
Chr4	9556765	9556765	Insertion_491bp
Chr4	9559464	9559485	Deletion_21bp
Chr4	9560015	9560015	Insertion_28bp
Chr4	9563688	9563688	Insertion_3130bp
Chr4	9567289	9567289	Insertion_28bp
Chr4	9570494	9575605	Deletion_5111bp
Chr4	10663401	10663432	Deletion_31bp
Chr4	10665711	10665711	Insertion_356bp
Chr4	10666006	10666006	Insertion_37bp
Chr4	10666031	10666031	Insertion_24bp
Chr4	2424047	2424084	Deletion_37bp
Chr4	2427631	2427657	Deletion_26bp
Chr4	5356133	5356153	Deletion_20bp
Chr4	5358516	5358585	Deletion_69bp
Chr4	5359838	5359838	Insertion_150bp
Chr4	5360973	5361009	Deletion_36bp
Chr4	11741148	11741148	Insertion_21bp
Chr4	782342	782342	Insertion_44bp
Chr4	5311406	5311406	Insertion_145bp
Chr4	5312054	5312126	Deletion_72bp
Chr4	5317712	5317712	Insertion_48bp
Chr4	17110578	17110633	Deletion_55bp
Chr4	8762492	8762721	Deletion_229bp
Chr4	8765823	8765823	Insertion_72bp
Chr4	8768546	8769325	Deletion_779bp
Chr4	5467167	5467167	Insertion_54bp
Chr4	5324625	5324625	Insertion_225bp
Chr4	5324682	5324682	Insertion_75bp
Chr4	6971093	6971093	Insertion_22bp
Chr4	6976168	6976193	Deletion_25bp
Chr4	2971491	2971554	Deletion_63bp
Chr4	2977595	2977595	Insertion_32bp
Chr4	2978191	2978547	Deletion_356bp
Chr4	8102571	8102571	Insertion_25bp
Chr4	5698817	5698817	Insertion_27bp
Chr4	5700053	5700068	Insertion_1881bp
Chr4	5703037	5703064	Deletion_27bp
Chr4	5703287	5703287	Insertion_27bp
Chr4	5706298	5706298	Insertion_731bp
Chr4	5706506	5706531	Deletion_25bp
Chr4	5709035	5709035	Insertion_20bp
Chr4	5711194	5711194	Insertion_47bp
Chr4	7160243	7160271	Deletion_28bp
Chr4	7166917	7166939	Deletion_22bp
Chr4	2668017	2668057	Deletion_40bp
Chr4	5076698	5076698	Insertion_1254bp

Chr4	7263141	7263199	Deletion_58bp
Chr4	7266677	7266677	Insertion_23bp
Chr4	7268242	7268242	Insertion_1711bp
Chr4	8536890	8536984	Deletion_94bp
Chr4	14912751	14912751	Insertion_48bp
Chr4	14914868	14914868	Insertion_33bp
Chr4	431107	431107	Insertion_28bp
Chr4	373063	373063	Insertion_43bp
Chr4	4793391	4793391	Insertion_37bp
Chr4	4796996	4797037	Deletion_41bp
Chr4	7832083	7832220	Deletion_137bp
Chr4	7833413	7833413	Insertion_2722bp
Chr4	7836202	7836202	Insertion_22bp
Chr4	1437226	1437256	Deletion_30bp
Chr4	858607	858607	Insertion_147bp
Chr4	860922	865795	Deletion_4873bp
Chr4	8020388	8020388	Insertion_56bp
Chr4	9044664	9044664	Insertion_26bp
Chr4	2225728	2225728	Insertion_28bp
Chr4	2226548	2226932	Deletion_384bp
Chr4	2233333	2233354	Deletion_21bp
Chr4	6869023	6869023	Insertion_1153bp
Chr4	8565572	8565572	Insertion_43bp
Chr4	2801879	2801879	Insertion_29bp
Chr4	10262886	10262909	Deletion_23bp
Chr4	10266144	10266176	Deletion_32bp
Chr4	10266618	10266659	Deletion_41bp
Chr4	10268017	10268017	Insertion_21bp
Chr4	10270921	10270921	Insertion_43bp
Chr4	8102571	8102571	Insertion_26bp
Chr4	3105288	3105316	Deletion_28bp
Chr4	3106456	3106507	Deletion_51bp
Chr4	3107806	3107806	Insertion_792bp
Chr4	3108652	3108652	Insertion_24bp
Chr4	2783581	2783581	Insertion_48bp
Chr4	2789596	2793641	Deletion_4045bp
Chr4	2798171	2798171	Insertion_21bp
Chr4	2798575	2798603	Deletion_28bp
Chr4	5718830	5718830	Insertion_30bp
Chr4	5720569	5720592	Deletion_23bp
Chr4	8029888	8029888	Insertion_553bp
Chr4	8031795	8031795	Insertion_69bp
Chr4	8031998	8032026	Deletion_28bp
Chr4	10002777	10002816	Deletion_39bp
Chr4	16578823	16578823	Insertion_29bp
Chr4	16584367	16584367	Insertion_38bp
Chr4	974209	974209	Insertion_49bp
Chr4	976313	976334	Deletion_21bp
Chr4	366531	366563	Deletion_32bp

Chr4	5065509	5065533	Deletion_24bp
Chr4	8543364	8543390	Deletion_26bp
Chr4	8548469	8548469	Insertion_373bp
Chr4	8300246	8300246	Insertion_21bp
Chr4	8301960	8301960	Insertion_30bp
Chr4	15700107	15700107	Insertion_182bp
Chr4	5019667	5019667	Insertion_253bp
Chr4	5023153	5023153	Insertion_398bp
Chr4	5023730	5023785	Deletion_55bp
Chr4	5024465	5025030	Deletion_565bp
Chr4	5028712	5028819	Deletion_107bp
Chr4	5029630	5029630	Insertion_29bp
Chr4	7337913	7337913	Insertion_41bp
Chr4	7342620	7342690	Deletion_70bp
Chr4	11769233	11769245	Insertion_23bp
Chr4	14971408	14971428	Deletion_20bp
Chr4	14971663	14971717	Deletion_54bp
Chr4	2778702	2778730	Deletion_28bp
Chr4	2778885	2779004	Deletion_119bp
Chr4	5715829	5715854	Deletion_25bp
Chr4	5716576	5716576	Insertion_1102bp
Chr4	5717178	5717178	Insertion_25bp
Chr4	10671033	10671090	Deletion_57bp
Chr4	7764139	7764139	Insertion_77bp
Chr4	5737418	5737465	Deletion_47bp
Chr4	7592810	7592810	Insertion_32bp
Chr4	7593231	7593231	Insertion_27bp
Chr4	7594492	7596213	Deletion_1721bp
Chr4	2765581	2765581	Insertion_44bp
Chr4	9654414	9654414	Insertion_29bp
Chr4	9655069	9655100	Deletion_31bp
Chr4	2697612	2697659	Deletion_47bp
Chr4	7611243	7611280	Deletion_37bp
Chr4	7615475	7615515	Deletion_40bp
Chr4	6475735	6475735	Insertion_534bp
Chr4	6696473	6696508	Deletion_35bp
Chr4	6697498	6697559	Deletion_61bp
Chr4	12313946	12313946	Insertion_32bp
Chr4	3056050	3056050	Insertion_253bp
Chr4	3056752	3056752	Insertion_31bp
Chr4	7076669	7076669	Insertion_53bp
Chr4	8094323	8094323	Insertion_501bp
Chr4	5011085	5011085	Insertion_52bp
Chr4	5015816	5015839	Deletion_23bp
Chr4	7227226	7227226	Insertion_39bp
Chr4	10429273	10429273	Insertion_22bp
Chr4	10429654	10429678	Deletion_24bp
Chr4	10430546	10430546	Insertion_34bp
Chr4	10430859	10430859	Insertion_52bp

Chr4	10435273	10435295	Deletion_22bp
Chr4	2238995	2238995	Insertion_20bp
Chr4	2239288	2239288	Insertion_44bp
Chr4	9451010	9451010	Insertion_2495bp
Chr4	8802501	8802501	Insertion_22bp
Chr4	8803259	8803259	Insertion_138bp
Chr4	8803333	8803333	Insertion_29bp
Chr4	8805593	8805626	Deletion_37bp
Chr4	5618029	5619126	Deletion_1097bp
Chr4	5621781	5621781	Insertion_296bp
Chr4	5624077	5624077	Insertion_28bp
Chr4	6936217	6936421	Deletion_204bp
Chr4	6941457	6941497	Deletion_40bp
Chr4	14021817	14021911	Deletion_94bp
Chr4	17594978	17594978	Insertion_3621bp
Chr4	8718861	8718904	Deletion_43bp
Chr4	8721523	8721557	Deletion_34bp
Chr4	867131	867131	Insertion_24bp
Chr4	867432	867495	Deletion_63bp
Chr4	867635	867800	Deletion_165bp
Chr4	869733	869733	Insertion_21bp
Chr4	874211	874211	Insertion_49bp
Chr4	3991187	3991187	Insertion_41bp
Chr4	3991326	3991346	Deletion_20bp
Chr4	3992366	3992366	Insertion_97bp
Chr4	7652565	7653129	Deletion_564bp
Chr4	7204360	7204360	Insertion_312bp
Chr4	5297594	5297594	Insertion_20bp
Chr4	5299024	5299024	Insertion_57bp
Chr4	6548077	6548107	Deletion_30bp
Chr4	6548894	6548934	Deletion_40bp
Chr4	6552421	6552421	Insertion_32bp
Chr4	7201578	7201578	Insertion_25bp
Chr4	4971736	4971736	Insertion_51bp
Chr4	4972026	4972056	Deletion_30bp
Chr4	4973080	4973112	Deletion_32bp
Chr4	2461549	2461549	Insertion_27bp
Chr4	3306257	3306257	Insertion_39bp
Chr4	3309180	3309491	Deletion_311bp
Chr4	7141595	7141595	Insertion_80bp
Chr4	7143339	7143361	Deletion_22bp
Chr4	5771420	5771420	Insertion_76bp
Chr4	694103	694103	Insertion_24bp
Chr4	697597	698825	Deletion_1228bp
Chr4	698899	698927	Deletion_28bp
Chr4	8715663	8715708	Deletion_45bp
Chr4	8716181	8716181	Insertion_31bp
Chr4	8716552	8716581	Deletion_29bp
Chr4	6690597	6690597	Insertion_27bp

Chr4	16704882	16704882	Insertion_20bp
Chr4	2450930	2450930	Insertion_386bp
Chr4	2451977	2452035	Deletion_58bp
Chr4	5989557	5989557	Insertion_30bp
Chr4	7221221	7221243	Deletion_22bp
Chr4	7221422	7221422	Insertion_30bp
Chr4	6737792	6737792	Insertion_24bp
Chr4	834291	834291	Insertion_31bp
Chr4	835897	839785	Deletion_3888bp
Chr4	842782	842810	Deletion_28bp
Chr4	4852337	4852375	Deletion_38bp
Chr4	4854419	4854440	Deletion_21bp
Chr4	1589242	1589242	Insertion_22bp
Chr4	8749476	8749476	Insertion_1603bp
Chr4	8753195	8753217	Deletion_22bp
Chr4	8779157	8779157	Insertion_29bp
Chr4	8780393	8780576	Deletion_183bp
Chr4	8782100	8782126	Deletion_26bp
Chr4	7659822	7659822	Insertion_20bp
Chr4	2638419	2638419	Insertion_35bp
Chr4	2639385	2639406	Deletion_21bp
Chr4	3056752	3056752	Insertion_31bp
Chr4	6123386	6123427	Deletion_41bp
Chr4	10595539	10595578	Deletion_39bp
Chr4	6076532	6076532	Insertion_163bp
Chr4	5771627	5771651	Deletion_24bp
Chr4	16267731	16267731	Insertion_35bp
Chr4	16270857	16270895	Deletion_38bp
Chr4	5001663	5001663	Insertion_60bp
Chr4	6570444	6570472	Deletion_28bp
Chr4	8360332	8360366	Deletion_34bp
Chr4	6483723	6483723	Insertion_30bp
Chr4	6484588	6484588	Insertion_5237bp
Chr4	2351672	2353791	Deletion_2119bp
Chr4	2356029	2356164	Deletion_135bp
Chr4	2358074	2358150	Deletion_76bp
Chr4	2359583	2359631	Deletion_48bp
Chr4	2359910	2360986	Deletion_1076bp
Chr4	2362527	2362749	Deletion_222bp
Chr4	1975533	1975533	Insertion_1608bp
Chr4	1975562	1975562	Insertion_343bp
Chr4	16243338	16243338	Insertion_25bp
Chr4	5669743	5669743	Insertion_27bp
Chr4	5671776	5671776	Insertion_28bp
Chr4	5671880	5671908	Deletion_28bp
Chr4	5673239	5673733	Deletion_494bp
Chr4	7422239	7422239	Insertion_263bp
Chr4	7422543	7422543	Insertion_193bp
Chr4	7423818	7423938	Deletion_120bp

Chr4	10422656	10422656	Insertion_24bp
Chr4	2662501	2662501	Insertion_33bp
Chr4	2583581	2583581	Insertion_758bp
Chr4	1820162	1820162	Insertion_33bp
Chr4	1821729	1821753	Deletion_24bp
Chr4	1822028	1822028	Insertion_23bp
Chr4	13721382	13721824	Deletion_442bp
Chr4	7157981	7158001	Deletion_20bp
Chr4	9325883	9325883	Insertion_1194bp
Chr4	248404	248404	Insertion_261bp
Chr4	4681766	4681849	Deletion_83bp
Chr4	4684206	4684206	Insertion_95bp
Chr4	4684530	4684530	Insertion_63bp
Chr4	1137314	1137492	Deletion_178bp
Chr4	1139812	1139844	Deletion_32bp
Chr4	4202174	4202174	Insertion_38bp
Chr4	11562659	11562702	Deletion_43bp
Chr4	9039758	9039778	Deletion_20bp
Chr4	2625692	2625692	Insertion_29bp
Chr4	8111812	8111812	Insertion_248bp
Chr4	8113411	8113411	Insertion_34bp
Chr4	2633083	2633124	Deletion_41bp
Chr4	9595904	9595904	Insertion_43bp
Chr4	6412527	6412527	Insertion_44bp
Chr4	6930980	6930980	Insertion_2122bp
Chr4	6932122	6932122	Insertion_21bp
Chr4	6932736	6932736	Insertion_22bp
Chr4	9947708	9947708	Insertion_30bp
Chr4	9948709	9948765	Deletion_56bp
Chr4	9948823	9948850	Deletion_40bp
Chr4	2591365	2591365	Insertion_34bp
Chr4	2582168	2582219	Deletion_51bp
Chr4	10734988	10735009	Deletion_21bp
Chr4	419265	419291	Deletion_26bp
Chr4	8039923	8040360	Deletion_437bp
Chr4	3845394	3845394	Insertion_47bp
Chr4	3848941	3848984	Deletion_43bp
Chr4	4162383	4162410	Deletion_27bp
Chr4	4167824	4167865	Deletion_41bp
Chr4	2436526	2436526	Insertion_29bp
Chr4	4555509	4555533	Deletion_24bp
Chr4	8728401	8730452	Deletion_2051bp
Chr4	8156976	8156976	Insertion_186bp
Chr4	10738942	10738942	Insertion_31bp
Chr4	3056752	3056752	Insertion_31bp
Chr4	3057367	3057367	Insertion_139bp
Chr4	2575742	2575763	Deletion_21bp
Chr4	6463370	6463378	Insertion_43bp
Chr4	6906754	6906806	Deletion_60bp

Chr4	3277333	3277357	Deletion_32bp
Chr4	905626	905626	Insertion_807bp
Chr4	4135519	4135519	Insertion_555bp
Chr4	1893113	1893162	Deletion_49bp
Chr4	851819	851902	Deletion_83bp
Chr4	3806386	3806386	Insertion_24bp
Chr4	11394828	11394863	Deletion_35bp
Chr4	7618092	7618116	Deletion_24bp
Chr4	10704958	10704984	Deletion_26bp
Chr4	7667409	7667409	Insertion_21bp
Chr4	1903434	1903473	Deletion_39bp
Chr4	1905074	1905074	Insertion_42bp
Chr4	820926	820926	Insertion_64bp
Chr4	545826	545846	Deletion_20bp
Chr4	3988965	3988965	Insertion_98bp
Chr4	7279795	7279795	Insertion_226bp
Chr4	17718136	17718176	Deletion_40bp
Chr4	6222732	6222732	Insertion_22bp
Chr4	10817203	10817203	Insertion_33bp
Chr4	4956235	4956292	Deletion_57bp
Chr4	5072626	5072626	Insertion_32bp
Chr4	8921542	8921542	Insertion_42bp
Chr4	4085716	4085716	Insertion_48bp
Chr4	13304558	13304558	Insertion_33bp
Chr4	7640576	7640605	Deletion_29bp
Chr4	4092360	4092360	Insertion_147bp
Chr4	4094085	4094085	Insertion_41bp
Chr4	2587188	2587188	Insertion_456bp
Chr4	2587281	2587281	Insertion_228bp
Chr4	2588555	2588555	Insertion_37bp
Chr4	10676829	10676829	Insertion_46bp
Chr4	3989774	3989796	Deletion_22bp
Chr4	3990440	3990440	Insertion_45bp
Chr4	3990816	3990816	Insertion_97bp
Chr4	7732584	7732799	Deletion_215bp
Chr4	9035977	9035977	Insertion_21bp
Chr4	10610239	10610239	Insertion_311bp
Chr4	10183460	10183460	Insertion_167bp
Chr4	6073860	6073893	Deletion_33bp
Chr4	6486261	6486296	Deletion_35bp
Chr4	3867993	3867993	Insertion_97bp
Chr4	8529532	8529569	Deletion_37bp
Chr4	16705097	16705097	Insertion_26bp
Chr4	558256	559238	Deletion_982bp
Chr4	559350	559374	Deletion_24bp
Chr4	559422	559464	Deletion_42bp
Chr4	1114444	1114505	Deletion_61bp
Chr4	13883105	13883105	Insertion_44bp
Chr4	8735592	8735592	Insertion_27bp

Chr4	970762	970847	Deletion_85bp
Chr4	11763683	11763683	Insertion_54bp
Chr4	2211386	2211386	Insertion_141bp
Chr4	2932254	2932435	Deletion_181bp
Chr4	15229486	15229486	Insertion_24bp
Chr4	10983244	10983244	Insertion_23bp
Chr4	17770899	17770926	Deletion_27bp
Chr4	6688240	6688240	Insertion_99bp
Chr4	17027337	17027378	Deletion_41bp
Chr4	6911417	6911417	Insertion_24bp
Chr4	7262217	7262239	Deletion_22bp
Chr4	4133854	4133854	Insertion_21bp
Chr4	4134807	4134807	Insertion_76bp
Chr4	4135519	4135519	Insertion_487bp
Chr4	10742205	10742205	Insertion_20bp
Chr4	3056752	3056752	Insertion_31bp
Chr4	4150451	4150451	Insertion_39bp
Chr4	11268351	11268351	Insertion_27bp
Chr4	16239182	16239232	Deletion_50bp
Chr4	876777	876799	Deletion_22bp
Chr4	1571991	1571991	Insertion_1469bp
Chr4	1572459	1572480	Deletion_21bp
Chr4	6324620	6324620	Insertion_20bp
Chr4	9686347	9686347	Insertion_64bp
Chr4	9471277	9471277	Insertion_47bp
Chr4	4143841	4143841	Insertion_1088bp
Chr4	9435774	9435774	Insertion_47bp
Chr4	9464410	9464410	Insertion_28bp
Chr4	686473	686473	Insertion_48bp
Chr4	4151983	4152009	Deletion_26bp
Chr4	4152284	4152310	Deletion_26bp
Chr4	4153338	4153383	Deletion_45bp
Chr4	8561478	8561508	Deletion_30bp
Chr4	1808658	1808697	Deletion_39bp
Chr4	10965598	10965598	Insertion_29bp
Chr4	4713434	4713434	Insertion_38bp
Chr4	4715327	4715327	Insertion_56bp
Chr4	4715494	4715494	Insertion_23bp
Chr4	6038173	6038173	Insertion_70bp
Chr4	6038300	6038300	Insertion_29bp
Chr4	12309903	12309903	Insertion_49bp
Chr4	12309927	12309927	Insertion_25bp
Chr4	9466204	9466410	Deletion_206bp
Chr4	18412092	18412285	Deletion_193bp
Chr4	2434409	2434433	Deletion_24bp
Chr4	1609721	1609721	Insertion_64bp
Chr4	2223299	2223338	Deletion_39bp
Chr4	13409786	13409819	Deletion_33bp
Chr4	549193	549193	Insertion_26bp

Chr4	4591769	4591995	Deletion_226bp
Chr4	7814827	7814827	Insertion_77bp
Chr4	9800980	9800980	Insertion_22bp
Chr4	10594422	10594444	Deletion_22bp
Chr4	2487954	2487996	Deletion_42bp
Chr4	10985577	10985597	Deletion_20bp
Chr4	10584331	10584367	Deletion_36bp
Chr4	10584544	10584568	Deletion_24bp
Chr4	3849596	3849704	Deletion_115bp
Chr4	3990470	3990628	Insertion_167bp
Chr4	3994364	3994364	Insertion_57bp
Chr4	3988965	3988965	Insertion_97bp
Chr4	3968954	3969059	Deletion_105bp
Chr4	3969869	3970047	Deletion_178bp
Chr4	9956988	9956988	Insertion_21bp
Chr4	3183783	3183783	Insertion_105bp
Chr4	3990979	3991001	Deletion_22bp
Chr4	3991013	3991062	Deletion_49bp
Chr4	4767985	4767985	Insertion_57bp
Chr4	3850594	3852227	Tandem_expansion_4346bp
Chr4	3850409	3850773	Repeat_contraction_115bp
Chr4	4777647	4778469	Tandem_expansion_1562bp
Chr4	1688684	1694418	Repeat_contraction_164bp
Chr4	3959623	3960911	Repeat_contraction_449bp
Chr4	3994706	3996602	Repeat_contraction_798bp
Chr4	1802101	1802129	Deletion_26bp
Chr4	3505890	3507642	Tandem_expansion_2034bp
Chr4	3845629	3849646	Deletion_4016bp
Chr4	3991065	3991555	Deletion_447bp
Chr4	3058321	3059595	Tandem_expansion_11049bp
Chr4	2978707	2979598	Repeat_contraction_534bp
Chr4	3054779	3058492	Repeat_expansion_13514bp
Chr4	3054327	3060817	Tandem_expansion_7434bp
Chr4	3057445	3061507	Tandem_expansion_5001bp
Chr4	3056359	3061469	Tandem_expansion_5978bp
Chr4	3842879	3866792	Repeat_contraction_18001bp
Chr4	3868327	3872608	Repeat_expansion_202bp
Chr4	3954121	3977629	Repeat_expansion_9869bp
Chr4	3978208	3984300	Repeat_expansion_124bp
Chr4	4773431	4774591	Repeat_contraction_179bp
Chr4	73182	73439	Repeat_expansion_44bp
Chr4	118313	121093	Repeat_expansion_2254bp
Chr4	153990	154633	Repeat_contraction_41bp
Chr4	183885	185937	Repeat_contraction_43bp
Chr4	194944	195175	Repeat_contraction_174bp
Chr4	198532	200261	Repeat_expansion_306bp
Chr4	218316	218449	Repeat_contraction_39bp
Chr4	228210	231261	Repeat_contraction_65bp
Chr4	311898	312411	Tandem_expansion_1296bp

Chr4	312189	314267	Deletion_2066bp
Chr4	360530	361296	Repeat_expansion_275bp
Chr4	361948	362003	Repeat_expansion_58bp
Chr4	368278	368436	Repeat_expansion_26bp
Chr4	376256	379633	Repeat_expansion_135bp
Chr4	408900	418172	Repeat_contraction_8351bp
Chr4	421719	426750	Repeat_contraction_516bp
Chr4	434104	434484	Repeat_contraction_249bp
Chr4	438036	440270	Repeat_contraction_1213bp
Chr4	468303	469554	Repeat_contraction_547bp
Chr4	474006	475181	Repeat_contraction_745bp
Chr4	512915	513283	Repeat_expansion_259bp
Chr4	513775	514036	Repeat_contraction_168bp
Chr4	549318	549759	Repeat_expansion_21bp
Chr4	553840	556911	Repeat_contraction_989bp
Chr4	559757	560300	Repeat_contraction_426bp
Chr4	562525	565063	Repeat_expansion_64bp
Chr4	583252	583573	Repeat_contraction_60bp
Chr4	589429	592991	Repeat_contraction_3343bp
Chr4	654372	654615	Tandem_expansion_4402bp
Chr4	659451	664777	Repeat_expansion_2807bp
Chr4	684460	685800	Repeat_contraction_384bp
Chr4	686791	687413	Repeat_expansion_31bp
Chr4	687967	688951	Repeat_contraction_195bp
Chr4	690230	693050	Repeat_contraction_1641bp
Chr4	699790	713483	Repeat_contraction_1792bp
Chr4	742356	743697	Repeat_contraction_582bp
Chr4	784358	784440	Repeat_expansion_32bp
Chr4	786424	786602	Repeat_contraction_66bp
Chr4	853345	853727	Repeat_expansion_75bp
Chr4	866706	867078	Repeat_expansion_96bp
Chr4	929726	929748	Insertion_30bp
Chr4	933730	934619	Repeat_expansion_71bp
Chr4	943504	943634	Repeat_expansion_20bp
Chr4	962577	967117	Repeat_contraction_2219bp
Chr4	969660	969925	Repeat_contraction_48bp
Chr4	971353	971538	Repeat_contraction_23bp
Chr4	982876	983551	Repeat_contraction_249bp
Chr4	999736	1002006	Repeat_contraction_2101bp
Chr4	1027857	1032206	Repeat_contraction_810bp
Chr4	1034989	1035722	Repeat_expansion_423bp
Chr4	1036190	1036460	Repeat_expansion_42bp
Chr4	1112982	1113372	Repeat_expansion_128bp
Chr4	1114622	1119858	Repeat_contraction_1642bp
Chr4	1140615	1143672	Repeat_contraction_1522bp
Chr4	1312395	1317222	Deletion_4832bp
Chr4	1354425	1354538	Repeat_expansion_188bp
Chr4	1365596	1366187	Repeat_contraction_355bp
Chr4	1407643	1407866	Repeat_expansion_92bp

Chr4	1439003	1439264	Repeat_expansion_44bp
Chr4	1442082	1442504	Repeat_expansion_68bp
Chr4	1443369	1445709	Repeat_expansion_1475bp
Chr4	1446624	1462469	Repeat_contraction_4763bp
Chr4	1476010	1476011	Insertion_1841bp
Chr4	1521258	1521880	Repeat_expansion_4329bp
Chr4	1536064	1536468	Repeat_contraction_298bp
Chr4	1557685	1557990	Tandem_expansion_4304bp
Chr4	1559575	1570837	Repeat_contraction_938bp
Chr4	1572516	1572909	Repeat_expansion_228bp
Chr4	1585819	1587665	Repeat_expansion_1238bp
Chr4	1598854	1598962	Repeat_expansion_261bp
Chr4	1608357	1609500	Repeat_contraction_392bp
Chr4	2773710	2774349	Repeat_contraction_161bp
Chr4	2771609	2771725	Repeat_expansion_25bp
Chr4	2769162	2770235	Repeat_expansion_1287bp
Chr4	2759209	2759749	Repeat_expansion_394bp
Chr4	2699294	2723822	Repeat_contraction_3148bp
Chr4	2692806	2693031	Repeat_contraction_23bp
Chr4	2670659	2671005	Repeat_contraction_26bp
Chr4	2663180	2664263	Repeat_contraction_79bp
Chr4	2659054	2660243	Repeat_contraction_154bp
Chr4	2653762	2658497	Repeat_expansion_2090bp
Chr4	2639581	2650889	Repeat_contraction_10140bp
Chr4	2629894	2630841	Repeat_expansion_3015bp
Chr4	2620757	2623390	Repeat_contraction_1989bp
Chr4	2596295	2602720	Repeat_contraction_5296bp
Chr4	2592004	2593491	Repeat_contraction_292bp
Chr4	2586713	2586761	Insertion_69bp
Chr4	2582530	2582879	Repeat_expansion_836bp
Chr4	2572051	2572497	Repeat_expansion_63bp
Chr4	2569527	2571732	Repeat_expansion_6148bp
Chr4	2543089	2543757	Repeat_contraction_38bp
Chr4	2531420	2532776	Repeat_expansion_327bp
Chr4	2487394	2487674	Repeat_expansion_113bp
Chr4	2480460	2480571	Repeat_expansion_27bp
Chr4	2464045	2464904	Repeat_expansion_434bp
Chr4	2457946	2458065	Repeat_expansion_142bp
Chr4	2440950	2441400	Repeat_contraction_39bp
Chr4	2438890	2440489	Repeat_expansion_120bp
Chr4	2430752	2434264	Repeat_contraction_1043bp
Chr4	2420063	2420670	Repeat_expansion_114bp
Chr4	2370039	2374298	Repeat_contraction_1403bp
Chr4	2365043	2367422	Repeat_expansion_420bp
Chr4	2345775	2350077	Repeat_contraction_3317bp
Chr4	2343994	2344355	Repeat_expansion_686bp
Chr4	2340409	2340629	Repeat_expansion_598bp
Chr4	2318081	2319723	Repeat_contraction_593bp
Chr4	2269131	2269278	Repeat_expansion_784bp

Chr4	2264871	2265407	Repeat_contraction_160bp
Chr4	2244735	2262885	Repeat_contraction_12938bp
Chr4	2234691	2238290	Repeat_contraction_2318bp
Chr4	2233379	2233480	Repeat_expansion_271bp
Chr4	2223357	2225129	Repeat_expansion_30bp
Chr4	2208013	2209263	Deletion_1251bp
Chr4	2180153	2180203	Tandem_expansion_1136bp
Chr4	2138332	2164393	Repeat_contraction_1491bp
Chr4	2117273	2117834	Repeat_contraction_26bp
Chr4	2009340	2009881	Repeat_expansion_609bp
Chr4	1978654	1982671	Repeat_contraction_3767bp
Chr4	1972560	1972798	Tandem_expansion_4341bp
Chr4	1944303	1954877	Tandem_contraction_11018bp
Chr4	1919445	1927812	Repeat_contraction_8039bp
Chr4	1866500	1867816	Repeat_contraction_436bp
Chr4	1855457	1865036	Repeat_contraction_9045bp
Chr4	1824757	1825476	Repeat_expansion_246bp
Chr4	1808991	1815945	Repeat_contraction_4450bp
Chr4	1783648	1805032	Repeat_contraction_14362bp
Chr4	1717557	1735170	Repeat_contraction_4878bp
Chr4	1710100	1716589	Repeat_contraction_5829bp
Chr4	1658298	1658835	Repeat_expansion_1058bp
Chr4	2799312	2799570	Repeat_contraction_33bp
Chr4	2807145	2807634	Repeat_contraction_44bp
Chr4	2809805	2809893	Repeat_expansion_28bp
Chr4	2815146	2816252	Deletion_1089bp
Chr4	2830527	2830654	Tandem_contraction_451bp
Chr4	2925165	2928421	Repeat_expansion_177bp
Chr4	2928917	2930929	Repeat_expansion_126bp
Chr4	2933698	2938764	Repeat_contraction_482bp
Chr4	3054350	3058776	Tandem_expansion_17010bp
Chr4	3097049	3104246	Repeat_contraction_1059bp
Chr4	3114544	3114754	Tandem_expansion_1346bp
Chr4	3148355	3148356	Insertion_3810bp
Chr4	3174499	3178768	Deletion_4243bp
Chr4	3305065	3305226	Deletion_119bp
Chr4	3310528	3310541	Insertion_4508bp
Chr4	3322892	3343099	Repeat_contraction_16877bp
Chr4	3364980	3365651	Deletion_626bp
Chr4	3436280	3436367	Deletion_60bp
Chr4	3445657	3445697	Insertion_660bp
Chr4	3463131	3463147	Insertion_1649bp
Chr4	3507966	3529402	Repeat_contraction_19921bp
Chr4	3623598	3625844	Repeat_expansion_1016bp
Chr4	3677551	3691585	Deletion_14024bp
Chr4	3693279	3693283	Insertion_10206bp
Chr4	3721569	3722781	Repeat_contraction_1015bp
Chr4	3804039	3805469	Repeat_contraction_1286bp
Chr4	3806883	3806971	Repeat_expansion_21bp

Chr4	3838621	3852239	Deletion_13605bp
Chr4	3864871	3877301	Repeat_contraction_11605bp
Chr4	4047044	4050165	Repeat_expansion_147bp
Chr4	4055329	4064907	Repeat_contraction_4402bp
Chr4	4065186	4069040	Repeat_contraction_223bp
Chr4	4083852	4083926	Repeat_expansion_1278bp
Chr4	4086351	4090655	Repeat_expansion_1343bp
Chr4	4124054	4129350	Repeat_contraction_2088bp
Chr4	4144847	4149296	Repeat_expansion_5664bp
Chr4	4132862	4139226	Deletion_6348bp
Chr4	4155329	4162102	Repeat_contraction_6684bp
Chr4	4132408	4132442	Insertion_4838bp
Chr4	4137567	4139443	Repeat_contraction_443bp
Chr4	4141726	4142963	Repeat_contraction_352bp
Chr4	4145420	4150569	Deletion_5135bp
Chr4	4151313	4151373	Repeat_expansion_3670bp
Chr4	4137491	4139553	Repeat_expansion_178bp
Chr4	4140934	4143117	Repeat_expansion_322bp
Chr4	4195344	4195570	Repeat_expansion_69bp
Chr4	4196761	4196836	Repeat_expansion_49bp
Chr4	4199454	4201278	Repeat_expansion_1035bp
Chr4	4017223	4017566	Repeat_contraction_74bp
Chr4	4637750	4642280	Repeat_contraction_4448bp
Chr4	4643285	4643334	Insertion_83bp
Chr4	4644625	4645988	Repeat_expansion_494bp
Chr4	4647869	4681428	Repeat_expansion_6650bp
Chr4	4687672	4701334	Repeat_expansion_1497bp
Chr4	4703864	4711204	Repeat_contraction_5333bp
Chr4	1897904	1898004	Repeat_expansion_93bp
Chr4	3989855	3990096	Repeat_contraction_27bp
Chr4	4799175	4799314	Repeat_contraction_72bp
Chr4	4855727	4855822	Repeat_expansion_43bp
Chr4	4884149	4885969	Repeat_expansion_67bp
Chr4	4948106	4948108	Insertion_1110bp
Chr4	4956562	4956563	Insertion_1623bp
Chr4	4958179	4969611	Deletion_11408bp
Chr4	4956562	4970325	Repeat_contraction_10758bp
Chr4	4971741	4972222	Repeat_contraction_329bp
Chr4	4992533	5001019	Repeat_expansion_2849bp
Chr4	5005173	5010913	Deletion_5732bp
Chr4	5033181	5033229	Insertion_3018bp
Chr4	5044091	5044659	Deletion_568bp
Chr4	5067702	5071679	Repeat_contraction_228bp
Chr4	3279307	3280267	Repeat_expansion_146bp
Chr4	5105761	5109633	Tandem_expansion_6199bp
Chr4	5172359	5172680	Repeat_expansion_76bp
Chr4	5177688	5193028	Repeat_expansion_7918bp
Chr4	5195345	5195490	Repeat_contraction_56bp
Chr4	5201405	5204376	Repeat_expansion_606bp

Chr4	5241105	5241110	Insertion_5336bp
Chr4	5247136	5247166	Insertion_85bp
Chr4	5292736	5296910	Repeat_expansion_394bp
Chr4	5302005	5302827	Deletion_779bp
Chr4	5303762	5309189	Repeat_contraction_5270bp
Chr4	5317946	5318063	Repeat_contraction_57bp
Chr4	5326460	5341464	Repeat_contraction_14471bp
Chr4	5353766	5354638	Repeat_contraction_679bp
Chr4	5389638	5389936	Repeat_expansion_71bp
Chr4	5390295	5401842	Repeat_contraction_1185bp
Chr4	5420800	5425783	Repeat_expansion_9849bp
Chr4	5471601	5473748	Repeat_contraction_2057bp
Chr4	5517824	5518731	Deletion_919bp
Chr4	5625082	5628467	Repeat_expansion_65bp
Chr4	5634452	5635320	Repeat_expansion_4874bp
Chr4	5664055	5669540	Repeat_expansion_2720bp
Chr4	5675985	5698173	Repeat_contraction_14964bp
Chr4	5717756	5718672	Repeat_contraction_299bp
Chr4	5732409	5733221	Repeat_contraction_133bp
Chr4	5790087	5791893	Repeat_expansion_3147bp
Chr4	5846629	5846689	Repeat_expansion_78bp
Chr4	5850825	5854669	Repeat_contraction_2283bp
Chr4	5927736	5931025	Repeat_contraction_1221bp
Chr4	5943244	5951591	Deletion_8358bp
Chr4	5987002	6003667	Repeat_contraction_11816bp
Chr4	6020061	6021304	Repeat_expansion_138bp
Chr4	6050327	6050500	Repeat_contraction_38bp
Chr4	6054405	6057747	Repeat_contraction_2347bp
Chr4	6058429	6072855	Repeat_contraction_8320bp
Chr4	6074229	6075756	Repeat_contraction_20bp
Chr4	6082384	6082553	Repeat_expansion_1086bp
Chr4	6107085	6107247	Repeat_expansion_60bp
Chr4	6109151	6111531	Repeat_contraction_1844bp
Chr4	6113560	6116506	Repeat_contraction_2646bp
Chr4	6117662	6117910	Repeat_contraction_25bp
Chr4	6123577	6125731	Repeat_expansion_630bp
Chr4	6168147	6169311	Deletion_1166bp
Chr4	6216707	6217210	Repeat_expansion_26bp
Chr4	6222320	6222448	Deletion_95bp
Chr4	6230178	6231229	Repeat_expansion_234bp
Chr4	6266470	6267540	Repeat_expansion_768bp
Chr4	6280046	6280276	Repeat_expansion_62bp
Chr4	6312286	6322370	Repeat_expansion_8847bp
Chr4	6358394	6360371	Repeat_expansion_12856bp
Chr4	6380862	6390798	Repeat_expansion_708bp
Chr4	6393181	6394059	Repeat_contraction_464bp
Chr4	6394652	6396036	Repeat_contraction_98bp
Chr4	6409923	6410432	Repeat_expansion_591bp
Chr4	6414054	6415042	Repeat_expansion_57bp

Chr4	6415907	6416136	Repeat_contraction_24bp
Chr4	6416512	6416648	Repeat_contraction_34bp
Chr4	6422114	6431263	Repeat_contraction_6614bp
Chr4	6462310	6463007	Repeat_expansion_38bp
Chr4	6480195	6481421	Repeat_expansion_961bp
Chr4	6485423	6485588	Repeat_contraction_50bp
Chr4	6488121	6490535	Repeat_expansion_1095bp
Chr4	6523112	6523487	Repeat_expansion_169bp
Chr4	6547739	6547863	Repeat_expansion_275bp
Chr4	6552646	6554168	Repeat_contraction_202bp
Chr4	6554691	6556241	Repeat_contraction_38bp
Chr4	6569799	6569846	Insertion_38bp
Chr4	6573506	6573670	Repeat_expansion_32bp
Chr4	6574881	6575446	Repeat_contraction_21bp
Chr4	6686549	6687632	Repeat_contraction_490bp
Chr4	9909613	9911117	Deletion_1460bp
Chr4	6694296	6694380	Repeat_expansion_125bp
Chr4	6699063	6701369	Repeat_contraction_1358bp
Chr4	6722286	6732419	Repeat_contraction_9206bp
Chr4	6734496	6735179	Repeat_expansion_769bp
Chr4	6736081	6736425	Repeat_expansion_555bp
Chr4	6754165	6758037	Repeat_contraction_246bp
Chr4	6760530	6760838	Repeat_expansion_79bp
Chr4	6811700	6816523	Repeat_expansion_134bp
Chr4	6859741	6859747	Insertion_305bp
Chr4	6875971	6878620	Repeat_expansion_413bp
Chr4	6890423	6891791	Repeat_expansion_667bp
Chr4	6904213	6905641	Repeat_contraction_87bp
Chr4	6908261	6910511	Repeat_contraction_754bp
Chr4	6911440	6919644	Repeat_contraction_5667bp
Chr4	6933975	6935270	Repeat_contraction_690bp
Chr4	6943277	6945158	Repeat_contraction_842bp
Chr4	6946972	6947272	Repeat_contraction_24bp
Chr4	6952665	6955823	Repeat_contraction_2122bp
Chr4	6956134	6958060	Repeat_contraction_29bp
Chr4	6982155	6983162	Repeat_expansion_1100bp
Chr4	6990793	6990795	Insertion_8802bp
Chr4	7008321	7008522	Repeat_expansion_20bp
Chr4	7010411	7012930	Repeat_contraction_1139bp
Chr4	7017046	7017234	Repeat_contraction_135bp
Chr4	7018203	7019005	Repeat_expansion_114bp
Chr4	7040225	7042190	Repeat_contraction_1402bp
Chr4	7053278	7053372	Repeat_contraction_39bp
Chr4	7058603	7061150	Repeat_contraction_1769bp
Chr4	7069344	7069473	Repeat_expansion_507bp
Chr4	7070852	7071809	Repeat_contraction_255bp
Chr4	7080587	7080975	Repeat_expansion_46bp
Chr4	7139656	7141210	Repeat_contraction_292bp
Chr4	7149871	7150260	Repeat_contraction_218bp

Chr4	7151598	7155687	Repeat_contraction_667bp
Chr4	7159460	7159923	Repeat_expansion_617bp
Chr4	7169775	7170252	Repeat_expansion_3337bp
Chr4	7190353	7191903	Repeat_expansion_1160bp
Chr4	7192414	7193793	Repeat_expansion_135bp
Chr4	7195110	7196239	Repeat_contraction_215bp
Chr4	7201904	7202719	Repeat_contraction_222bp
Chr4	7229436	7229651	Repeat_contraction_22bp
Chr4	7259224	7260693	Repeat_expansion_25bp
Chr4	7261158	7262111	Repeat_expansion_72bp
Chr4	7274861	7278346	Repeat_contraction_1715bp
Chr4	7282124	7282285	Repeat_expansion_30bp
Chr4	7334888	7336474	Repeat_contraction_281bp
Chr4	7343781	7344070	Repeat_expansion_368bp
Chr4	7381113	7385833	Repeat_contraction_2211bp
Chr4	7402010	7404777	Repeat_contraction_381bp
Chr4	7406940	7409640	Repeat_contraction_37bp
Chr4	7410144	7410209	Repeat_expansion_60bp
Chr4	7411775	7417391	Repeat_contraction_261bp
Chr4	7418678	7420902	Repeat_expansion_76bp
Chr4	7426141	7426324	Tandem_expansion_5011bp
Chr4	7470713	7471914	Repeat_contraction_533bp
Chr4	7477787	7477946	Repeat_contraction_24bp
Chr4	7478218	7479615	Repeat_contraction_441bp
Chr4	7523466	7527889	Repeat_contraction_4321bp
Chr4	7529211	7530997	Repeat_expansion_156bp
Chr4	7533756	7533784	Insertion_25bp
Chr4	7534704	7536865	Repeat_contraction_48bp
Chr4	7539936	7540177	Repeat_expansion_27bp
Chr4	7545297	7546363	Repeat_contraction_90bp
Chr4	7578472	7578919	Repeat_expansion_136bp
Chr4	7585143	7585717	Repeat_expansion_328bp
Chr4	7591716	7591940	Repeat_expansion_278bp
Chr4	7601247	7605574	Repeat_expansion_98bp
Chr4	7618333	7618643	Repeat_contraction_30bp
Chr4	7620746	7620830	Deletion_59bp
Chr4	7621678	7621808	Repeat_expansion_34bp
Chr4	7623109	7624400	Repeat_contraction_236bp
Chr4	7637839	7640448	Repeat_contraction_1041bp
Chr4	7642730	7644100	Repeat_contraction_311bp
Chr4	7658095	7659289	Repeat_contraction_486bp
Chr4	7666439	7667355	Repeat_expansion_37bp
Chr4	7669178	7669936	Repeat_contraction_37bp
Chr4	7731914	7732396	Repeat_expansion_119bp
Chr4	7745326	7753179	Repeat_expansion_5655bp
Chr4	7761895	7763793	Repeat_expansion_73bp
Chr4	7808933	7809920	Repeat_expansion_139bp
Chr4	7810621	7814416	Repeat_contraction_1820bp
Chr4	7816578	7821806	Repeat_contraction_4965bp

Chr4	7822491	7824163	Repeat_expansion_657bp
Chr4	7838108	7838961	Repeat_contraction_450bp
Chr4	7840509	7841060	Repeat_expansion_40bp
Chr4	7918973	7924565	Repeat_contraction_236bp
Chr4	7944986	7945033	Deletion_44bp
Chr4	7948239	7948512	Repeat_expansion_379bp
Chr4	8008046	8008550	Repeat_contraction_48bp
Chr4	8013857	8014094	Repeat_contraction_57bp
Chr4	8022007	8023347	Repeat_contraction_186bp
Chr4	8024434	8024864	Repeat_contraction_130bp
Chr4	8035204	8035337	Repeat_contraction_44bp
Chr4	8035714	8036693	Repeat_expansion_261bp
Chr4	8037599	8037655	Repeat_expansion_21bp
Chr4	8040613	8046409	Repeat_contraction_5216bp
Chr4	8062736	8066073	Repeat_contraction_2936bp
Chr4	8099899	8099954	Repeat_expansion_101bp
Chr4	8094323	8106354	Tandem_expansion_12159bp
Chr4	8099899	8099954	Repeat_expansion_101bp
Chr4	8108379	8111274	Repeat_expansion_791bp
Chr4	8118184	8118363	Repeat_contraction_91bp
Chr4	8144871	8145085	Repeat_contraction_22bp
Chr4	8152807	8153849	Repeat_expansion_76bp
Chr4	8157759	8158138	Repeat_expansion_5694bp
Chr4	8260761	8267225	Repeat_expansion_3073bp
Chr4	8278254	8279305	Repeat_expansion_556bp
Chr4	8290243	8299595	Repeat_expansion_5590bp
Chr4	8309796	8318847	Repeat_contraction_5269bp
Chr4	8353772	8357353	Repeat_expansion_595bp
Chr4	8420950	8421931	Repeat_contraction_801bp
Chr4	8524291	8528664	Repeat_contraction_2145bp
Chr4	8541377	8541426	Insertion_21bp
Chr4	8550067	8554028	Repeat_contraction_458bp
Chr4	8563840	8565164	Repeat_contraction_586bp
Chr4	8584924	8584948	Insertion_23bp
Chr4	8666209	8666957	Repeat_expansion_63bp
Chr4	8670235	8671646	Repeat_contraction_756bp
Chr4	8712252	8712442	Repeat_contraction_22bp
Chr4	8717101	8718688	Repeat_contraction_57bp
Chr4	8724530	8726350	Repeat_contraction_244bp
Chr4	8734739	8734876	Repeat_expansion_35bp
Chr4	8736215	8744329	Repeat_contraction_6477bp
Chr4	8753512	8753773	Repeat_contraction_73bp
Chr4	8756568	8756685	Deletion_75bp
Chr4	8758945	8759401	Repeat_expansion_50bp
Chr4	8776603	8777866	Repeat_contraction_1044bp
Chr4	8783421	8783465	Insertion_595bp
Chr4	8808944	8809208	Repeat_contraction_77bp
Chr4	8810431	8811673	Repeat_expansion_144bp
Chr4	8824089	8824361	Repeat_contraction_60bp

Chr4	8866330	8867226	Repeat_contraction_46bp
Chr4	8890994	8893227	Repeat_contraction_47bp
Chr4	8899037	8899965	Deletion_887bp
Chr4	8900657	8907273	Repeat_contraction_5820bp
Chr4	8923089	8924015	Repeat_expansion_34bp
Chr4	8925718	8925912	Repeat_contraction_51bp
Chr4	8946154	8949496	Repeat_contraction_881bp
Chr4	8957964	8960524	Repeat_contraction_910bp
Chr4	8973569	8974001	Repeat_contraction_24bp
Chr4	8974675	8975270	Repeat_expansion_57bp
Chr4	9012047	9012650	Repeat_contraction_36bp
Chr4	9015313	9015497	Repeat_expansion_264bp
Chr4	9035154	9035521	Repeat_contraction_260bp
Chr4	9063456	9075042	Repeat_contraction_4149bp
Chr4	9137651	9137846	Repeat_contraction_24bp
Chr4	9141146	9141192	Insertion_21bp
Chr4	9174786	9175117	Repeat_contraction_75bp
Chr4	9182859	9188134	Repeat_expansion_186bp
Chr4	9307425	9307888	Repeat_contraction_105bp
Chr4	9320553	9323351	Repeat_expansion_2207bp
Chr4	9326695	9326830	Repeat_expansion_33bp
Chr4	9382391	9382637	Repeat_expansion_21bp
Chr4	9419184	9419444	Repeat_expansion_494bp
Chr4	9422694	9423288	Repeat_expansion_160bp
Chr4	9424159	9424661	Repeat_contraction_291bp
Chr4	9426920	9427695	Repeat_contraction_22bp
Chr4	9429105	9430474	Repeat_contraction_113bp
Chr4	9431847	9435265	Repeat_contraction_1554bp
Chr4	9436223	9436452	Repeat_expansion_28bp
Chr4	9438519	9442924	Repeat_contraction_2049bp
Chr4	9451255	9451459	Repeat_expansion_38bp
Chr4	9453489	9454249	Repeat_expansion_1001bp
Chr4	9455772	9457544	Repeat_expansion_9392bp
Chr4	9468438	9470368	Repeat_expansion_320bp
Chr4	9475433	9476117	Repeat_expansion_433bp
Chr4	9544437	9549696	Repeat_expansion_369bp
Chr4	9545977	9551138	Tandem_expansion_13701bp
Chr4	9549846	9550397	Tandem_expansion_5437bp
Chr4	9576564	9576821	Repeat_contraction_36bp
Chr4	9582717	9584449	Repeat_expansion_76bp
Chr4	9649672	9649793	Repeat_contraction_25bp
Chr4	9668602	9669125	Repeat_contraction_86bp
Chr4	9669979	9670903	Repeat_expansion_323bp
Chr4	9673334	9673841	Repeat_contraction_41bp
Chr4	9681969	9685306	Repeat_contraction_90bp
Chr4	9732380	9737738	Repeat_contraction_5173bp
Chr4	9738857	9739437	Repeat_contraction_132bp
Chr4	9794145	9798603	Repeat_contraction_3321bp
Chr4	9799967	9800574	Repeat_expansion_420bp

Chr4	9829916	9830331	Repeat_contraction_116bp
Chr4	9839372	9842607	Repeat_contraction_57bp
Chr4	9885551	9886778	Repeat_contraction_60bp
Chr4	9887454	9887638	Repeat_contraction_52bp
Chr4	9890070	9890309	Deletion_200bp
Chr4	9908971	9914047	Deletion_5058bp
Chr4	9950452	9951234	Repeat_contraction_75bp
Chr4	9953946	9958771	Repeat_contraction_4625bp
Chr4	9980832	9982093	Deletion_1219bp
Chr4	10000601	10001131	Repeat_contraction_30bp
Chr4	10002503	10002594	Repeat_contraction_26bp
Chr4	10019611	10020491	Repeat_contraction_233bp
Chr4	10121632	10121813	Tandem_expansion_3373bp
Chr4	10179475	10181088	Repeat_contraction_451bp
Chr4	10182896	10183009	Repeat_expansion_170bp
Chr4	10226188	10226602	Repeat_expansion_58bp
Chr4	10271227	10271471	Repeat_contraction_47bp
Chr4	10302476	10302718	Repeat_contraction_24bp
Chr4	10315043	10315173	Repeat_contraction_24bp
Chr4	10316928	10317531	Repeat_contraction_268bp
Chr4	10340363	10341027	Repeat_expansion_1397bp
Chr4	10354512	10355185	Repeat_contraction_23bp
Chr4	10400585	10401891	Repeat_contraction_1142bp
Chr4	10402512	10403798	Repeat_contraction_126bp
Chr4	10412038	10412136	Repeat_expansion_21bp
Chr4	10412945	10413138	Repeat_contraction_23bp
Chr4	10427141	10427449	Repeat_contraction_191bp
Chr4	10450397	10453732	Repeat_expansion_654bp
Chr4	10459953	10459998	Insertion_43bp
Chr4	10576588	10576897	Repeat_expansion_192bp
Chr4	10581710	10582060	Repeat_expansion_23bp
Chr4	10582889	10583322	Repeat_contraction_38bp
Chr4	10599334	10599756	Repeat_contraction_189bp
Chr4	10605138	10606174	Repeat_contraction_282bp
Chr4	10609355	10609412	Repeat_expansion_147bp
Chr4	10638796	10657304	Tandem_expansion_18749bp
Chr4	10639161	10657677	Repeat_contraction_16660bp
Chr4	10682618	10693154	Repeat_contraction_1165bp
Chr4	10705054	10705611	Repeat_contraction_128bp
Chr4	10709404	10710093	Repeat_expansion_1690bp
Chr4	10732206	10733299	Repeat_contraction_181bp
Chr4	10742644	10745198	Repeat_contraction_94bp
Chr4	10768792	10771484	Repeat_contraction_496bp
Chr4	10815678	10815721	Deletion_37bp
Chr4	10817653	10817822	Deletion_160bp
Chr4	10854427	10854614	Repeat_expansion_36bp
Chr4	10899526	10904693	Deletion_5171bp
Chr4	10958641	10961604	Repeat_contraction_2172bp
Chr4	10965963	10967220	Repeat_expansion_113bp

Chr4	10987461	10989147	Repeat_expansion_28bp
Chr4	11034452	11035866	Repeat_contraction_1294bp
Chr4	11138180	11138626	Tandem_expansion_1389bp
Chr4	11206764	11210980	Tandem_contraction_4430bp
Chr4	11221392	11222236	Repeat_contraction_85bp
Chr4	11267776	11268181	Repeat_contraction_21bp
Chr4	11269201	11269607	Repeat_contraction_22bp
Chr4	11311159	11311284	Repeat_expansion_24bp
Chr4	11352307	11352329	Insertion_26bp
Chr4	11439051	11440904	Repeat_expansion_623bp
Chr4	11566480	11566524	Insertion_67bp
Chr4	11682073	11682539	Repeat_contraction_279bp
Chr4	11735337	11735454	Tandem_expansion_1843bp
Chr4	11751723	11752252	Deletion_529bp
Chr4	11754866	11755565	Tandem_expansion_5998bp
Chr4	11763053	11763247	Repeat_expansion_432bp
Chr4	11764285	11766003	Repeat_expansion_646bp
Chr4	11815193	11827729	Repeat_contraction_10946bp
Chr4	11874563	11875315	Repeat_expansion_38bp
Chr4	11910662	11911033	Repeat_expansion_63bp
Chr4	11930132	11936608	Tandem_expansion_5098bp
Chr4	12027428	12028797	Repeat_expansion_435bp
Chr4	12050277	12053343	Repeat_contraction_291bp
Chr4	12121176	12123986	Tandem_expansion_2820bp
Chr4	12128397	12131467	Repeat_contraction_2165bp
Chr4	12146514	12147089	Deletion_533bp
Chr4	12217139	12218073	Deletion_907bp
Chr4	12275296	12275480	Repeat_expansion_81bp
Chr4	12306568	12309530	Repeat_contraction_2728bp
Chr4	12310495	12310498	Insertion_15296bp
Chr4	12315332	12315966	Repeat_expansion_120bp
Chr4	12408621	12408831	Repeat_expansion_98bp
Chr4	12598065	12598413	Repeat_expansion_522bp
Chr4	12722007	12722179	Repeat_contraction_24bp
Chr4	12829886	12829965	Repeat_expansion_2125bp
Chr4	12847579	12857996	Repeat_contraction_850bp
Chr4	12929902	12930268	Repeat_contraction_34bp
Chr4	12952281	12952404	Repeat_expansion_27bp
Chr4	12982013	12984053	Repeat_expansion_1257bp
Chr4	12987257	12988191	Repeat_contraction_37bp
Chr4	13072484	13072614	Repeat_contraction_35bp
Chr4	13135655	13135679	Insertion_27bp
Chr4	13150259	13151371	Repeat_expansion_20bp
Chr4	13305901	13306384	Repeat_expansion_2362bp
Chr4	13326206	13326268	Repeat_expansion_29bp
Chr4	13328446	13332424	Repeat_contraction_3809bp
Chr4	13404848	13409242	Repeat_expansion_24bp
Chr4	13410139	13410702	Repeat_contraction_53bp
Chr4	13541270	13541503	Repeat_contraction_82bp

Chr4	13577502	13577774	Repeat_expansion_822bp
Chr4	13588077	13592671	Tandem_expansion_4615bp
Chr4	13620078	13637351	Repeat_contraction_11944bp
Chr4	13690594	13690618	Insertion_90bp
Chr4	13717965	13718561	Repeat_expansion_194bp
Chr4	13729858	13729947	Repeat_expansion_2019bp
Chr4	13803187	13803397	Repeat_contraction_20bp
Chr4	13804114	13804522	Repeat_expansion_291bp
Chr4	13878655	13878674	Insertion_271bp
Chr4	13880782	13881654	Repeat_expansion_305bp
Chr4	13887034	13888410	Repeat_contraction_845bp
Chr4	13992891	13992972	Repeat_contraction_26bp
Chr4	14013700	14013956	Repeat_contraction_31bp
Chr4	14020299	14020918	Repeat_contraction_36bp
Chr4	14025816	14026773	Repeat_contraction_443bp
Chr4	14151812	14151987	Repeat_contraction_35bp
Chr4	14291720	14291745	Insertion_72bp
Chr4	14413842	14414806	Repeat_contraction_48bp
Chr4	14661193	14661733	Repeat_contraction_45bp
Chr4	14661193	14661733	Repeat_contraction_43bp
Chr4	14661193	14661733	Repeat_contraction_45bp
Chr4	14662666	14662727	Repeat_expansion_91bp
Chr4	14701707	14701712	Insertion_4745bp
Chr4	14767200	14767876	Repeat_contraction_28bp
Chr4	14843912	14844399	Repeat_contraction_269bp
Chr4	14911550	14912635	Repeat_contraction_951bp
Chr4	14988212	14988783	Repeat_expansion_90bp
Chr4	15012482	15014865	Deletion_2391bp
Chr4	15061307	15061357	Repeat_expansion_203bp
Chr4	15100804	15101233	Repeat_contraction_93bp
Chr4	15313347	15313520	Repeat_expansion_40bp
Chr4	15328080	15330585	Tandem_contraction_2772bp
Chr4	15381758	15381945	Repeat_expansion_24bp
Chr4	15695333	15699230	Repeat_expansion_2363bp
Chr4	15705411	15705685	Repeat_contraction_50bp
Chr4	15909715	15909846	Repeat_expansion_149bp
Chr4	16050480	16051080	Repeat_expansion_138bp
Chr4	16133822	16133995	Repeat_expansion_1711bp
Chr4	16135004	16136318	Repeat_expansion_929bp
Chr4	16238061	16238098	Insertion_37bp
Chr4	16248161	16248741	Repeat_expansion_400bp
Chr4	16267128	16267253	Repeat_expansion_27bp
Chr4	16271411	16271432	Insertion_23bp
Chr4	16378814	16378873	Repeat_expansion_294bp
Chr4	16396385	16396567	Repeat_contraction_116bp
Chr4	16543978	16544284	Repeat_contraction_22bp
Chr4	16584721	16586420	Repeat_expansion_730bp
Chr4	16910092	16911573	Repeat_contraction_36bp
Chr4	17026242	17027200	Repeat_expansion_67bp

Chr4	17081080	17081826	Tandem_expansion_746bp
Chr4	17091878	17092225	Repeat_expansion_80bp
Chr4	17094170	17094348	Repeat_contraction_30bp
Chr4	17098657	17106644	Repeat_expansion_1764bp
Chr4	17190609	17190774	Repeat_expansion_88bp
Chr4	17217933	17218002	Repeat_expansion_428bp
Chr4	17252273	17252446	Repeat_contraction_43bp
Chr4	17253051	17253385	Repeat_expansion_63bp
Chr4	17339038	17346161	Repeat_expansion_99bp
Chr4	17472857	17472962	Repeat_expansion_37bp
Chr4	17494051	17494189	Repeat_expansion_45bp
Chr4	17566073	17566218	Repeat_expansion_35bp
Chr4	17569219	17569776	Repeat_contraction_162bp
Chr4	17648606	17648625	Insertion_266bp
Chr4	17648978	17649155	Repeat_contraction_69bp
Chr4	17654857	17656008	Repeat_contraction_1099bp
Chr4	17673423	17674600	Repeat_contraction_434bp
Chr4	17702796	17710031	Repeat_expansion_3255bp
Chr4	17711391	17717786	Repeat_contraction_4487bp
Chr4	17719480	17723049	Repeat_expansion_641bp
Chr4	17769372	17769984	Repeat_expansion_323bp
Chr4	17771745	17773240	Repeat_expansion_304bp
Chr4	18052981	18053340	Repeat_contraction_39bp
Chr4	18113894	18114154	Repeat_contraction_26bp
Chr4	18115153	18115272	Repeat_expansion_33bp
Chr4	18160736	18161199	Repeat_contraction_30bp
Chr4	18201761	18202186	Repeat_contraction_176bp
Chr4	18202689	18203630	Repeat_contraction_473bp
Chr4	18249610	18249653	Deletion_27bp
Chr4	18254899	18255225	Repeat_contraction_38bp
Chr4	18392935	18393236	Repeat_expansion_26bp
Chr4	18412693	18412764	Deletion_58bp
Chr4	18413123	18413300	Repeat_contraction_113bp
Chr4	18425521	18429338	Repeat_expansion_144bp
Chr4	18517136	18518906	Repeat_contraction_1644bp
Chr4	18530276	18530369	Repeat_contraction_26bp
Chr4	18532292	18533678	Repeat_contraction_1275bp
Chr4	18542287	18542289	Insertion_63bp
Chr4	18543127	18543297	Repeat_contraction_30bp
Chr4	3989949	3990046	Repeat_contraction_22bp
Chr4	18249684	18251432	Tandem_expansion_1981bp
Chr4	18249685	18251408	Tandem_expansion_1979bp
Chr4	18249685	18251408	Tandem_expansion_1980bp
Chr4	3968278	3973516	Tandem_expansion_6504bp
Chr4	3973322	3984145	Repeat_contraction_6670bp
Chr4	3985833	3986753	Tandem_expansion_6073bp
Chr4	3952904	3953951	Tandem_expansion_1918bp
Chr5	15314912	15314976	Deletion_64bp
Chr5	8933879	8933904	Deletion_25bp

Chr5	11630342	11630364	Deletion_22bp
Chr5	11630672	11630717	Deletion_45bp
Chr5	12429997	12430020	Deletion_23bp
Chr5	15673413	15673413	Insertion_54bp
Chr5	13758487	13758510	Deletion_23bp
Chr5	11142462	11142462	Insertion_87bp
Chr5	18472785	18472785	Insertion_20bp
Chr5	18478838	18478991	Deletion_153bp
Chr5	18626392	18626412	Deletion_20bp
Chr5	10113249	10113274	Deletion_25bp
Chr5	4208319	4208341	Deletion_22bp
Chr5	4212858	4212880	Deletion_22bp
Chr5	18476729	18476729	Insertion_33bp
Chr5	8209522	8209543	Deletion_21bp
Chr5	18472842	18472863	Deletion_21bp
Chr5	9566509	9566613	Deletion_104bp
Chr5	9567212	9567212	Insertion_135bp
Chr5	9567865	9567865	Insertion_478bp
Chr5	9570916	9570936	Deletion_20bp
Chr5	9570938	9570938	Insertion_26bp
Chr5	14176894	14177215	Deletion_321bp
Chr5	14178015	14178115	Deletion_100bp
Chr5	18477087	18477112	Deletion_25bp
Chr5	18477164	18477164	Insertion_59bp
Chr5	18478089	18478517	Deletion_442bp
Chr5	21531420	21531420	Insertion_23bp
Chr5	10063033	10063064	Deletion_31bp
Chr5	24028858	24028902	Deletion_44bp
Chr5	9931119	9931259	Deletion_140bp
Chr5	11691485	11691485	Insertion_89bp
Chr5	11691538	11691538	Insertion_59bp
Chr5	11691884	11691884	Insertion_71bp
Chr5	11695821	11695866	Deletion_45bp
Chr5	8928705	8928757	Deletion_52bp
Chr5	8931233	8931233	Insertion_24bp
Chr5	10951920	10951950	Deletion_30bp
Chr5	10952197	10952321	Deletion_124bp
Chr5	11083764	11083800	Deletion_36bp
Chr5	11268957	11268957	Insertion_26bp
Chr5	11271365	11271393	Deletion_28bp
Chr5	10064413	10064413	Insertion_34bp
Chr5	13961800	13961875	Deletion_75bp
Chr5	11926552	11926552	Insertion_24bp
Chr5	8846372	8846372	Insertion_344bp
Chr5	12290303	12290387	Deletion_84bp
Chr5	12291798	12292083	Deletion_285bp
Chr5	11584194	11584194	Insertion_52bp
Chr5	11585736	11585736	Insertion_34bp
Chr5	12434522	12434574	Deletion_52bp

Chr5	15276642	15276670	Deletion_28bp
Chr5	3659916	3659952	Deletion_36bp
Chr5	3688680	3688703	Deletion_23bp
Chr5	3691048	3691080	Deletion_32bp
Chr5	3715245	3715304	Deletion_59bp
Chr5	3717161	3717161	Insertion_53bp
Chr5	3727730	3727770	Deletion_40bp
Chr5	3750331	3750371	Deletion_40bp
Chr5	3796757	3796757	Insertion_34bp
Chr5	3833999	3834020	Deletion_21bp
Chr5	3960663	3960663	Insertion_35bp
Chr5	3973227	3973227	Insertion_22bp
Chr5	4004253	4004253	Insertion_37bp
Chr5	24782492	24782492	Insertion_34bp
Chr5	24816199	24816225	Deletion_26bp
Chr5	24817614	24817671	Deletion_57bp
Chr5	24818763	24820179	Deletion_1416bp
Chr5	24826894	24826894	Insertion_25bp
Chr5	24836431	24836431	Insertion_90bp
Chr5	24870665	24870665	Insertion_32bp
Chr5	24954198	24954198	Insertion_37bp
Chr5	24959817	24959817	Insertion_545bp
Chr5	24970897	24971207	Deletion_310bp
Chr5	25073239	25073271	Deletion_32bp
Chr5	25088701	25088721	Deletion_20bp
Chr5	25101773	25101773	Insertion_26bp
Chr5	23042182	23042220	Deletion_38bp
Chr5	23058119	23058185	Deletion_66bp
Chr5	23060936	23060943	Insertion_52bp
Chr5	23112756	23112787	Deletion_31bp
Chr5	23113025	23113025	Insertion_24bp
Chr5	23118946	23118993	Deletion_47bp
Chr5	23248905	23248945	Deletion_40bp
Chr5	23282386	23282443	Deletion_57bp
Chr5	23287613	23287666	Deletion_53bp
Chr5	23309763	23309763	Insertion_2956bp
Chr5	23310111	23310140	Deletion_29bp
Chr5	20640211	20640211	Insertion_33bp
Chr5	20788814	20788814	Insertion_29bp
Chr5	20803343	20804673	Deletion_1330bp
Chr5	20810073	20810073	Insertion_52bp
Chr5	20832685	20832707	Deletion_22bp
Chr5	20834282	20834312	Deletion_30bp
Chr5	20852779	20852779	Insertion_37bp
Chr5	20856137	20856164	Deletion_27bp
Chr5	20856659	20856694	Deletion_35bp
Chr5	20360407	20360407	Insertion_1344bp
Chr5	20364552	20364552	Insertion_450bp
Chr5	20381058	20381058	Insertion_462bp

Chr5	20395151	20395241	Deletion_90bp
Chr5	20398316	20398316	Insertion_472bp
Chr5	20400885	20400885	Insertion_23bp
Chr5	20414275	20414308	Deletion_33bp
Chr5	20426733	20427496	Deletion_763bp
Chr5	20427676	20427700	Deletion_24bp
Chr5	20448152	20448152	Insertion_3019bp
Chr5	20450874	20450914	Deletion_40bp
Chr5	20527792	20527815	Deletion_23bp
Chr5	20564256	20564280	Deletion_24bp
Chr5	2580025	2580025	Insertion_1428bp
Chr5	2584875	2584875	Insertion_35bp
Chr5	2592238	2592238	Insertion_449bp
Chr5	2610118	2610118	Insertion_1024bp
Chr5	2611771	2611831	Deletion_60bp
Chr5	2639241	2639373	Deletion_132bp
Chr5	2680129	2680150	Deletion_21bp
Chr5	2725072	2725128	Deletion_56bp
Chr5	2791114	2791156	Deletion_42bp
Chr5	3372127	3372127	Insertion_478bp
Chr5	3504384	3504384	Insertion_20bp
Chr5	3527786	3527817	Deletion_31bp
Chr5	3529078	3529078	Insertion_60bp
Chr5	3535976	3535976	Insertion_551bp
Chr5	3544999	3544999	Insertion_33bp
Chr5	822511	822532	Deletion_21bp
Chr5	829575	829611	Deletion_36bp
Chr5	836136	836215	Deletion_79bp
Chr5	841452	841452	Insertion_737bp
Chr5	871313	871371	Deletion_58bp
Chr5	889144	889169	Deletion_25bp
Chr5	896555	896555	Insertion_26bp
Chr5	904124	904145	Deletion_21bp
Chr5	911821	911821	Insertion_409bp
Chr5	951907	951929	Deletion_22bp
Chr5	967451	967471	Deletion_20bp
Chr5	971412	971581	Deletion_169bp
Chr5	4303854	4303854	Insertion_23bp
Chr5	4312437	4314866	Deletion_2429bp
Chr5	4318527	4318553	Deletion_26bp
Chr5	4320148	4326237	Deletion_6089bp
Chr5	4402455	4402676	Deletion_221bp
Chr5	4458556	4458611	Deletion_55bp
Chr5	4460017	4460017	Insertion_45bp
Chr5	4463500	4463500	Insertion_40bp
Chr5	4495653	4495653	Insertion_22bp
Chr5	24496907	24496907	Insertion_20bp
Chr5	24514985	24514985	Insertion_41bp
Chr5	24534930	24534930	Insertion_32bp

Chr5	24578872	24578895	Deletion_23bp
Chr5	24586628	24587056	Deletion_428bp
Chr5	24626804	24626804	Insertion_25bp
Chr5	24647409	24647409	Insertion_34bp
Chr5	25623676	25623676	Insertion_38bp
Chr5	25645023	25645023	Insertion_143bp
Chr5	25762471	25762471	Insertion_20bp
Chr5	25765585	25765585	Insertion_29bp
Chr5	3229682	3229705	Deletion_23bp
Chr5	3239349	3239349	Insertion_2568bp
Chr5	3270954	3271001	Deletion_47bp
Chr5	3275063	3275063	Insertion_53bp
Chr5	3312027	3312060	Deletion_33bp
Chr5	3315252	3315252	Insertion_25bp
Chr5	3324797	3324797	Insertion_101bp
Chr5	3343818	3343818	Insertion_33bp
Chr5	3350061	3350346	Deletion_285bp
Chr5	22894834	22894834	Insertion_23bp
Chr5	23026044	23027324	Deletion_1280bp
Chr5	23523469	23523491	Deletion_22bp
Chr5	23567095	23567095	Insertion_1375bp
Chr5	23568557	23568557	Insertion_33bp
Chr5	23603965	23604029	Deletion_64bp
Chr5	4063724	4063746	Deletion_22bp
Chr5	4074149	4074205	Deletion_56bp
Chr5	4141315	4141315	Insertion_40bp
Chr5	4156084	4156115	Deletion_31bp
Chr5	4162499	4162499	Insertion_381bp
Chr5	4166356	4166356	Insertion_3150bp
Chr5	25484867	25484867	Insertion_36bp
Chr5	25484987	25484987	Insertion_31bp
Chr5	25505020	25505055	Deletion_35bp
Chr5	25511144	25511144	Insertion_33bp
Chr5	25532990	25532990	Insertion_24bp
Chr5	25535423	25535467	Deletion_44bp
Chr5	25537171	25537197	Deletion_26bp
Chr5	16394046	16394046	Insertion_81bp
Chr5	16406724	16406754	Deletion_30bp
Chr5	16428466	16428512	Deletion_46bp
Chr5	16441306	16441306	Insertion_20bp
Chr5	16444159	16444159	Insertion_32bp
Chr5	16477618	16477618	Insertion_63bp
Chr5	16480785	16480806	Deletion_21bp
Chr5	4634117	4634152	Deletion_35bp
Chr5	4642403	4642403	Insertion_21bp
Chr5	4669954	4669986	Deletion_32bp
Chr5	4723227	4723230	Insertion_28bp
Chr5	4728892	4728915	Deletion_23bp
Chr5	4737013	4737129	Deletion_116bp

Chr5	1087762	1087784	Deletion_22bp
Chr5	1088862	1088892	Deletion_30bp
Chr5	1094486	1094486	Insertion_314bp
Chr5	1160743	1160743	Insertion_22bp
Chr5	6224586	6224586	Insertion_121bp
Chr5	6225481	6225481	Insertion_60bp
Chr5	6231446	6231446	Insertion_80bp
Chr5	6234446	6234474	Deletion_28bp
Chr5	6296769	6296769	Insertion_563bp
Chr5	6317710	6317817	Deletion_107bp
Chr5	6319719	6319719	Insertion_23bp
Chr5	6072538	6073723	Deletion_1185bp
Chr5	2334512	2334512	Insertion_30bp
Chr5	2342566	2342596	Deletion_30bp
Chr5	2374086	2374166	Deletion_80bp
Chr5	1932440	1932469	Deletion_29bp
Chr5	1935831	1935831	Insertion_1623bp
Chr5	1951030	1951030	Insertion_72bp
Chr5	1996356	1996356	Insertion_280bp
Chr5	2036923	2036998	Deletion_75bp
Chr5	13291086	13291124	Deletion_38bp
Chr5	13299059	13299059	Insertion_20bp
Chr5	13366257	13366291	Deletion_34bp
Chr5	13367231	13367259	Deletion_28bp
Chr5	13375814	13375814	Insertion_111bp
Chr5	13376390	13376424	Deletion_34bp
Chr5	24352359	24352359	Insertion_20bp
Chr5	24363556	24363576	Deletion_20bp
Chr5	2916203	2916203	Insertion_20bp
Chr5	2948464	2948464	Insertion_695bp
Chr5	5041932	5041979	Deletion_47bp
Chr5	5042458	5042458	Insertion_34bp
Chr5	6736711	6736743	Deletion_32bp
Chr5	6755437	6755480	Deletion_43bp
Chr5	6773110	6773110	Insertion_56bp
Chr5	6788701	6790010	Deletion_1309bp
Chr5	26252469	26252510	Deletion_41bp
Chr5	26290190	26290236	Deletion_46bp
Chr5	26325117	26325117	Insertion_155bp
Chr5	26351756	26351756	Insertion_30bp
Chr5	26130845	26131057	Deletion_212bp
Chr5	26150430	26150430	Insertion_73bp
Chr5	26157149	26157175	Deletion_26bp
Chr5	26167379	26167400	Deletion_21bp
Chr5	26193823	26194114	Deletion_291bp
Chr5	26208160	26208160	Insertion_139bp
Chr5	26208976	26208976	Insertion_274bp
Chr5	26209495	26210478	Deletion_983bp
Chr5	26219742	26219742	Insertion_245bp

Chr5	7237478	7237510	Deletion_32bp
Chr5	7248237	7248278	Deletion_41bp
Chr5	7251157	7251179	Deletion_22bp
Chr5	7255971	7255998	Deletion_27bp
Chr5	7326115	7326115	Insertion_34bp
Chr5	5803767	5803767	Insertion_61bp
Chr5	5858284	5858284	Insertion_20bp
Chr5	5869236	5869236	Insertion_34bp
Chr5	5871496	5871516	Deletion_20bp
Chr5	21147343	21147343	Insertion_789bp
Chr5	21157377	21157377	Insertion_23bp
Chr5	21160187	21160217	Deletion_30bp
Chr5	21168507	21169086	Deletion_579bp
Chr5	21190865	21190889	Deletion_24bp
Chr5	1837006	1837134	Deletion_128bp
Chr5	1871579	1871607	Deletion_28bp
Chr5	1887558	1887558	Insertion_692bp
Chr5	1912713	1912740	Deletion_27bp
Chr5	1918285	1918285	Insertion_24bp
Chr5	19305586	19305586	Insertion_20bp
Chr5	19354378	19354378	Insertion_400bp
Chr5	7360075	7360075	Insertion_349bp
Chr5	7379175	7379175	Insertion_31bp
Chr5	5938133	5938133	Insertion_30bp
Chr5	5938726	5938824	Deletion_98bp
Chr5	5961205	5961205	Insertion_25bp
Chr5	6013978	6013978	Insertion_27bp
Chr5	25152786	25152786	Insertion_33bp
Chr5	25176470	25176490	Deletion_20bp
Chr5	25177539	25177559	Deletion_20bp
Chr5	25186658	25186681	Deletion_23bp
Chr5	25211760	25211760	Insertion_28bp
Chr5	25212443	25212443	Insertion_27bp
Chr5	25216173	25216173	Insertion_24bp
Chr5	25216550	25216550	Insertion_115bp
Chr5	25216802	25216802	Insertion_23bp
Chr5	25226559	25226559	Insertion_4961bp
Chr5	25232000	25232000	Insertion_162bp
Chr5	25240216	25240216	Insertion_233bp
Chr5	1641226	1641226	Insertion_27bp
Chr5	1409651	1409709	Deletion_58bp
Chr5	1410515	1410515	Insertion_22bp
Chr5	1445118	1445118	Insertion_20bp
Chr5	4868929	4868975	Deletion_46bp
Chr5	4894642	4894664	Deletion_22bp
Chr5	24664452	24664452	Insertion_26bp
Chr5	24681492	24681492	Insertion_33bp
Chr5	24683176	24683176	Insertion_24bp
Chr5	24734707	24734931	Deletion_224bp

Chr5	6505018	6505049	Deletion_31bp
Chr5	6565989	6565989	Insertion_38bp
Chr5	6567491	6567522	Deletion_31bp
Chr5	6570032	6570032	Insertion_180bp
Chr5	23516880	23516947	Deletion_67bp
Chr5	2500665	2500665	Insertion_21bp
Chr5	2508350	2508350	Insertion_21bp
Chr5	2530596	2530616	Deletion_20bp
Chr5	2541963	2542005	Deletion_42bp
Chr5	23683743	23683772	Deletion_29bp
Chr5	23717396	23717403	Insertion_37bp
Chr5	23723377	23723377	Insertion_548bp
Chr5	23750262	23750411	Deletion_149bp
Chr5	3019523	3019523	Insertion_1877bp
Chr5	3020210	3020210	Insertion_20bp
Chr5	3038298	3038298	Insertion_32bp
Chr5	3041783	3041783	Insertion_542bp
Chr5	3049377	3049377	Insertion_22bp
Chr5	3066785	3066785	Insertion_22bp
Chr5	3096060	3096060	Insertion_399bp
Chr5	5356637	5356637	Insertion_73bp
Chr5	5397421	5397453	Deletion_32bp
Chr5	5419563	5419563	Insertion_22bp
Chr5	22731763	22731783	Deletion_20bp
Chr5	22732183	22732275	Deletion_92bp
Chr5	22777504	22777534	Deletion_30bp
Chr5	22781502	22781541	Deletion_39bp
Chr5	22788372	22788372	Insertion_30bp
Chr5	22794488	22794495	Insertion_26bp
Chr5	22796340	22796366	Deletion_26bp
Chr5	22798465	22798490	Deletion_25bp
Chr5	26410305	26410305	Insertion_29bp
Chr5	26410387	26410387	Insertion_41bp
Chr5	26431274	26431297	Deletion_23bp
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Chr5	5221862	5221891	Deletion_29bp
Chr5	5284744	5284744	Insertion_33bp
Chr5	5288317	5289085	Deletion_768bp
Chr5	5289115	5289148	Deletion_33bp
Chr5	5299540	5299573	Deletion_33bp
Chr5	5302972	5303007	Deletion_35bp
Chr5	24206201	24206607	Deletion_406bp
Chr5	24256018	24256018	Insertion_40bp
Chr5	5506923	5506923	Insertion_42bp
Chr5	5517701	5517701	Insertion_21bp
Chr5	5535835	5535835	Insertion_20bp
Chr5	1291304	1291340	Deletion_36bp
Chr5	1296476	1296476	Insertion_4557bp
Chr5	1306640	1306640	Insertion_56bp

Chr5	1307142	1307172	Deletion_30bp
Chr5	1344109	1344169	Deletion_60bp
Chr5	1349127	1349160	Deletion_33bp
Chr5	1367339	1367339	Insertion_47bp
Chr5	9296545	9296545	Insertion_50bp
Chr5	9302423	9302803	Deletion_380bp
Chr5	9321466	9321510	Deletion_44bp
Chr5	9322334	9322334	Insertion_34bp
Chr5	9326022	9326042	Deletion_20bp
Chr5	9326684	9326684	Insertion_22bp
Chr5	9342309	9342309	Insertion_22bp
Chr5	9354501	9354521	Deletion_20bp
Chr5	6803836	6803836	Insertion_28bp
Chr5	6804433	6804433	Insertion_23bp
Chr5	6830356	6830356	Insertion_22bp
Chr5	6838190	6838224	Deletion_34bp
Chr5	19071521	19071521	Insertion_67bp
Chr5	19092624	19092662	Deletion_38bp
Chr5	19101559	19102108	Deletion_549bp
Chr5	19119876	19119876	Insertion_20bp
Chr5	997	997	Insertion_161bp
Chr5	16350	16350	Insertion_83bp
Chr5	17718	17739	Deletion_21bp
Chr5	38052	38052	Insertion_27bp
Chr5	41678	41702	Deletion_24bp
Chr5	64767	71200	Deletion_6433bp
Chr5	7892950	7893533	Deletion_583bp
Chr5	7919640	7919640	Insertion_20bp
Chr5	250083	251120	Deletion_1037bp
Chr5	272262	272262	Insertion_45bp
Chr5	281657	281657	Insertion_49bp
Chr5	339690	339690	Insertion_31bp
Chr5	347816	348098	Deletion_282bp
Chr5	391228	391254	Deletion_26bp
Chr5	20147648	20149168	Deletion_1520bp
Chr5	20170205	20170300	Deletion_95bp
Chr5	20175643	20175690	Deletion_47bp
Chr5	20184054	20184084	Deletion_30bp
Chr5	20191764	20191764	Insertion_22bp
Chr5	22451383	22451383	Insertion_36bp
Chr5	22457464	22457464	Insertion_21bp
Chr5	22463654	22464199	Deletion_545bp
Chr5	22478636	22478636	Insertion_35bp
Chr5	22488135	22488157	Deletion_30bp
Chr5	22507903	22507903	Insertion_26bp
Chr5	22510455	22510481	Deletion_26bp
Chr5	25408490	25408490	Insertion_20bp
Chr5	25411472	25411472	Insertion_26bp
Chr5	25462321	25462321	Insertion_35bp

Chr5	19965194	19965194	Insertion_44bp
Chr5	19966446	19966446	Insertion_86bp
Chr5	19970469	19970496	Deletion_27bp
Chr5	5701341	5702995	Deletion_1654bp
Chr5	5711804	5711836	Deletion_32bp
Chr5	21611994	21611994	Insertion_64bp
Chr5	21613661	21613696	Deletion_35bp
Chr5	21648530	21648530	Insertion_44bp
Chr5	8378603	8378603	Insertion_54bp
Chr5	8381741	8381741	Insertion_67bp
Chr5	8384776	8384776	Insertion_3459bp
Chr5	8400384	8400970	Deletion_586bp
Chr5	8428158	8428158	Insertion_32bp
Chr5	8433617	8433645	Deletion_28bp
Chr5	8441138	8441170	Deletion_32bp
Chr5	8446729	8446729	Insertion_27bp
Chr5	19994913	19994975	Deletion_62bp
Chr5	20029550	20029613	Deletion_63bp
Chr5	20047273	20047273	Insertion_2440bp
Chr5	20060147	20060155	Insertion_62bp
Chr5	4242326	4242735	Deletion_409bp
Chr5	4286473	4286473	Insertion_33bp
Chr5	25823030	25823621	Deletion_591bp
Chr5	25851932	25851932	Insertion_23bp
Chr5	25855935	25858087	Deletion_2152bp
Chr5	25859352	25859463	Deletion_123bp
Chr5	10970841	10970841	Insertion_25bp
Chr5	10977130	10977763	Deletion_633bp
Chr5	10983422	10983422	Insertion_29bp
Chr5	10986787	10991712	Deletion_4925bp
Chr5	10993834	10993834	Insertion_28bp
Chr5	11014866	11015490	Deletion_624bp
Chr5	11018952	11018952	Insertion_2174bp
Chr5	11046151	11046151	Insertion_40bp
Chr5	11051897	11051897	Insertion_2592bp
Chr5	11058607	11058670	Deletion_63bp
Chr5	11062525	11062525	Insertion_4490bp
Chr5	11069401	11069401	Insertion_22bp
Chr5	11070357	11070421	Deletion_64bp
Chr5	11075894	11075894	Insertion_29bp
Chr5	10518851	10518851	Insertion_48bp
Chr5	10519557	10519600	Deletion_43bp
Chr5	10520950	10520950	Insertion_601bp
Chr5	10532022	10532042	Deletion_20bp
Chr5	10543985	10543985	Insertion_64bp
Chr5	10564181	10564241	Deletion_60bp
Chr5	10567787	10567787	Insertion_550bp
Chr5	21738064	21738106	Deletion_42bp
Chr5	21756878	21756906	Deletion_28bp

Chr5	21788018	21788018	Insertion_383bp
Chr5	2461568	2461674	Deletion_106bp
Chr5	2462842	2462842	Insertion_39bp
Chr5	2463269	2463329	Deletion_60bp
Chr5	19882559	19882559	Insertion_701bp
Chr5	19910443	19910443	Insertion_26bp
Chr5	19929935	19929935	Insertion_94bp
Chr5	13583232	13583232	Insertion_38bp
Chr5	13607064	13607064	Insertion_32bp
Chr5	13616472	13616528	Deletion_56bp
Chr5	13617256	13617256	Insertion_367bp
Chr5	13632951	13632979	Deletion_28bp
Chr5	13636096	13636138	Deletion_42bp
Chr5	7605980	7605980	Insertion_4740bp
Chr5	7608537	7608537	Insertion_4762bp
Chr5	7644543	7644543	Insertion_34bp
Chr5	14230266	14230266	Insertion_218bp
Chr5	14246876	14246903	Deletion_27bp
Chr5	14248059	14248092	Deletion_33bp
Chr5	14268049	14268078	Deletion_29bp
Chr5	14271588	14271610	Deletion_22bp
Chr5	23378708	23378708	Insertion_22bp
Chr5	23381310	23381310	Insertion_21bp
Chr5	23419445	23419466	Deletion_21bp
Chr5	12500014	12500069	Deletion_55bp
Chr5	12513898	12513898	Insertion_467bp
Chr5	12517692	12517692	Insertion_32bp
Chr5	12527106	12527130	Deletion_24bp
Chr5	12547109	12554204	Deletion_7095bp
Chr5	12554400	12555836	Deletion_1436bp
Chr5	12561341	12561341	Insertion_125bp
Chr5	26611232	26611459	Deletion_227bp
Chr5	26628063	26628227	Deletion_164bp
Chr5	26644994	26644994	Insertion_27bp
Chr5	21321567	21321591	Deletion_24bp
Chr5	21326137	21326210	Insertion_146bp
Chr5	21326998	21326998	Insertion_549bp
Chr5	21348986	21348986	Insertion_411bp
Chr5	21358317	21358317	Insertion_22bp
Chr5	21365425	21365453	Deletion_28bp
Chr5	1488097	1489345	Deletion_1248bp
Chr5	1501542	1501574	Deletion_32bp
Chr5	1503166	1503166	Insertion_25bp
Chr5	1507175	1507197	Deletion_22bp
Chr5	1515162	1516304	Deletion_1142bp
Chr5	1536689	1536723	Deletion_34bp
Chr5	24453318	24453318	Insertion_44bp
Chr5	24460449	24460500	Deletion_51bp
Chr5	24462612	24462612	Insertion_33bp

Chr5	24462926	24462976	Deletion_50bp
Chr5	24465590	24465590	Insertion_26bp
Chr5	24467567	24467625	Deletion_58bp
Chr5	24472082	24472129	Deletion_47bp
Chr5	2837516	2837516	Insertion_34bp
Chr5	2839130	2839130	Insertion_34bp
Chr5	2848592	2848631	Deletion_39bp
Chr5	2865487	2865487	Insertion_28bp
Chr5	553760	553760	Insertion_33bp
Chr5	584970	584970	Insertion_79bp
Chr5	21681284	21681317	Deletion_33bp
Chr5	21684057	21684093	Deletion_36bp
Chr5	21694005	21694005	Insertion_1609bp
Chr5	21710211	21710255	Deletion_44bp
Chr5	21712610	21712610	Insertion_36bp
Chr5	21730625	21730664	Deletion_39bp
Chr5	21735076	21735076	Insertion_22bp
Chr5	25935899	25936460	Deletion_561bp
Chr5	25973753	25973753	Insertion_390bp
Chr5	25985440	25989024	Deletion_3584bp
Chr5	4970260	4971025	Deletion_765bp
Chr5	17132871	17134669	Deletion_1798bp
Chr5	17141333	17141357	Deletion_24bp
Chr5	17181282	17181431	Deletion_149bp
Chr5	21542905	21546688	Deletion_3783bp
Chr5	597233	597319	Deletion_86bp
Chr5	600706	600827	Deletion_121bp
Chr5	602947	603239	Deletion_292bp
Chr5	610116	610496	Deletion_380bp
Chr5	1793939	1793939	Insertion_34bp
Chr5	1810436	1810436	Insertion_278bp
Chr5	1813519	1813519	Insertion_26bp
Chr5	13900709	13900709	Insertion_20bp
Chr5	13907054	13907074	Deletion_20bp
Chr5	13917289	13918785	Deletion_1496bp
Chr5	13929019	13929052	Deletion_33bp
Chr5	13929436	13929472	Deletion_36bp
Chr5	13930424	13930457	Deletion_33bp
Chr5	13931606	13931683	Deletion_77bp
Chr5	13939290	13939320	Deletion_30bp
Chr5	13940414	13940463	Deletion_49bp
Chr5	13943930	13943930	Insertion_72bp
Chr5	13951748	13951784	Deletion_36bp
Chr5	13956509	13956530	Deletion_21bp
Chr5	8851186	8851186	Insertion_30bp
Chr5	8896645	8897756	Deletion_1111bp
Chr5	3139351	3139382	Deletion_31bp
Chr5	3160484	3160548	Deletion_64bp
Chr5	3174686	3174686	Insertion_32bp

Chr5	3177810	3177840	Deletion_30bp
Chr5	16860128	16860148	Deletion_20bp
Chr5	16881177	16881177	Insertion_54bp
Chr5	702571	702571	Insertion_21bp
Chr5	4574769	4574817	Deletion_48bp
Chr5	4575135	4575385	Deletion_250bp
Chr5	4599702	4599726	Deletion_24bp
Chr5	4612437	4612437	Insertion_375bp
Chr5	4618074	4618074	Insertion_48bp
Chr5	26362320	26362384	Deletion_64bp
Chr5	26369797	26369845	Deletion_48bp
Chr5	26391255	26391255	Insertion_37bp
Chr5	26393550	26393572	Deletion_22bp
Chr5	4541293	4541316	Deletion_23bp
Chr5	4554507	4554539	Deletion_32bp
Chr5	4561269	4561291	Deletion_22bp
Chr5	16079593	16079593	Insertion_25bp
Chr5	16080134	16080134	Insertion_21bp
Chr5	16088143	16088143	Insertion_2025bp
Chr5	16118343	16118343	Insertion_2109bp
Chr5	16120650	16120792	Deletion_142bp
Chr5	16127741	16127741	Insertion_28bp
Chr5	24301411	24301411	Insertion_41bp
Chr5	17765628	17765628	Insertion_887bp
Chr5	17769035	17769035	Insertion_22bp
Chr5	17781731	17781773	Deletion_42bp
Chr5	17796138	17796784	Deletion_646bp
Chr5	16941521	16941543	Deletion_22bp
Chr5	16944951	16944951	Insertion_164bp
Chr5	16962587	16962623	Deletion_36bp
Chr5	16967240	16967240	Insertion_487bp
Chr5	10681202	10682298	Deletion_1096bp
Chr5	10683175	10683344	Deletion_169bp
Chr5	10683778	10683778	Insertion_28bp
Chr5	10692633	10692633	Insertion_1071bp
Chr5	10695158	10695180	Deletion_22bp
Chr5	10695752	10695772	Deletion_20bp
Chr5	10697999	10698038	Deletion_39bp
Chr5	10708431	10708459	Deletion_28bp
Chr5	10713107	10713107	Insertion_133bp
Chr5	10733701	10734060	Deletion_359bp
Chr5	10735929	10736019	Deletion_90bp
Chr5	10738802	10738802	Insertion_21bp
Chr5	10741783	10741783	Insertion_32bp
Chr5	9081738	9081738	Insertion_30bp
Chr5	9109813	9109813	Insertion_32bp
Chr5	8294167	8294167	Insertion_24bp
Chr5	8320176	8320197	Deletion_21bp
Chr5	8322620	8322876	Deletion_256bp

Chr5	4799788	4799844	Deletion_56bp
Chr5	4800848	4800848	Insertion_38bp
Chr5	4836110	4836141	Deletion_31bp
Chr5	4842143	4842143	Insertion_3012bp
Chr5	21028219	21028219	Insertion_26bp
Chr5	21044123	21044181	Deletion_58bp
Chr5	21046445	21046468	Deletion_23bp
Chr5	21050006	21050276	Deletion_270bp
Chr5	8455418	8455418	Insertion_135bp
Chr5	8460880	8460926	Deletion_46bp
Chr5	8469634	8469688	Deletion_54bp
Chr5	8490923	8490950	Deletion_27bp
Chr5	13488866	13489023	Deletion_157bp
Chr5	13491415	13491797	Deletion_382bp
Chr5	13499528	13499528	Insertion_27bp
Chr5	13500170	13500616	Deletion_446bp
Chr5	13508940	13509101	Deletion_161bp
Chr5	13510527	13510527	Insertion_44bp
Chr5	13512254	13512254	Insertion_34bp
Chr5	13513335	13513335	Insertion_40bp
Chr5	13530809	13530985	Deletion_176bp
Chr5	13535364	13535364	Insertion_70bp
Chr5	13536787	13536952	Deletion_165bp
Chr5	13544192	13544192	Insertion_8247bp
Chr5	25340639	25340671	Deletion_32bp
Chr5	21285224	21285224	Insertion_46bp
Chr5	9753809	9754190	Deletion_381bp
Chr5	9759808	9759808	Insertion_489bp
Chr5	9761305	9761305	Insertion_28bp
Chr5	9775768	9775806	Deletion_38bp
Chr5	9786850	9786850	Insertion_34bp
Chr5	7159853	7159853	Insertion_22bp
Chr5	7165343	7165380	Deletion_37bp
Chr5	7172212	7172245	Deletion_33bp
Chr5	7192986	7192986	Insertion_78bp
Chr5	7197226	7197226	Insertion_82bp
Chr5	2380257	2380293	Deletion_36bp
Chr5	2383218	2383347	Deletion_129bp
Chr5	2386388	2386448	Deletion_60bp
Chr5	2400738	2400824	Deletion_86bp
Chr5	2421992	2421992	Insertion_121bp
Chr5	13076913	13076913	Insertion_31bp
Chr5	13079305	13079305	Insertion_49bp
Chr5	13079649	13080423	Deletion_774bp
Chr5	13085245	13085270	Deletion_25bp
Chr5	13089915	13089915	Insertion_21bp
Chr5	13092657	13092657	Insertion_93bp
Chr5	13093498	13094877	Deletion_1379bp
Chr5	13102098	13102098	Insertion_49bp

Chr5	13112414	13112414	Insertion_21bp
Chr5	13115040	13115075	Deletion_35bp
Chr5	13121787	13121787	Insertion_21bp
Chr5	24158472	24158472	Insertion_288bp
Chr5	24193085	24193119	Deletion_34bp
Chr5	19123723	19123723	Insertion_51bp
Chr5	19135240	19135252	Insertion_46bp
Chr5	19138440	19138440	Insertion_213bp
Chr5	19139857	19139902	Deletion_45bp
Chr5	19142055	19142055	Insertion_362bp
Chr5	19152416	19153743	Deletion_1327bp
Chr5	19155122	19155122	Insertion_36bp
Chr5	19174529	19175866	Deletion_1337bp
Chr5	8703460	8703530	Deletion_70bp
Chr5	6919551	6919687	Deletion_144bp
Chr5	6920418	6920440	Deletion_22bp
Chr5	6921116	6921151	Deletion_35bp
Chr5	6926008	6926464	Deletion_456bp
Chr5	9576880	9576926	Deletion_46bp
Chr5	9601048	9605280	Deletion_4232bp
Chr5	9616875	9616955	Deletion_80bp
Chr5	9627008	9627008	Insertion_759bp
Chr5	9627300	9627320	Deletion_20bp
Chr5	6439024	6439024	Insertion_234bp
Chr5	9483414	9483431	Insertion_25bp
Chr5	9486681	9486700	Insertion_28bp
Chr5	9488635	9488635	Insertion_89bp
Chr5	9497394	9497394	Insertion_23bp
Chr5	9497792	9497827	Deletion_35bp
Chr5	9520253	9520253	Insertion_430bp
Chr5	9520590	9520590	Insertion_187bp
Chr5	9527012	9527012	Insertion_259bp
Chr5	9527326	9527326	Insertion_135bp
Chr5	20328080	20328108	Deletion_28bp
Chr5	20328440	20328859	Deletion_419bp
Chr5	23774315	23775702	Deletion_1387bp
Chr5	19479578	19480157	Deletion_579bp
Chr5	19480356	19480382	Deletion_26bp
Chr5	19480814	19480839	Deletion_25bp
Chr5	19495315	19495323	Insertion_54bp
Chr5	19506089	19506089	Insertion_405bp
Chr5	9683355	9683398	Deletion_43bp
Chr5	9686282	9686282	Insertion_519bp
Chr5	9697347	9697398	Deletion_51bp
Chr5	9705924	9705924	Insertion_22bp
Chr5	5007975	5008573	Deletion_598bp
Chr5	5013954	5013954	Insertion_43bp
Chr5	659925	659955	Deletion_30bp
Chr5	7139706	7139804	Deletion_98bp

Chr5	7147367	7147421	Deletion_54bp
Chr5	6486022	6486022	Insertion_39bp
Chr5	12572670	12572719	Deletion_49bp
Chr5	12577262	12577262	Insertion_24bp
Chr5	12581901	12581933	Deletion_32bp
Chr5	12586954	12586988	Deletion_34bp
Chr5	12587137	12588130	Deletion_993bp
Chr5	12592573	12592598	Deletion_25bp
Chr5	12606317	12606359	Deletion_42bp
Chr5	12611007	12611027	Deletion_20bp
Chr5	12613608	12613608	Insertion_66bp
Chr5	16332140	16332140	Insertion_613bp
Chr5	16337695	16337695	Insertion_23bp
Chr5	16341966	16341993	Deletion_27bp
Chr5	16354082	16354119	Deletion_37bp
Chr5	11379133	11379133	Insertion_21bp
Chr5	11387089	11387123	Deletion_34bp
Chr5	11388372	11389612	Deletion_1240bp
Chr5	11390120	11390408	Deletion_288bp
Chr5	11392065	11392102	Deletion_37bp
Chr5	11393171	11393171	Insertion_180bp
Chr5	11403647	11403647	Insertion_76bp
Chr5	11422237	11422274	Deletion_37bp
Chr5	11423176	11423176	Insertion_45bp
Chr5	11423862	11423862	Insertion_59bp
Chr5	11431300	11431325	Deletion_25bp
Chr5	1723067	1723067	Insertion_45bp
Chr5	1726123	1726123	Insertion_26bp
Chr5	22660821	22660821	Insertion_28bp
Chr5	22676286	22676321	Deletion_35bp
Chr5	22681613	22681613	Insertion_35bp
Chr5	22692835	22692835	Insertion_82bp
Chr5	7752814	7753193	Deletion_379bp
Chr5	7755856	7755856	Insertion_35bp
Chr5	7777228	7777264	Deletion_36bp
Chr5	7777987	7777987	Insertion_1971bp
Chr5	19783884	19783884	Insertion_24bp
Chr5	19796674	19796702	Deletion_28bp
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Chr5	9021937	9021958	Deletion_21bp
Chr5	26891639	26893399	Deletion_1760bp
Chr5	26895749	26895749	Insertion_32bp
Chr5	26900598	26900598	Insertion_25bp
Chr5	26905526	26905526	Insertion_27bp
Chr5	26907352	26907422	Deletion_70bp
Chr5	26920416	26920439	Deletion_23bp
Chr5	6361456	6361456	Insertion_489bp
Chr5	6364285	6364517	Deletion_232bp

Chr5	6365759	6365808	Deletion_49bp
Chr5	6381796	6381796	Insertion_23bp
Chr5	2187155	2187322	Deletion_167bp
Chr5	2188646	2188669	Deletion_23bp
Chr5	2190171	2190210	Deletion_39bp
Chr5	2196028	2196265	Deletion_237bp
Chr5	2216661	2216661	Insertion_45bp
Chr5	2221394	2221394	Insertion_21bp
Chr5	26839256	26839276	Deletion_20bp
Chr5	26846172	26846200	Deletion_28bp
Chr5	26856420	26856901	Deletion_481bp
Chr5	26869686	26869686	Insertion_23bp
Chr5	10813434	10813455	Deletion_21bp
Chr5	10835566	10835625	Deletion_59bp
Chr5	10841253	10841731	Deletion_478bp
Chr5	7007325	7007362	Deletion_37bp
Chr5	7007837	7007869	Deletion_32bp
Chr5	1738896	1738928	Deletion_32bp
Chr5	15391861	15391861	Insertion_22bp
Chr5	15396775	15396881	Deletion_106bp
Chr5	15397756	15397756	Insertion_27bp
Chr5	15397787	15397787	Insertion_25bp
Chr5	15415148	15415148	Insertion_151bp
Chr5	26676539	26676539	Insertion_859bp
Chr5	26679718	26679718	Insertion_23bp
Chr5	26682378	26682485	Deletion_107bp
Chr5	26692620	26692670	Deletion_50bp
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Chr5	21243704	21243725	Deletion_21bp
Chr5	21247199	21247240	Deletion_41bp
Chr5	16826317	16826555	Deletion_238bp
Chr5	16828717	16829117	Deletion_400bp
Chr5	16844100	16844129	Deletion_29bp
Chr5	16856703	16856703	Insertion_39bp
Chr5	22233538	22233565	Deletion_27bp
Chr5	22244383	22244422	Deletion_39bp
Chr5	22253569	22253624	Deletion_55bp
Chr5	19283116	19283138	Deletion_22bp
Chr5	198269	198269	Insertion_33bp
Chr5	198417	198417	Insertion_46bp
Chr5	13231670	13232073	Deletion_403bp
Chr5	10386542	10386542	Insertion_55bp
Chr5	10387031	10387031	Insertion_24bp
Chr5	8593738	8593777	Deletion_39bp
Chr5	8598234	8598270	Deletion_36bp
Chr5	26583056	26583056	Insertion_291bp
Chr5	26585550	26585550	Insertion_138bp
Chr5	20979550	20979550	Insertion_103bp
Chr5	20980026	20980026	Insertion_22bp

Chr5	20989989	20989989	Insertion_249bp
Chr5	20990574	20990574	Insertion_23bp
Chr5	20996150	20996176	Deletion_26bp
Chr5	22829957	22833746	Deletion_3789bp
Chr5	22839905	22839905	Insertion_4963bp
Chr5	22840708	22841508	Deletion_800bp
Chr5	22848300	22848300	Insertion_27bp
Chr5	16180478	16180478	Insertion_5192bp
Chr5	16199866	16199901	Deletion_35bp
Chr5	16207658	16207681	Deletion_23bp
Chr5	16208168	16208168	Insertion_30bp
Chr5	16211362	16212169	Deletion_807bp
Chr5	17041148	17041148	Insertion_21bp
Chr5	17043359	17043901	Deletion_542bp
Chr5	17045061	17045115	Deletion_54bp
Chr5	17047600	17047613	Insertion_39bp
Chr5	17054334	17054366	Deletion_32bp
Chr5	17055798	17056130	Deletion_332bp
Chr5	17074364	17074364	Insertion_41bp
Chr5	7958208	7958208	Insertion_35bp
Chr5	7989481	7989481	Insertion_46bp
Chr5	14784830	14784862	Deletion_32bp
Chr5	14795625	14795625	Insertion_27bp
Chr5	14799631	14799924	Deletion_293bp
Chr5	14804222	14804222	Insertion_5930bp
Chr5	8636456	8636456	Insertion_206bp
Chr5	8652587	8652650	Deletion_63bp
Chr5	8660152	8660152	Insertion_20bp
Chr5	22190566	22190589	Deletion_23bp
Chr5	22194516	22194539	Deletion_23bp
Chr5	22200422	22200422	Insertion_39bp
Chr5	17468323	17468343	Deletion_20bp
Chr5	17481920	17481920	Insertion_49bp
Chr5	17487336	17487336	Insertion_541bp
Chr5	17506665	17506685	Deletion_20bp
Chr5	7836922	7836922	Insertion_31bp
Chr5	7842574	7842574	Insertion_32bp
Chr5	7868246	7868246	Insertion_130bp
Chr5	7870181	7870219	Deletion_38bp
Chr5	23876369	23876394	Deletion_25bp
Chr5	23897201	23897201	Insertion_27bp
Chr5	23899038	23899038	Insertion_31bp
Chr5	16550984	16550984	Insertion_586bp
Chr5	16552487	16552487	Insertion_38bp
Chr5	7097705	7097705	Insertion_43bp
Chr5	16240241	16240267	Deletion_26bp
Chr5	16240347	16240372	Deletion_25bp
Chr5	11126329	11126359	Deletion_30bp
Chr5	11129152	11129183	Deletion_31bp

Chr5	11129682	11129746	Deletion_64bp
Chr5	11130630	11131048	Deletion_418bp
Chr5	11132810	11132810	Insertion_34bp
Chr5	11137891	11137891	Insertion_20bp
Chr5	11139322	11139440	Deletion_118bp
Chr5	11139756	11139784	Deletion_28bp
Chr5	11141016	11141016	Insertion_84bp
Chr5	11143931	11143931	Insertion_463bp
Chr5	11145438	11145438	Insertion_33bp
Chr5	13772587	13772587	Insertion_1137bp
Chr5	13778075	13778075	Insertion_22bp
Chr5	13781605	13781605	Insertion_26bp
Chr5	13799482	13799482	Insertion_62bp
Chr5	13808079	13808079	Insertion_33bp
Chr5	10418702	10418702	Insertion_451bp
Chr5	10418958	10418994	Deletion_36bp
Chr5	10419897	10419897	Insertion_27bp
Chr5	10424792	10424792	Insertion_33bp
Chr5	10431314	10431335	Deletion_21bp
Chr5	10432871	10446803	Deletion_13932bp
Chr5	10448349	10448370	Deletion_21bp
Chr5	10450920	10450940	Deletion_20bp
Chr5	10479358	10486385	Deletion_7027bp
Chr5	10487999	10489685	Deletion_1686bp
Chr5	10491291	10491373	Deletion_82bp
Chr5	10491944	10491968	Deletion_24bp
Chr5	15671630	15671630	Insertion_25bp
Chr5	6612513	6612538	Deletion_25bp
Chr5	6622645	6622645	Insertion_34bp
Chr5	26528597	26528597	Insertion_238bp
Chr5	22547914	22547914	Insertion_120bp
Chr5	22557167	22557206	Deletion_39bp
Chr5	22564709	22564737	Deletion_28bp
Chr5	23931605	23931605	Insertion_20bp
Chr5	23933384	23933384	Insertion_57bp
Chr5	23938252	23938279	Deletion_27bp
Chr5	23938661	23938661	Insertion_5113bp
Chr5	21870595	21870625	Deletion_30bp
Chr5	21871841	21871841	Insertion_26bp
Chr5	21872052	21872082	Deletion_30bp
Chr5	21875905	21875905	Insertion_63bp
Chr5	21887727	21887760	Deletion_33bp
Chr5	21900128	21900128	Insertion_56bp
Chr5	21901360	21901360	Insertion_55bp
Chr5	16570363	16570363	Insertion_33bp
Chr5	16570669	16570669	Insertion_35bp
Chr5	16576586	16576613	Deletion_27bp
Chr5	21482386	21482407	Deletion_21bp
Chr5	11521911	11521963	Deletion_52bp

Chr5	11534181	11534215	Deletion_34bp
Chr5	11555591	11555598	Insertion_15496bp
Chr5	11557294	11557335	Deletion_41bp
Chr5	11561975	11562704	Deletion_729bp
Chr5	11566318	11566318	Insertion_39bp
Chr5	11567418	11567418	Insertion_42bp
Chr5	11581000	11581067	Deletion_67bp
Chr5	11581515	11581515	Insertion_21bp
Chr5	22316800	22316800	Insertion_25bp
Chr5	22317136	22317136	Insertion_20bp
Chr5	22335079	22335079	Insertion_34bp
Chr5	22337179	22337179	Insertion_20bp
Chr5	15615021	15615162	Deletion_141bp
Chr5	15615871	15615871	Insertion_24bp
Chr5	15621157	15621161	Insertion_342bp
Chr5	15622077	15622100	Deletion_23bp
Chr5	15625221	15625321	Deletion_100bp
Chr5	15630453	15630453	Insertion_268bp
Chr5	15636211	15639177	Deletion_2966bp
Chr5	8168043	8168043	Insertion_3698bp
Chr5	26787105	26787136	Deletion_31bp
Chr5	26790910	26790910	Insertion_33bp
Chr5	9991896	9991896	Insertion_24bp
Chr5	9993598	9993640	Deletion_42bp
Chr5	9995664	9995664	Insertion_15269bp
Chr5	10001877	10001905	Deletion_28bp
Chr5	10019072	10019911	Deletion_839bp
Chr5	26949711	26949760	Deletion_49bp
Chr5	26959122	26959170	Deletion_48bp
Chr5	22415889	22415889	Insertion_5154bp
Chr5	22439714	22439830	Deletion_116bp
Chr5	15251705	15251705	Insertion_21bp
Chr5	15267644	15267644	Insertion_26bp
Chr5	15273364	15273364	Insertion_20bp
Chr5	15274362	15274362	Insertion_4961bp
Chr5	22022758	22022758	Insertion_30bp
Chr5	22023215	22023215	Insertion_33bp
Chr5	22028438	22028438	Insertion_30bp
Chr5	22048197	22048220	Deletion_23bp
Chr5	16297647	16297687	Deletion_56bp
Chr5	5442294	5443140	Deletion_846bp
Chr5	5449817	5449817	Insertion_34bp
Chr5	5454577	5454645	Deletion_68bp
Chr5	2055127	2055158	Deletion_31bp
Chr5	2055737	2055762	Deletion_25bp
Chr5	17813820	17813820	Insertion_23bp
Chr5	17816578	17816604	Deletion_26bp
Chr5	17819935	17819960	Deletion_25bp
Chr5	17820179	17820179	Insertion_44bp

Chr5	17827275	17827307	Deletion_39bp
Chr5	14312853	14312879	Deletion_26bp
Chr5	14324062	14324166	Deletion_104bp
Chr5	14817748	14817790	Deletion_42bp
Chr5	14821160	14821160	Insertion_60bp
Chr5	14821273	14821293	Deletion_20bp
Chr5	14831069	14831069	Insertion_53bp
Chr5	14832760	14833161	Deletion_401bp
Chr5	14834261	14834261	Insertion_319bp
Chr5	14843829	14843829	Insertion_98bp
Chr5	10845910	10846029	Deletion_119bp
Chr5	10847233	10854218	Deletion_6985bp
Chr5	10865093	10865093	Insertion_564bp
Chr5	10867997	10868020	Deletion_23bp
Chr5	10869746	10869746	Insertion_28bp
Chr5	10874588	10874740	Deletion_152bp
Chr5	10889899	10889899	Insertion_50bp
Chr5	10890741	10890741	Insertion_9878bp
Chr5	9832622	9832650	Deletion_28bp
Chr5	9833138	9833138	Insertion_2547bp
Chr5	9848835	9848877	Deletion_42bp
Chr5	9857723	9857759	Deletion_36bp
Chr5	9858351	9858351	Insertion_172bp
Chr5	9859365	9859365	Insertion_5220bp
Chr5	9859527	9859547	Deletion_20bp
Chr5	9868775	9868775	Insertion_15272bp
Chr5	9872385	9872460	Deletion_75bp
Chr5	9876718	9876718	Insertion_62bp
Chr5	15938893	15938954	Deletion_61bp
Chr5	15952272	15953072	Deletion_800bp
Chr5	15959031	15959031	Insertion_218bp
Chr5	15970339	15970361	Deletion_22bp
Chr5	15973628	15973628	Insertion_1006bp
Chr5	15974016	15974016	Insertion_55bp
Chr5	1376449	1376449	Insertion_95bp
Chr5	14607872	14607872	Insertion_2384bp
Chr5	14614655	14614679	Deletion_24bp
Chr5	25267043	25267125	Deletion_82bp
Chr5	18732674	18732674	Insertion_21bp
Chr5	18737765	18737869	Deletion_104bp
Chr5	25308221	25308221	Insertion_23bp
Chr5	19542721	19544900	Deletion_2179bp
Chr5	19549062	19549062	Insertion_171bp
Chr5	25922283	25922389	Deletion_106bp
Chr5	25924526	25924526	Insertion_188bp
Chr5	25791162	25791199	Deletion_37bp
Chr5	22164994	22165017	Deletion_23bp
Chr5	22179931	22179955	Deletion_24bp
Chr5	26726544	26726544	Insertion_37bp

Chr5	26751190	26751190	Insertion_20bp
Chr5	18033003	18033045	Deletion_42bp
Chr5	18039779	18039779	Insertion_62bp
Chr5	7209108	7209152	Deletion_44bp
Chr5	7214569	7214569	Insertion_23bp
Chr5	10284361	10285288	Deletion_927bp
Chr5	10572739	10572777	Deletion_38bp
Chr5	10574606	10574633	Deletion_27bp
Chr5	10581050	10583498	Deletion_2448bp
Chr5	10584055	10584055	Insertion_21bp
Chr5	10586486	10586508	Deletion_22bp
Chr5	10605811	10606129	Deletion_318bp
Chr5	10608179	10608210	Deletion_31bp
Chr5	19428260	19428260	Insertion_31bp
Chr5	19437355	19437355	Insertion_1190bp
Chr5	19437396	19437396	Insertion_2712bp
Chr5	19444179	19444179	Insertion_38bp
Chr5	19450911	19450911	Insertion_34bp
Chr5	25992082	25992107	Deletion_25bp
Chr5	1212651	1212651	Insertion_23bp
Chr5	1214949	1214976	Deletion_27bp
Chr5	1221189	1221219	Deletion_30bp
Chr5	1231234	1231265	Deletion_31bp
Chr5	1237394	1237455	Deletion_61bp
Chr5	17527972	17527972	Insertion_27bp
Chr5	17548237	17548237	Insertion_60bp
Chr5	12265492	12265492	Insertion_29bp
Chr5	12275406	12275406	Insertion_241bp
Chr5	12275987	12276029	Deletion_42bp
Chr5	12287655	12287677	Deletion_22bp
Chr5	12289670	12289670	Insertion_1910bp
Chr5	20880578	20880624	Deletion_46bp
Chr5	7534337	7534365	Deletion_28bp
Chr5	7540925	7540925	Insertion_317bp
Chr5	7549462	7549482	Deletion_20bp
Chr5	14731485	14731485	Insertion_235bp
Chr5	17918408	17918432	Deletion_24bp
Chr5	17940043	17940043	Insertion_45bp
Chr5	17869958	17869981	Deletion_23bp
Chr5	15899617	15899654	Deletion_37bp
Chr5	22153984	22154013	Deletion_29bp
Chr5	4004392	4004392	Insertion_35bp
Chr5	21987815	21987815	Insertion_60bp
Chr5	22002011	22006884	Deletion_4873bp
Chr5	18927361	18927361	Insertion_83bp
Chr5	18935057	18935079	Deletion_22bp
Chr5	12071195	12071195	Insertion_40bp
Chr5	9740182	9740182	Insertion_249bp
Chr5	22587989	22587989	Insertion_201bp

Chr5	22588498	22588498	Insertion_21bp
Chr5	22589851	22590360	Deletion_509bp
Chr5	22613349	22618266	Deletion_4917bp
Chr5	22622008	22622163	Deletion_155bp
Chr5	158289	158289	Insertion_40bp
Chr5	177913	177945	Deletion_32bp
Chr5	178824	178824	Insertion_5892bp
Chr5	8940652	8940652	Insertion_593bp
Chr5	2072116	2072143	Deletion_27bp
Chr5	2072255	2072282	Deletion_27bp
Chr5	2075999	2075999	Insertion_484bp
Chr5	2089460	2089460	Insertion_47bp
Chr5	2093110	2093181	Deletion_71bp
Chr5	8104032	8104111	Deletion_79bp
Chr5	14029344	14029386	Deletion_42bp
Chr5	14036039	14036039	Insertion_39bp
Chr5	14039559	14039559	Insertion_27bp
Chr5	14042415	14042441	Deletion_26bp
Chr5	18893182	18893182	Insertion_55bp
Chr5	23661907	23661907	Insertion_97bp
Chr5	23674184	23674310	Deletion_126bp
Chr5	20885062	20885131	Deletion_69bp
Chr5	20905252	20905277	Deletion_25bp
Chr5	14651753	14651753	Insertion_39bp
Chr5	14657498	14657498	Insertion_23bp
Chr5	14658579	14659210	Deletion_631bp
Chr5	14676195	14676195	Insertion_76bp
Chr5	14677082	14677082	Insertion_379bp
Chr5	14677972	14677972	Insertion_23bp
Chr5	14681365	14681365	Insertion_8442bp
Chr5	21421635	21421660	Deletion_25bp
Chr5	21851488	21852235	Deletion_747bp
Chr5	21854299	21854299	Insertion_30bp
Chr5	21855416	21855448	Deletion_32bp
Chr5	21860384	21860432	Deletion_48bp
Chr5	18999373	18999373	Insertion_42bp
Chr5	19014365	19015039	Deletion_674bp
Chr5	19018618	19019563	Deletion_945bp
Chr5	19023094	19023094	Insertion_40bp
Chr5	19025313	19025728	Deletion_415bp
Chr5	19028633	19028633	Insertion_3260bp
Chr5	26817806	26817806	Insertion_2098bp
Chr5	26829315	26829378	Deletion_63bp
Chr5	2250152	2250152	Insertion_85bp
Chr5	3560747	3560934	Deletion_187bp
Chr5	18971929	18971929	Insertion_32bp
Chr5	18976014	18976040	Deletion_26bp
Chr5	8684113	8684113	Insertion_30bp
Chr5	8698045	8698066	Deletion_21bp

Chr5	23324064	23324064	Insertion_22bp
Chr5	22361014	22361014	Insertion_148bp
Chr5	22372301	22372301	Insertion_25bp
Chr5	22375545	22375567	Deletion_22bp
Chr5	4529581	4529581	Insertion_36bp
Chr5	22451383	22451383	Insertion_36bp
Chr5	22457464	22457464	Insertion_21bp
Chr5	22463654	22464199	Deletion_545bp
Chr5	26024543	26024543	Insertion_22bp
Chr5	23856793	23856855	Deletion_62bp
Chr5	23862151	23862151	Insertion_24bp
Chr5	23864106	23864106	Insertion_40bp
Chr5	12158173	12158203	Deletion_30bp
Chr5	12159479	12159479	Insertion_22bp
Chr5	12162356	12162389	Deletion_33bp
Chr5	12169244	12169334	Deletion_90bp
Chr5	12182239	12182239	Insertion_7655bp
Chr5	12189642	12189642	Insertion_66bp
Chr5	12192484	12192484	Insertion_435bp
Chr5	12193402	12193402	Insertion_37bp
Chr5	12193778	12193778	Insertion_4856bp
Chr5	12195189	12195281	Deletion_92bp
Chr5	12205405	12205405	Insertion_637bp
Chr5	12213399	12218870	Deletion_5471bp
Chr5	12219388	12219388	Insertion_31bp
Chr5	12224921	12224921	Insertion_93bp
Chr5	12228161	12228196	Deletion_35bp
Chr5	12228929	12228980	Deletion_51bp
Chr5	12229752	12229779	Deletion_27bp
Chr5	12234725	12234725	Insertion_37bp
Chr5	25860805	25860805	Insertion_87bp
Chr5	16049798	16049798	Insertion_29bp
Chr5	16050998	16050998	Insertion_22bp
Chr5	512672	512672	Insertion_31bp
Chr5	21452317	21452317	Insertion_769bp
Chr5	21466859	21466859	Insertion_22bp
Chr5	24079334	24079334	Insertion_109bp
Chr5	24082923	24082947	Deletion_24bp
Chr5	16746774	16746774	Insertion_30bp
Chr5	11150729	11150757	Deletion_28bp
Chr5	11154201	11154229	Deletion_28bp
Chr5	11163808	11163808	Insertion_22bp
Chr5	11166376	11166398	Deletion_22bp
Chr5	2892860	2892860	Insertion_39bp
Chr5	1043192	1043226	Deletion_34bp
Chr5	1043923	1043923	Insertion_61bp
Chr5	8906160	8906184	Deletion_24bp
Chr5	8911758	8911766	Insertion_22bp
Chr5	8921821	8921821	Insertion_42bp

Chr5	1023053	1023053	Insertion_42bp
Chr5	1029991	1029991	Insertion_170bp
Chr5	1035787	1035787	Insertion_36bp
Chr5	13730545	13730573	Deletion_28bp
Chr5	13733050	13733630	Deletion_580bp
Chr5	13738117	13738177	Deletion_60bp
Chr5	14744076	14744076	Insertion_568bp
Chr5	14748951	14748951	Insertion_30bp
Chr5	14756209	14756209	Insertion_23bp
Chr5	16009433	16009433	Insertion_21bp
Chr5	10166904	10166904	Insertion_3423bp
Chr5	10174149	10174149	Insertion_23bp
Chr5	10174980	10175013	Deletion_33bp
Chr5	10179882	10179882	Insertion_29bp
Chr5	10181705	10181750	Deletion_45bp
Chr5	21254597	21254635	Deletion_38bp
Chr5	19236748	19236748	Insertion_26bp
Chr5	19246303	19248053	Deletion_1750bp
Chr5	11586527	11586527	Insertion_45bp
Chr5	11597558	11597600	Deletion_42bp
Chr5	11597934	11597934	Insertion_30bp
Chr5	11600758	11600808	Deletion_50bp
Chr5	11603361	11603361	Insertion_22bp
Chr5	11608998	11608998	Insertion_328bp
Chr5	11610097	11610129	Deletion_32bp
Chr5	22704808	22704916	Deletion_108bp
Chr5	9245294	9245294	Insertion_33bp
Chr5	9247607	9247627	Deletion_20bp
Chr5	9247795	9247879	Deletion_84bp
Chr5	9253223	9253244	Deletion_21bp
Chr5	25891324	25891324	Insertion_668bp
Chr5	25892408	25892408	Insertion_55bp
Chr5	26805668	26805697	Deletion_29bp
Chr5	10040553	10040553	Insertion_20bp
Chr5	10042372	10042372	Insertion_2094bp
Chr5	10054362	10054383	Deletion_21bp
Chr5	15856052	15856949	Deletion_897bp
Chr5	14126279	14126279	Insertion_30bp
Chr5	14127775	14127775	Insertion_77bp
Chr5	14143397	14143397	Insertion_34bp
Chr5	24140135	24140135	Insertion_42bp
Chr5	13410702	13410837	Deletion_135bp
Chr5	13414083	13414083	Insertion_20bp
Chr5	13414485	13414547	Deletion_62bp
Chr5	13417294	13418254	Deletion_960bp
Chr5	10146218	10146218	Insertion_286bp
Chr5	10151178	10162508	Deletion_11330bp
Chr5	5766488	5766488	Insertion_44bp
Chr5	5766525	5766525	Insertion_314bp

Chr5	10615321	10615357	Deletion_36bp
Chr5	10627271	10628236	Deletion_965bp
Chr5	10632800	10633564	Deletion_764bp
Chr5	10633716	10633754	Deletion_47bp
Chr5	10634969	10634995	Deletion_26bp
Chr5	10638488	10638516	Deletion_28bp
Chr5	744013	744047	Deletion_34bp
Chr5	744362	744445	Deletion_83bp
Chr5	744843	744871	Deletion_28bp
Chr5	1065386	1067895	Deletion_2509bp
Chr5	1075690	1075719	Deletion_29bp
Chr5	1085254	1085275	Deletion_21bp
Chr5	1268994	1269232	Deletion_238bp
Chr5	8971618	8971649	Deletion_31bp
Chr5	14988564	14988564	Insertion_28bp
Chr5	22096592	22096637	Deletion_45bp
Chr5	22096849	22096849	Insertion_80bp
Chr5	22102539	22102539	Insertion_34bp
Chr5	18320988	18321008	Deletion_20bp
Chr5	18331826	18331826	Insertion_51bp
Chr5	2798125	2798217	Deletion_92bp
Chr5	26233116	26233531	Deletion_415bp
Chr5	26235679	26235700	Deletion_21bp
Chr5	26239373	26239401	Deletion_28bp
Chr5	14857889	14857921	Deletion_32bp
Chr5	14863726	14863726	Insertion_542bp
Chr5	14869374	14870164	Deletion_790bp
Chr5	14874329	14874349	Deletion_20bp
Chr5	14879122	14879122	Insertion_24bp
Chr5	14879456	14879456	Insertion_50bp
Chr5	14882054	14882054	Insertion_26bp
Chr5	14885435	14885470	Deletion_35bp
Chr5	18275486	18275545	Deletion_59bp
Chr5	10067405	10067405	Insertion_41bp
Chr5	10072841	10072914	Deletion_73bp
Chr5	10073307	10073307	Insertion_28bp
Chr5	10073503	10073503	Insertion_498bp
Chr5	10074564	10074590	Deletion_26bp
Chr5	10082926	10082952	Deletion_26bp
Chr5	7505365	7505430	Deletion_65bp
Chr5	7506328	7507177	Deletion_849bp
Chr5	7512934	7514999	Deletion_2065bp
Chr5	7515886	7515886	Insertion_649bp
Chr5	12438672	12438672	Insertion_39bp
Chr5	12444117	12444117	Insertion_32bp
Chr5	12447681	12447681	Insertion_37bp
Chr5	12450369	12450431	Deletion_62bp
Chr5	12456332	12456332	Insertion_248bp
Chr5	12457819	12457819	Insertion_751bp

Chr5	21814031	21814031	Insertion_44bp
Chr5	10906356	10906356	Insertion_21bp
Chr5	10912610	10912610	Insertion_97bp
Chr5	10913398	10913398	Insertion_33bp
Chr5	21529815	21529837	Deletion_22bp
Chr5	22813957	22814056	Deletion_99bp
Chr5	22817385	22817408	Deletion_23bp
Chr5	26563408	26563435	Deletion_27bp
Chr5	26568282	26568379	Deletion_97bp
Chr5	18727554	18727554	Insertion_23bp
Chr5	14390199	14390199	Insertion_38bp
Chr5	14394695	14394695	Insertion_25bp
Chr5	14396150	14396150	Insertion_132bp
Chr5	15877043	15877082	Deletion_39bp
Chr5	15890493	15890493	Insertion_895bp
Chr5	18955126	18955151	Deletion_25bp
Chr5	17304188	17304188	Insertion_26bp
Chr5	17314510	17314532	Deletion_22bp
Chr5	16979759	16979759	Insertion_52bp
Chr5	16991218	16991218	Insertion_531bp
Chr5	19693131	19693131	Insertion_22bp
Chr5	19705142	19705208	Deletion_66bp
Chr5	18069448	18069448	Insertion_33bp
Chr5	18074533	18074595	Deletion_62bp
Chr5	18081133	18081133	Insertion_168bp
Chr5	18081426	18081426	Insertion_25bp
Chr5	10258676	10258676	Insertion_552bp
Chr5	10260735	10260760	Deletion_25bp
Chr5	10265692	10265713	Deletion_21bp
Chr5	10270553	10270625	Deletion_72bp
Chr5	10271042	10271042	Insertion_81bp
Chr5	11445956	11445956	Insertion_69bp
Chr5	11736078	11736103	Deletion_25bp
Chr5	11737209	11737250	Deletion_41bp
Chr5	11739933	11739933	Insertion_123bp
Chr5	11741025	11741051	Deletion_26bp
Chr5	11741907	11741955	Deletion_48bp
Chr5	11747902	11747902	Insertion_400bp
Chr5	11752588	11752588	Insertion_178bp
Chr5	11753935	11754111	Deletion_176bp
Chr5	12000091	12000091	Insertion_185bp
Chr5	12002418	12002466	Deletion_48bp
Chr5	12004952	12004952	Insertion_33bp
Chr5	13846266	13846266	Insertion_53bp
Chr5	13847648	13848555	Deletion_907bp
Chr5	13850921	13851751	Deletion_830bp
Chr5	13853240	13853399	Deletion_159bp
Chr5	13860185	13860185	Insertion_2354bp
Chr5	13860939	13860966	Deletion_27bp

Chr5	13863726	13863726	Insertion_358bp
Chr5	13870186	13870232	Deletion_46bp
Chr5	15024847	15024847	Insertion_32bp
Chr5	15031400	15031400	Insertion_183bp
Chr5	15039532	15039560	Deletion_28bp
Chr5	3179429	3179464	Deletion_35bp
Chr5	15745427	15745457	Deletion_30bp
Chr5	15749280	15749280	Insertion_31bp
Chr5	15755639	15755666	Deletion_27bp
Chr5	15759018	15759042	Deletion_24bp
Chr5	19209175	19209196	Deletion_21bp
Chr5	19219706	19219706	Insertion_20bp
Chr5	19225003	19225003	Insertion_2064bp
Chr5	16755481	16755481	Insertion_2834bp
Chr5	16767173	16767173	Insertion_283bp
Chr5	16769801	16769801	Insertion_26bp
Chr5	17030289	17030289	Insertion_32bp
Chr5	17041148	17041148	Insertion_21bp
Chr5	9417977	9418002	Deletion_25bp
Chr5	9428066	9428066	Insertion_33bp
Chr5	9432132	9432132	Insertion_148bp
Chr5	22269271	22269271	Insertion_24bp
Chr5	10755195	10755252	Deletion_57bp
Chr5	10755900	10756253	Deletion_353bp
Chr5	10761334	10761334	Insertion_11167bp
Chr5	10771349	10771374	Deletion_25bp
Chr5	10774470	10775368	Deletion_898bp
Chr5	10778731	10778829	Deletion_98bp
Chr5	10779466	10779493	Deletion_27bp
Chr5	22114786	22114845	Deletion_59bp
Chr5	22127025	22127025	Insertion_30bp
Chr5	21380286	21380286	Insertion_199bp
Chr5	21382181	21382215	Deletion_34bp
Chr5	15798966	15799341	Deletion_375bp
Chr5	15800415	15800415	Insertion_44bp
Chr5	15808413	15808413	Insertion_558bp
Chr5	15812230	15812230	Insertion_34bp
Chr5	15812434	15812434	Insertion_28bp
Chr5	15821346	15821346	Insertion_20bp
Chr5	7458271	7458271	Insertion_29bp
Chr5	7468372	7468372	Insertion_20bp
Chr5	7473993	7473993	Insertion_46bp
Chr5	7528854	7528854	Insertion_239bp
Chr5	18217689	18217689	Insertion_27bp
Chr5	18220129	18220129	Insertion_498bp
Chr5	18220973	18221058	Deletion_85bp
Chr5	18233437	18238459	Deletion_5022bp
Chr5	5648898	5648935	Deletion_37bp
Chr5	5649491	5649491	Insertion_43bp

Chr5	9791504	9791530	Deletion_26bp
Chr5	9792502	9792558	Deletion_56bp
Chr5	9801095	9801098	Insertion_28bp
Chr5	9802436	9802436	Insertion_27bp
Chr5	9802683	9802683	Insertion_53bp
Chr5	9802875	9802875	Insertion_79bp
Chr5	9806525	9806525	Insertion_74bp
Chr5	9810063	9810063	Insertion_4557bp
Chr5	18883587	18883618	Deletion_31bp
Chr5	18887757	18887869	Deletion_112bp
Chr5	18890718	18890763	Deletion_45bp
Chr5	16255292	16255292	Insertion_82bp
Chr5	16259104	16264752	Deletion_5648bp
Chr5	16267635	16267673	Deletion_38bp
Chr5	12617653	12617673	Deletion_20bp
Chr5	12617892	12617927	Deletion_35bp
Chr5	12624544	12624544	Insertion_21bp
Chr5	12627149	12627386	Deletion_237bp
Chr5	12631126	12631238	Deletion_112bp
Chr5	12631722	12632090	Deletion_368bp
Chr5	12635004	12635004	Insertion_5344bp
Chr5	12637627	12637679	Deletion_52bp
Chr5	4495653	4495653	Insertion_22bp
Chr5	4506048	4506096	Deletion_48bp
Chr5	8000021	8000051	Deletion_30bp
Chr5	14506980	14506980	Insertion_107bp
Chr5	14508612	14508612	Insertion_28bp
Chr5	14510510	14510564	Deletion_54bp
Chr5	14517214	14517214	Insertion_37bp
Chr5	24000500	24000500	Insertion_27bp
Chr5	24000541	24000541	Insertion_118bp
Chr5	24002084	24003329	Deletion_1245bp
Chr5	24016138	24016138	Insertion_26bp
Chr5	12092767	12092787	Deletion_20bp
Chr5	12099336	12099358	Deletion_22bp
Chr5	1250083	1250083	Insertion_1700bp
Chr5	1257104	1257133	Deletion_29bp
Chr5	4039072	4039072	Insertion_20bp
Chr5	20920004	20920038	Deletion_34bp
Chr5	19823042	19823876	Deletion_834bp
Chr5	19831986	19832042	Deletion_56bp
Chr5	19572874	19572902	Deletion_28bp
Chr5	15436072	15436072	Insertion_38bp
Chr5	15437920	15437958	Deletion_38bp
Chr5	15438685	15438742	Deletion_57bp
Chr5	15443364	15443569	Deletion_205bp
Chr5	15444514	15444583	Deletion_69bp
Chr5	15445601	15445601	Insertion_22bp
Chr5	15446614	15446614	Insertion_22bp

Chr5	15448357	15448357	Insertion_21bp
Chr5	15454007	15455708	Deletion_1701bp
Chr5	15457172	15457172	Insertion_48bp
Chr5	15461553	15461584	Deletion_31bp
Chr5	15461778	15462827	Deletion_1049bp
Chr5	8063194	8063194	Insertion_48bp
Chr5	8362941	8362941	Insertion_26bp
Chr5	8363402	8363426	Deletion_24bp
Chr5	5879726	5879768	Deletion_42bp
Chr5	5886804	5887092	Deletion_288bp
Chr5	5887922	5887922	Insertion_20bp
Chr5	9459941	9459941	Insertion_33bp
Chr5	9462791	9462791	Insertion_546bp
Chr5	14924387	14924387	Insertion_32bp
Chr5	14926972	14927001	Deletion_29bp
Chr5	7659349	7659370	Deletion_21bp
Chr5	7717525	7717577	Deletion_52bp
Chr5	1583772	1583772	Insertion_76bp
Chr5	8803494	8803494	Insertion_7462bp
Chr5	6896917	6896917	Insertion_21bp
Chr5	26725072	26725110	Deletion_46bp
Chr5	11495448	11495988	Deletion_540bp
Chr5	11500000	11500000	Insertion_1179bp
Chr5	11503921	11503952	Deletion_31bp
Chr5	11506343	11506371	Deletion_28bp
Chr5	11508181	11508217	Deletion_36bp
Chr5	11508524	11509003	Deletion_479bp
Chr5	11510068	11510068	Insertion_28bp
Chr5	14594579	14594579	Insertion_21bp
Chr5	14601434	14601434	Insertion_42bp
Chr5	7064379	7064426	Deletion_47bp
Chr5	7067206	7067244	Deletion_38bp
Chr5	7069990	7070517	Deletion_527bp
Chr5	7073521	7073521	Insertion_818bp
Chr5	7073726	7074139	Deletion_413bp
Chr5	8249698	8249698	Insertion_21bp
Chr5	13546418	13546445	Deletion_27bp
Chr5	13546565	13546589	Deletion_24bp
Chr5	13552217	13552217	Insertion_38bp
Chr5	13553985	13553985	Insertion_14083bp
Chr5	13554072	13554108	Deletion_36bp
Chr5	13556353	13556353	Insertion_506bp
Chr5	13570057	13570057	Insertion_7855bp
Chr5	1566301	1566371	Deletion_70bp
Chr5	1567517	1567517	Insertion_1811bp
Chr5	8009554	8009585	Deletion_31bp
Chr5	2222582	2222603	Deletion_21bp
Chr5	10646512	10646552	Deletion_40bp
Chr5	10656151	10656175	Deletion_24bp

Chr5	13137876	13137876	Insertion_798bp
Chr5	13139476	13139476	Insertion_46bp
Chr5	13139949	13139994	Deletion_45bp
Chr5	13146211	13146211	Insertion_20bp
Chr5	13152951	13152951	Insertion_367bp
Chr5	26095017	26095050	Deletion_33bp
Chr5	17902906	17902906	Insertion_51bp
Chr5	26115899	26115920	Deletion_21bp
Chr5	26117159	26117182	Deletion_23bp
Chr5	26117447	26117447	Insertion_294bp
Chr5	26117493	26117787	Deletion_294bp
Chr5	26119988	26119988	Insertion_571bp
Chr5	7344724	7344724	Insertion_28bp
Chr5	7351708	7351708	Insertion_52bp
Chr5	26074138	26074163	Deletion_25bp
Chr5	26081521	26081544	Deletion_23bp
Chr5	17847391	17847512	Deletion_121bp
Chr5	17848374	17848374	Insertion_33bp
Chr5	17850506	17850506	Insertion_151bp
Chr5	9959916	9959958	Deletion_42bp
Chr5	9961127	9961152	Deletion_25bp
Chr5	9962947	9965016	Deletion_2069bp
Chr5	9969323	9969365	Deletion_42bp
Chr5	16607016	16607039	Deletion_23bp
Chr5	16612474	16612498	Deletion_24bp
Chr5	20243580	20243580	Insertion_22bp
Chr5	13473669	13473669	Insertion_26bp
Chr5	13483068	13483089	Deletion_21bp
Chr5	13484023	13484023	Insertion_27bp
Chr5	11473375	11473375	Insertion_444bp
Chr5	11481463	11481463	Insertion_137bp
Chr5	14202955	14202955	Insertion_132bp
Chr5	14204433	14204474	Deletion_41bp
Chr5	14206275	14206275	Insertion_21bp
Chr5	21668013	21668033	Deletion_20bp
Chr5	21672739	21672780	Deletion_41bp
Chr5	17190318	17190318	Insertion_24bp
Chr5	9055859	9055859	Insertion_259bp
Chr5	9056335	9056364	Deletion_29bp
Chr5	9061103	9061223	Deletion_120bp
Chr5	22089923	22089923	Insertion_34bp
Chr5	13891821	13891852	Deletion_31bp
Chr5	13892130	13892685	Deletion_555bp
Chr5	6671059	6671059	Insertion_56bp
Chr5	18642350	18642371	Deletion_21bp
Chr5	18645574	18645574	Insertion_21bp
Chr5	11760946	11760946	Insertion_755bp
Chr5	20096172	20096212	Deletion_40bp
Chr5	20096658	20096804	Deletion_146bp

Chr5	20097928	20097957	Deletion_29bp
Chr5	20100180	20100180	Insertion_24bp
Chr5	20100531	20100531	Insertion_38bp
Chr5	22622008	22622163	Deletion_155bp
Chr5	22624496	22625941	Deletion_1445bp
Chr5	22627982	22631441	Deletion_3459bp
Chr5	22631823	22631823	Insertion_81bp
Chr5	13393772	13393809	Deletion_37bp
Chr5	10945698	10954080	Deletion_8382bp
Chr5	10960115	10960115	Insertion_24bp
Chr5	10964562	10964562	Insertion_32bp
Chr5	10965015	10965015	Insertion_394bp
Chr5	10966908	10966963	Deletion_55bp
Chr5	21946618	21946618	Insertion_33bp
Chr5	13205978	13206062	Deletion_84bp
Chr5	13206688	13206688	Insertion_115bp
Chr5	13207958	13208034	Deletion_76bp
Chr5	13208525	13208577	Deletion_52bp
Chr5	13212649	13212675	Deletion_26bp
Chr5	13215691	13215691	Insertion_74bp
Chr5	13219718	13219718	Insertion_20bp
Chr5	19754565	19754627	Deletion_62bp
Chr5	19757467	19757467	Insertion_91bp
Chr5	15172835	15172870	Deletion_35bp
Chr5	394035	394035	Insertion_28bp
Chr5	394565	394565	Insertion_22bp
Chr5	399560	399580	Deletion_20bp
Chr5	8234394	8234680	Deletion_286bp
Chr5	17697264	17697707	Deletion_443bp
Chr5	17706443	17706464	Deletion_21bp
Chr5	16318213	16318213	Insertion_30bp
Chr5	9165839	9165861	Deletion_22bp
Chr5	9166063	9167205	Deletion_1142bp
Chr5	6686739	6686749	Insertion_21bp
Chr5	9925488	9925509	Deletion_21bp
Chr5	4218197	4218237	Deletion_40bp
Chr5	7453533	7453568	Deletion_35bp
Chr5	7456866	7456893	Deletion_27bp
Chr5	13055351	13055351	Insertion_98bp
Chr5	13062432	13062472	Deletion_40bp
Chr5	13064646	13066017	Deletion_1371bp
Chr5	9948425	9948446	Deletion_21bp
Chr5	22073176	22073176	Insertion_80bp
Chr5	9891588	9891588	Insertion_26bp
Chr5	9897617	9897651	Deletion_34bp
Chr5	8769440	8770674	Deletion_1234bp
Chr5	16013947	16014031	Deletion_84bp
Chr5	16018209	16018244	Deletion_35bp
Chr5	25472151	25472205	Deletion_54bp

Chr5	25481330	25481330	Insertion_26bp
Chr5	13155136	13155178	Deletion_42bp
Chr5	13156287	13156287	Insertion_29bp
Chr5	13156797	13156797	Insertion_51bp
Chr5	13158260	13158297	Deletion_37bp
Chr5	21821603	21821603	Insertion_68bp
Chr5	21831459	21837083	Deletion_5624bp
Chr5	12972642	12973804	Deletion_1162bp
Chr5	12975744	12975744	Insertion_695bp
Chr5	12976903	12976949	Deletion_46bp
Chr5	17592098	17592098	Insertion_30bp
Chr5	17596758	17605846	Deletion_9088bp
Chr5	17608596	17608596	Insertion_38bp
Chr5	8992837	8992837	Insertion_36bp
Chr5	772247	772247	Insertion_456bp
Chr5	20250463	20250463	Insertion_28bp
Chr5	14910730	14910730	Insertion_34bp
Chr5	14910889	14910889	Insertion_50bp
Chr5	18118587	18132766	Deletion_14179bp
Chr5	18133391	18133415	Deletion_24bp
Chr5	5618361	5618361	Insertion_331bp
Chr5	7792627	7792647	Deletion_20bp
Chr5	7793549	7793549	Insertion_96bp
Chr5	7793591	7793591	Insertion_20bp
Chr5	22069581	22069617	Deletion_36bp
Chr5	26499042	26499042	Insertion_21bp
Chr5	23835229	23835379	Deletion_150bp
Chr5	6195634	6195657	Deletion_23bp
Chr5	6195903	6195903	Insertion_62bp
Chr5	6196228	6196228	Insertion_40bp
Chr5	6201720	6201720	Insertion_25bp
Chr5	6205798	6212630	Deletion_6832bp
Chr5	22656047	22656047	Insertion_28bp
Chr5	8521114	8521142	Deletion_28bp
Chr5	21960391	21960391	Insertion_51bp
Chr5	21960645	21960645	Insertion_40bp
Chr5	21962504	21962527	Deletion_23bp
Chr5	21969028	21969770	Deletion_742bp
Chr5	21974209	21974253	Deletion_44bp
Chr5	15982737	15982792	Deletion_55bp
Chr5	15985035	15985035	Insertion_22bp
Chr5	5313062	5313098	Deletion_36bp
Chr5	5313260	5313348	Deletion_88bp
Chr5	499656	499683	Deletion_27bp
Chr5	502488	502488	Insertion_24bp
Chr5	508313	508313	Insertion_20bp
Chr5	26043352	26043352	Insertion_32bp
Chr5	26045254	26045254	Insertion_20bp
Chr5	18287643	18287684	Deletion_41bp

Chr5	18293490	18293873	Deletion_383bp
Chr5	18294478	18294478	Insertion_24bp
Chr5	10240454	10240454	Insertion_8398bp
Chr5	18678877	18678877	Insertion_22bp
Chr5	10923916	10923916	Insertion_1069bp
Chr5	10926455	10926717	Deletion_262bp
Chr5	12702109	12703034	Deletion_925bp
Chr5	18164737	18164773	Deletion_36bp
Chr5	18168390	18168422	Deletion_32bp
Chr5	23910814	23910814	Insertion_1859bp
Chr5	23912325	23912348	Deletion_23bp
Chr5	23914226	23915096	Deletion_870bp
Chr5	8550877	8550914	Deletion_37bp
Chr5	8555447	8555920	Deletion_473bp
Chr5	16662786	16662819	Deletion_33bp
Chr5	16670614	16670614	Insertion_29bp
Chr5	7674768	7674768	Insertion_23bp
Chr5	17084230	17084230	Insertion_23bp
Chr5	17085546	17086912	Deletion_1366bp
Chr5	9372955	9372955	Insertion_22bp
Chr5	9374328	9374328	Insertion_4471bp
Chr5	8755801	8755801	Insertion_23bp
Chr5	12923849	12923849	Insertion_27bp
Chr5	12928077	12928077	Insertion_104bp
Chr5	6630052	6630090	Deletion_38bp
Chr5	6630710	6635472	Deletion_4762bp
Chr5	6641244	6641244	Insertion_22bp
Chr5	17280550	17280595	Deletion_45bp
Chr5	17286523	17286523	Insertion_35bp
Chr5	20228179	20228179	Insertion_1016bp
Chr5	12476872	12476872	Insertion_44bp
Chr5	12479552	12479581	Deletion_29bp
Chr5	12479583	12479583	Insertion_20bp
Chr5	20116001	20116021	Deletion_20bp
Chr5	20118519	20118519	Insertion_103bp
Chr5	15309134	15309198	Deletion_64bp
Chr5	15315554	15315554	Insertion_5029bp
Chr5	15323797	15324632	Deletion_835bp
Chr5	15324861	15324896	Deletion_35bp
Chr5	16813239	16813263	Deletion_24bp
Chr5	8811641	8812232	Deletion_591bp
Chr5	8813178	8813207	Deletion_29bp
Chr5	8819460	8819999	Deletion_539bp
Chr5	23337151	23337151	Insertion_69bp
Chr5	23343906	23343943	Deletion_37bp
Chr5	23344886	23344886	Insertion_39bp
Chr5	15861810	15861810	Insertion_273bp
Chr5	15870021	15870045	Deletion_24bp
Chr5	17638539	17638566	Deletion_27bp

Chr5	17638640	17638898	Deletion_258bp
Chr5	17644362	17644656	Deletion_294bp
Chr5	17646093	17646093	Insertion_24bp
Chr5	17646327	17646584	Deletion_257bp
Chr5	17648489	17648489	Insertion_45bp
Chr5	18625526	18625546	Deletion_20bp
Chr5	21600525	21600549	Deletion_24bp
Chr5	22724684	22724704	Deletion_20bp
Chr5	17204865	17204865	Insertion_36bp
Chr5	15771499	15771499	Insertion_864bp
Chr5	15779236	15779808	Deletion_572bp
Chr5	14886410	14886410	Insertion_269bp
Chr5	9935906	9935931	Deletion_25bp
Chr5	813654	813654	Insertion_31bp
Chr5	17718898	17718929	Deletion_31bp
Chr5	17721681	17721681	Insertion_40bp
Chr5	17722209	17722209	Insertion_406bp
Chr5	17112477	17112477	Insertion_86bp
Chr5	16642270	16642294	Deletion_24bp
Chr5	12467497	12467497	Insertion_24bp
Chr5	12475247	12475283	Deletion_36bp
Chr5	22399008	22399008	Insertion_32bp
Chr5	22401409	22401445	Deletion_36bp
Chr5	17010983	17010983	Insertion_36bp
Chr5	15783296	15783296	Insertion_57bp
Chr5	15790425	15790470	Deletion_45bp
Chr5	12652898	12652898	Insertion_27bp
Chr5	12653522	12653522	Insertion_51bp
Chr5	19845970	19846008	Deletion_38bp
Chr5	19848391	19848391	Insertion_29bp
Chr5	19848537	19848537	Insertion_24bp
Chr5	9548535	9548535	Insertion_22bp
Chr5	9548805	9548805	Insertion_34bp
Chr5	9551051	9551051	Insertion_28bp
Chr5	9557659	9559506	Deletion_1847bp
Chr5	9560137	9560594	Deletion_457bp
Chr5	17405675	17405770	Deletion_95bp
Chr5	17407138	17407138	Insertion_278bp
Chr5	17411712	17412499	Deletion_787bp
Chr5	17413973	17413973	Insertion_2387bp
Chr5	13660994	13660994	Insertion_64bp
Chr5	19729806	19729806	Insertion_27bp
Chr5	14471902	14471902	Insertion_1163bp
Chr5	14478161	14478161	Insertion_56bp
Chr5	14479902	14479902	Insertion_21bp
Chr5	11785977	11786156	Deletion_179bp
Chr5	11786920	11787264	Deletion_344bp
Chr5	17021853	17021853	Insertion_20bp
Chr5	9909276	9909414	Deletion_138bp

Chr5	9910233	9910588	Deletion_355bp
Chr5	9917844	9917844	Insertion_30bp
Chr5	10060493	10060535	Deletion_42bp
Chr5	1576681	1576681	Insertion_39bp
Chr5	11464026	11464026	Insertion_26bp
Chr5	20079722	20079742	Deletion_20bp
Chr5	20080338	20080338	Insertion_1352bp
Chr5	11102475	11102496	Deletion_21bp
Chr5	11103465	11103465	Insertion_30bp
Chr5	11104365	11104365	Insertion_1164bp
Chr5	8036938	8036968	Deletion_30bp
Chr5	8032684	8032684	Insertion_20bp
Chr5	8032938	8032938	Insertion_28bp
Chr5	12309520	12309556	Deletion_36bp
Chr5	12310286	12310286	Insertion_27bp
Chr5	12315769	12315769	Insertion_6029bp
Chr5	12317518	12317518	Insertion_102bp
Chr5	12318350	12318350	Insertion_22bp
Chr5	19629514	19629545	Deletion_31bp
Chr5	19631920	19631920	Insertion_55bp
Chr5	19635409	19635409	Insertion_36bp
Chr5	12032825	12032870	Deletion_45bp
Chr5	12034241	12034303	Deletion_62bp
Chr5	12039773	12039773	Insertion_24bp
Chr5	12042514	12042587	Deletion_73bp
Chr5	17429206	17429206	Insertion_30bp
Chr5	17430141	17432026	Deletion_1885bp
Chr5	17432449	17432449	Insertion_20bp
Chr5	17439662	17445935	Deletion_6273bp
Chr5	17450448	17450475	Deletion_27bp
Chr5	7818435	7818435	Insertion_26bp
Chr5	7818621	7818621	Insertion_27bp
Chr5	7819587	7819587	Insertion_31bp
Chr5	11891858	11892035	Deletion_177bp
Chr5	11894522	11894699	Deletion_177bp
Chr5	786446	786468	Deletion_22bp
Chr5	788854	788907	Deletion_53bp
Chr5	20122685	20122685	Insertion_21bp
Chr5	20127563	20129726	Deletion_2163bp
Chr5	20209017	20209371	Deletion_354bp
Chr5	13646712	13646712	Insertion_44bp
Chr5	13649539	13649539	Insertion_32bp
Chr5	13652963	13652963	Insertion_183bp
Chr5	16274935	16275040	Deletion_105bp
Chr5	17672111	17672111	Insertion_28bp
Chr5	17678027	17678027	Insertion_28bp
Chr5	14102221	14102221	Insertion_23bp
Chr5	14107318	14107318	Insertion_199bp
Chr5	17269464	17269498	Deletion_34bp

Chr5	7691352	7691352	Insertion_34bp
Chr5	7693537	7693537	Insertion_1645bp
Chr5	7694024	7694024	Insertion_51bp
Chr5	8187001	8187161	Deletion_160bp
Chr5	8844920	8844920	Insertion_30bp
Chr5	8845569	8845569	Insertion_30bp
Chr5	8846399	8846399	Insertion_298bp
Chr5	8847403	8847427	Deletion_24bp
Chr5	8848303	8848303	Insertion_1494bp
Chr5	21933258	21933258	Insertion_3689bp
Chr5	21936172	21936172	Insertion_78bp
Chr5	9442433	9442433	Insertion_38bp
Chr5	9443476	9443500	Deletion_24bp
Chr5	17557821	17557821	Insertion_24bp
Chr5	19670802	19672842	Deletion_2040bp
Chr5	14994457	14994457	Insertion_66bp
Chr5	8614829	8615008	Deletion_179bp
Chr5	11794594	11794594	Insertion_356bp
Chr5	11794949	11794949	Insertion_351bp
Chr5	11795304	11795304	Insertion_356bp
Chr5	11795665	11795665	Insertion_711bp
Chr5	11796811	11796811	Insertion_711bp
Chr5	11797084	11797084	Insertion_351bp
Chr5	16914249	16914249	Insertion_44bp
Chr5	7044616	7044668	Deletion_52bp
Chr5	11643319	11643319	Insertion_21bp
Chr5	1581562	1581562	Insertion_35bp
Chr5	1582298	1582298	Insertion_23bp
Chr5	15540297	15540326	Deletion_29bp
Chr5	15540632	15540632	Insertion_178bp
Chr5	15541866	15541866	Insertion_93bp
Chr5	15545380	15545384	Insertion_311bp
Chr5	23824980	23825592	Deletion_612bp
Chr5	5928808	5928808	Insertion_21bp
Chr5	7803183	7803183	Insertion_56bp
Chr5	6047244	6047244	Insertion_32bp
Chr5	6047720	6047754	Deletion_34bp
Chr5	6047936	6048112	Deletion_176bp
Chr5	9237634	9237634	Insertion_45bp
Chr5	10936770	10936879	Deletion_109bp
Chr5	10937512	10937542	Deletion_30bp
Chr5	10940251	10940251	Insertion_26bp
Chr5	15213064	15213400	Deletion_344bp
Chr5	15831281	15831281	Insertion_892bp
Chr5	21315252	21315315	Deletion_63bp
Chr5	8224993	8225015	Deletion_22bp
Chr5	26752918	26752951	Deletion_33bp
Chr5	7734020	7734020	Insertion_21bp
Chr5	7739125	7739387	Deletion_262bp

Chr5	15001949	15001949	Insertion_95bp
Chr5	8080643	8080643	Insertion_1740bp
Chr5	8085133	8090445	Deletion_5312bp
Chr5	12678472	12678472	Insertion_28bp
Chr5	20286557	20286588	Deletion_31bp
Chr5	11660721	11660721	Insertion_23bp
Chr5	11661887	11661887	Insertion_20bp
Chr5	11662551	11662551	Insertion_49bp
Chr5	11667011	11667032	Deletion_21bp
Chr5	16508162	16508197	Deletion_35bp
Chr5	16508818	16508818	Insertion_139bp
Chr5	13988543	13988610	Deletion_67bp
Chr5	13988761	13988761	Insertion_34bp
Chr5	13993107	13993107	Insertion_94bp
Chr5	13994790	14000225	Deletion_5435bp
Chr5	15740428	15740428	Insertion_36bp
Chr5	14962055	14967706	Deletion_5651bp
Chr5	14969626	14969626	Insertion_32bp
Chr5	8837978	8837978	Insertion_83bp
Chr5	15292672	15292730	Deletion_58bp
Chr5	6884343	6884403	Deletion_60bp
Chr5	6885992	6885992	Insertion_692bp
Chr5	18698231	18698231	Insertion_21bp
Chr5	18702489	18702824	Deletion_335bp
Chr5	3010858	3010995	Deletion_137bp
Chr5	8213851	8213908	Deletion_57bp
Chr5	25293052	25293063	Insertion_231bp
Chr5	7645427	7645427	Insertion_24bp
Chr5	7645451	7645451	Insertion_30bp
Chr5	7646372	7646372	Insertion_23bp
Chr5	7646621	7646621	Insertion_37bp
Chr5	7648690	7648690	Insertion_700bp
Chr5	7649707	7649707	Insertion_641bp
Chr5	7651115	7651135	Deletion_20bp
Chr5	6455334	6455334	Insertion_59bp
Chr5	6456533	6456554	Deletion_21bp
Chr5	6456797	6456797	Insertion_23bp
Chr5	19389986	19389986	Insertion_65bp
Chr5	14011987	14011987	Insertion_4206bp
Chr5	14012621	14012648	Deletion_27bp
Chr5	4208078	4213085	Deletion_5007bp
Chr5	15580887	15580887	Insertion_120bp
Chr5	15581660	15582580	Deletion_920bp
Chr5	15584359	15584380	Deletion_21bp
Chr5	15585243	15585263	Deletion_20bp
Chr5	17623143	17623150	Insertion_33bp
Chr5	17623601	17623643	Deletion_42bp
Chr5	8049593	8049619	Deletion_26bp
Chr5	9475160	9475160	Insertion_612bp

Chr5	9475565	9475565	Insertion_20bp
Chr5	15066082	15066106	Deletion_24bp
Chr5	20290401	20290401	Insertion_61bp
Chr5	20293641	20293678	Deletion_37bp
Chr5	20295161	20295196	Deletion_35bp
Chr5	14294897	14294897	Insertion_23bp
Chr5	14295802	14295826	Deletion_24bp
Chr5	23036119	23036153	Deletion_34bp
Chr5	17368762	17368820	Deletion_58bp
Chr5	15129027	15129027	Insertion_33bp
Chr5	16557117	16557142	Deletion_25bp
Chr5	16560771	16560796	Deletion_25bp
Chr5	14855294	14855294	Insertion_31bp
Chr5	9452057	9452085	Deletion_28bp
Chr5	9042932	9042932	Insertion_664bp
Chr5	9044181	9044202	Deletion_21bp
Chr5	16801045	16801045	Insertion_150bp
Chr5	16801620	16801620	Insertion_28bp
Chr5	13384699	13384699	Insertion_178bp
Chr5	2796265	2796265	Insertion_36bp
Chr5	13403864	13404602	Deletion_738bp
Chr5	14551900	14551929	Deletion_29bp
Chr5	14557738	14559734	Deletion_1996bp
Chr5	19376328	19376356	Deletion_28bp
Chr5	8173229	8173229	Insertion_93bp
Chr5	8175029	8175029	Insertion_183bp
Chr5	8177607	8177607	Insertion_20bp
Chr5	8177668	8178106	Deletion_438bp
Chr5	19712787	19712787	Insertion_24bp
Chr5	11222765	11222765	Insertion_27bp
Chr5	18786542	18786870	Deletion_328bp
Chr5	19408145	19408174	Deletion_29bp
Chr5	19411546	19411546	Insertion_25bp
Chr5	12253609	12253737	Deletion_128bp
Chr5	7702816	7702816	Insertion_34bp
Chr5	7705682	7705704	Deletion_22bp
Chr5	7705843	7705843	Insertion_30bp
Chr5	7708260	7708260	Insertion_679bp
Chr5	15371378	15371378	Insertion_31bp
Chr5	15372597	15372632	Deletion_35bp
Chr5	26967270	26967270	Insertion_85bp
Chr5	25303329	25303329	Insertion_33bp
Chr5	7050536	7050558	Deletion_22bp
Chr5	17511999	17512037	Deletion_38bp
Chr5	15522656	15522656	Insertion_59bp
Chr5	14066658	14066681	Deletion_23bp
Chr5	14018570	14018654	Deletion_84bp
Chr5	14019082	14019082	Insertion_31bp
Chr5	17955558	17957177	Deletion_1619bp

Chr5	17958909	17958909	Insertion_581bp
Chr5	17960366	17960366	Insertion_31bp
Chr5	17962317	17968786	Deletion_6469bp
Chr5	19655069	19655108	Deletion_39bp
Chr5	19657444	19657444	Insertion_44bp
Chr5	19658895	19658915	Deletion_20bp
Chr5	7825728	7825960	Deletion_232bp
Chr5	15431875	15432716	Deletion_841bp
Chr5	14291497	14291497	Insertion_26bp
Chr5	22156308	22156347	Deletion_39bp
Chr5	16625926	16625952	Deletion_26bp
Chr5	15184659	15184659	Insertion_39bp
Chr5	8219475	8219611	Deletion_136bp
Chr5	8220527	8220558	Deletion_31bp
Chr5	6057743	6057743	Insertion_31bp
Chr5	691835	691883	Deletion_48bp
Chr5	692918	692918	Insertion_43bp
Chr5	18693069	18693069	Insertion_37bp
Chr5	2563317	2563317	Insertion_33bp
Chr5	12133295	12133565	Deletion_270bp
Chr5	12135410	12135410	Insertion_59bp
Chr5	12137180	12137180	Insertion_36bp
Chr5	15071322	15071322	Insertion_4063bp
Chr5	9146674	9146674	Insertion_136bp
Chr5	9148907	9148907	Insertion_241bp
Chr5	3353109	3353109	Insertion_47bp
Chr5	15510395	15510419	Deletion_24bp
Chr5	15513028	15513028	Insertion_3162bp
Chr5	15515776	15515803	Deletion_27bp
Chr5	15516205	15516294	Deletion_89bp
Chr5	15516983	15517058	Deletion_75bp
Chr5	15518499	15518499	Insertion_417bp
Chr5	18673051	18673108	Deletion_57bp
Chr5	11916581	11916581	Insertion_355bp
Chr5	11916720	11916720	Insertion_179bp
Chr5	7876356	7876378	Deletion_22bp
Chr5	15795892	15795922	Deletion_30bp
Chr5	11648748	11648801	Deletion_53bp
Chr5	15192793	15193194	Deletion_401bp
Chr5	18186450	18186450	Insertion_23bp
Chr5	17337007	17337564	Deletion_557bp
Chr5	463849	463849	Insertion_75bp
Chr5	7833877	7834774	Deletion_914bp
Chr5	8964243	8964305	Deletion_62bp
Chr5	8964442	8964467	Deletion_25bp
Chr5	16159308	16159413	Deletion_105bp
Chr5	8023592	8023625	Deletion_33bp
Chr5	15104227	15104255	Deletion_28bp
Chr5	17260869	17260917	Deletion_48bp

Chr5	26537321	26537321	Insertion_329bp
Chr5	26537408	26537408	Insertion_25bp
Chr5	6875886	6875886	Insertion_2120bp
Chr5	4789099	4789141	Deletion_42bp
Chr5	9268907	9268907	Insertion_30bp
Chr5	9198165	9198165	Insertion_30bp
Chr5	8033711	8033711	Insertion_50bp
Chr5	9209455	9209455	Insertion_38bp
Chr5	6658579	6658616	Deletion_37bp
Chr5	15225222	15225251	Deletion_29bp
Chr5	13812690	13812714	Deletion_24bp
Chr5	17120922	17120953	Deletion_31bp
Chr5	17121475	17121495	Deletion_20bp
Chr5	18779665	18779675	Insertion_24bp
Chr5	7799918	7799957	Deletion_39bp
Chr5	17017174	17017174	Insertion_21bp
Chr5	17948505	17948505	Insertion_209bp
Chr5	16911539	16911575	Deletion_36bp
Chr5	16912034	16912034	Insertion_20bp
Chr5	9226812	9226834	Deletion_22bp
Chr5	9228434	9228434	Insertion_3152bp
Chr5	16521390	16521390	Insertion_31bp
Chr5	19687359	19688037	Deletion_678bp
Chr5	9902372	9902488	Deletion_116bp
Chr5	9904126	9904176	Deletion_50bp
Chr5	9905413	9905818	Deletion_405bp
Chr5	9908006	9908006	Insertion_34bp
Chr5	9908263	9908263	Insertion_83bp
Chr5	9908372	9908372	Insertion_64bp
Chr5	13815468	13816054	Deletion_586bp
Chr5	13817325	13817351	Deletion_26bp
Chr5	19422000	19422000	Insertion_29bp
Chr5	19423149	19423149	Insertion_24bp
Chr5	22226872	22227023	Deletion_151bp
Chr5	14907218	14907245	Deletion_27bp
Chr5	17575402	17575431	Deletion_29bp
Chr5	8749692	8749692	Insertion_40bp
Chr5	19467839	19467839	Insertion_66bp
Chr5	17971095	17971095	Insertion_31bp
Chr5	17973744	17973769	Deletion_25bp
Chr5	491948	491989	Deletion_41bp
Chr5	9191941	9191941	Insertion_112bp
Chr5	12010032	12010032	Insertion_23bp
Chr5	12012298	12012336	Deletion_38bp
Chr5	6384250	6384487	Deletion_237bp
Chr5	17681913	17681941	Deletion_28bp
Chr5	8496580	8496632	Deletion_52bp
Chr5	9068169	9068734	Deletion_565bp
Chr5	20072929	20072929	Insertion_34bp

Chr5	16500907	16500907	Insertion_37bp
Chr5	16501054	16501102	Deletion_48bp
Chr5	15007876	15008081	Deletion_205bp
Chr5	25277725	25277754	Deletion_29bp
Chr5	26972542	26972641	Deletion_99bp
Chr5	19404669	19404669	Insertion_48bp
Chr5	8502765	8507109	Deletion_4344bp
Chr5	20234239	20234297	Deletion_58bp
Chr5	21064284	21064304	Deletion_20bp
Chr5	15134221	15134221	Insertion_48bp
Chr5	9132494	9132494	Insertion_28bp
Chr5	9132877	9132877	Insertion_33bp
Chr5	9132956	9132956	Insertion_20bp
Chr5	9133760	9133760	Insertion_30bp
Chr5	16679758	16679787	Deletion_29bp
Chr5	3196231	3196286	Deletion_55bp
Chr5	3196620	3196656	Deletion_36bp
Chr5	17232754	17232754	Insertion_166bp
Chr5	7706521	7706541	Deletion_20bp
Chr5	17105926	17105926	Insertion_1126bp
Chr5	16721196	16721937	Deletion_741bp
Chr5	13722255	13722275	Deletion_20bp
Chr5	17811145	17811145	Insertion_432bp
Chr5	9528431	9528439	Insertion_25bp
Chr5	2378379	2378437	Deletion_58bp
Chr5	23678471	23678471	Insertion_20bp
Chr5	16775121	16775121	Insertion_50bp
Chr5	15588498	15588498	Insertion_20bp
Chr5	7489647	7489697	Deletion_50bp
Chr5	17652855	17652876	Deletion_21bp
Chr5	15486418	15486468	Deletion_50bp
Chr5	15486814	15486814	Insertion_21bp
Chr5	15487692	15487692	Insertion_5196bp
Chr5	5151043	5151043	Insertion_22bp
Chr5	9528431	9528439	Insertion_25bp
Chr5	12939687	12939687	Insertion_28bp
Chr5	17579666	17579666	Insertion_26bp
Chr5	17579893	17579921	Deletion_28bp
Chr5	17581432	17581452	Deletion_20bp
Chr5	17581477	17581585	Deletion_108bp
Chr5	17581955	17582018	Deletion_63bp
Chr5	17582925	17583891	Deletion_966bp
Chr5	8129350	8129350	Insertion_388bp
Chr5	8130081	8130107	Deletion_26bp
Chr5	5906949	5906949	Insertion_26bp
Chr5	15198397	15198417	Deletion_20bp
Chr5	15158851	15158886	Deletion_35bp
Chr5	22644060	22644089	Deletion_29bp
Chr5	22644249	22644283	Deletion_34bp

Chr5	15229181	15229465	Deletion_284bp
Chr5	16277707	16277838	Deletion_131bp
Chr5	17569242	17569277	Deletion_35bp
Chr5	13440305	13440653	Deletion_348bp
Chr5	18342092	18342092	Insertion_41bp
Chr5	15340211	15340211	Insertion_76bp
Chr5	15340286	15340286	Insertion_20bp
Chr5	9179661	9179688	Deletion_27bp
Chr5	9179879	9179952	Deletion_73bp
Chr5	15167707	15167707	Insertion_30bp
Chr5	8542843	8542843	Insertion_21bp
Chr5	8542946	8542946	Insertion_41bp
Chr5	8543082	8543082	Insertion_72bp
Chr5	16924063	16924063	Insertion_26bp
Chr5	16924859	16924859	Insertion_28bp
Chr5	15592902	15592902	Insertion_25bp
Chr5	15593966	15593966	Insertion_33bp
Chr5	12101780	12101780	Insertion_28bp
Chr5	12103146	12103183	Deletion_37bp
Chr5	14157865	14157865	Insertion_59bp
Chr5	17234979	17235011	Deletion_32bp
Chr5	17235113	17235147	Deletion_34bp
Chr5	1736317	1736350	Deletion_33bp
Chr5	12348791	12348791	Insertion_397bp
Chr5	15929610	15929610	Insertion_48bp
Chr5	17510261	17510362	Deletion_101bp
Chr5	9445223	9445256	Deletion_33bp
Chr5	9445740	9445740	Insertion_26bp
Chr5	496929	496965	Deletion_36bp
Chr5	15792665	15792686	Deletion_21bp
Chr5	21116006	21116006	Insertion_21bp
Chr5	8171436	8171515	Deletion_79bp
Chr5	9231347	9231372	Deletion_25bp
Chr5	9232519	9232661	Deletion_142bp
Chr5	19525763	19525763	Insertion_35bp
Chr5	19526340	19526598	Deletion_258bp
Chr5	23681481	23681506	Deletion_25bp
Chr5	16518952	16519041	Deletion_89bp
Chr5	18170780	18170780	Insertion_21bp
Chr5	18171280	18172311	Deletion_1031bp
Chr5	8901397	8901397	Insertion_23bp
Chr5	1207482	1207503	Deletion_21bp
Chr5	7708449	7708449	Insertion_32bp
Chr5	14006277	14006277	Insertion_38bp
Chr5	15860788	15860819	Deletion_31bp
Chr5	15200144	15200144	Insertion_59bp
Chr5	8748071	8748100	Deletion_29bp
Chr5	17868597	17868639	Deletion_42bp
Chr5	14689446	14689480	Deletion_34bp

Chr5	19412159	19412183	Insertion_30bp
Chr5	15126473	15126711	Deletion_238bp
Chr5	15552038	15552038	Insertion_91bp
Chr5	22285133	22285133	Insertion_23bp
Chr5	12886457	12886457	Insertion_443bp
Chr5	6664999	6665033	Deletion_34bp
Chr5	5141946	5141946	Insertion_38bp
Chr5	15934020	15934020	Insertion_49bp
Chr5	12104845	12105087	Deletion_242bp
Chr5	9205712	9205712	Insertion_34bp
Chr5	15051705	15051732	Deletion_27bp
Chr5	13701293	13701293	Insertion_21bp
Chr5	17295352	17295352	Insertion_58bp
Chr5	17295566	17295566	Insertion_21bp
Chr5	15042136	15043429	Deletion_1293bp
Chr5	16500485	16500516	Deletion_31bp
Chr5	15791981	15791981	Insertion_22bp
Chr5	7231652	7231652	Insertion_20bp
Chr5	7446433	7446460	Deletion_27bp
Chr5	5907607	5907630	Deletion_23bp
Chr5	9884665	9884665	Insertion_22bp
Chr5	17360292	17360292	Insertion_53bp
Chr5	4796718	4796718	Insertion_25bp
Chr5	25931964	25932020	Deletion_56bp
Chr5	17379130	17379130	Insertion_42bp
Chr5	7705288	7705288	Insertion_21bp
Chr5	15016587	15016587	Insertion_27bp
Chr5	12430216	12433143	Repeat_contraction_510bp
Chr5	12428304	12434838	Tandem_expansion_7080bp
Chr5	12430216	12431373	Repeat_contraction_84bp
Chr5	12203554	12203755	Repeat_expansion_37bp
Chr5	5644858	5645138	Repeat_expansion_40bp
Chr5	18474805	18478093	Repeat_contraction_1378bp
Chr5	12619752	12620115	Tandem_expansion_4594bp
Chr5	11003043	11005022	Repeat_expansion_180bp
Chr5	12156021	12157837	Repeat_expansion_376bp
Chr5	19018661	19019567	Tandem_expansion_7275bp
Chr5	19018661	19019567	Tandem_expansion_7275bp
Chr5	19018661	19019567	Tandem_expansion_7275bp
Chr5	1165433	1165642	Deletion_169bp
Chr5	18475611	18476838	Repeat_contraction_1042bp
Chr5	10948103	10949622	Repeat_contraction_60bp
Chr5	12292151	12294881	Repeat_contraction_2471bp
Chr5	2979761	2984074	Tandem_expansion_4317bp
Chr5	93667	98158	Tandem_expansion_4489bp
Chr5	182209	183137	Tandem_contraction_1087bp
Chr5	216599	217073	Repeat_contraction_45bp
Chr5	288506	289018	Repeat_contraction_290bp
Chr5	327843	327974	Repeat_contraction_30bp

Chr5	331222	331400	Repeat_expansion_164bp
Chr5	410612	411078	Repeat_expansion_27bp
Chr5	473166	473553	Repeat_contraction_23bp
Chr5	486584	491785	Repeat_contraction_4961bp
Chr5	494386	495319	Repeat_expansion_7456bp
Chr5	497954	498108	Repeat_contraction_59bp
Chr5	679458	679629	Repeat_contraction_29bp
Chr5	681753	684543	Repeat_contraction_2658bp
Chr5	743532	743667	Repeat_expansion_980bp
Chr5	785916	786175	Repeat_expansion_27bp
Chr5	793591	793921	Repeat_expansion_24bp
Chr5	795030	795733	Repeat_expansion_95bp
Chr5	801376	802376	Repeat_expansion_34bp
Chr5	816829	822245	Repeat_expansion_1725bp
Chr5	1015697	1016064	Repeat_expansion_506bp
Chr5	1017212	1018520	Repeat_contraction_71bp
Chr5	1042512	1043099	Repeat_contraction_22bp
Chr5	1086783	1087008	Repeat_contraction_22bp
Chr5	1207017	1207073	Deletion_29bp
Chr5	1207774	1208206	Repeat_expansion_272bp
Chr5	1208905	1209917	Repeat_expansion_58bp
Chr5	1258871	1258904	Insertion_25bp
Chr5	1282030	1282302	Repeat_contraction_46bp
Chr5	1483929	1484984	Repeat_contraction_687bp
Chr5	1550812	1551410	Repeat_contraction_29bp
Chr5	1552102	1552946	Repeat_expansion_107bp
Chr5	1582824	1583074	Repeat_contraction_41bp
Chr5	1597048	1601506	Repeat_contraction_4013bp
Chr5	1688605	1690956	Tandem_contraction_2679bp
Chr5	1731761	1734102	Repeat_expansion_189bp
Chr5	1738397	1738682	Repeat_contraction_126bp
Chr5	2066002	2067457	Repeat_contraction_545bp
Chr5	2105886	2108049	Deletion_2175bp
Chr5	2235009	2235789	Repeat_contraction_283bp
Chr5	2258845	2258919	Deletion_31bp
Chr5	2377813	2378045	Repeat_expansion_106bp
Chr5	2379274	2379606	Repeat_expansion_422bp
Chr5	2422344	2422733	Repeat_expansion_6470bp
Chr5	2481698	2481765	Repeat_expansion_23bp
Chr5	2562888	2563149	Repeat_contraction_33bp
Chr5	2874604	2876224	Repeat_contraction_20bp
Chr5	3005358	3007470	Repeat_expansion_61bp
Chr5	3013039	3013100	Repeat_expansion_20bp
Chr5	3178230	3178370	Repeat_expansion_35bp
Chr5	3194371	3194498	Repeat_contraction_22bp
Chr5	3195228	3195361	Repeat_expansion_36bp
Chr5	3197936	3198818	Repeat_contraction_57bp
Chr5	3546088	3554079	Repeat_contraction_24bp
Chr5	3554812	3554990	Tandem_expansion_4263bp

Chr5	4002894	4008745	Tandem_expansion_6941bp
Chr5	4027617	4027732	Repeat_expansion_61bp
Chr5	4183755	4183867	Repeat_expansion_58bp
Chr5	4204070	4204188	Repeat_contraction_25bp
Chr5	4216631	4216791	Repeat_expansion_79bp
Chr5	4289588	4289769	Repeat_expansion_554bp
Chr5	4495234	4495711	Tandem_expansion_2325bp
Chr5	4508150	4508440	Repeat_contraction_44bp
Chr5	4573369	4573587	Repeat_contraction_101bp
Chr5	4620551	4621049	Repeat_expansion_296bp
Chr5	4788319	4788506	Repeat_expansion_1076bp
Chr5	4790526	4796681	Repeat_contraction_5915bp
Chr5	4796940	4799516	Repeat_contraction_2481bp
Chr5	4934060	4934065	Insertion_4634bp
Chr5	5036255	5036372	Repeat_expansion_49bp
Chr5	5140737	5141084	Repeat_expansion_42bp
Chr5	5143442	5143608	Repeat_expansion_101bp
Chr5	5146699	5147243	Repeat_expansion_105bp
Chr5	5210792	5210797	Insertion_72bp
Chr5	5216953	5221259	Repeat_contraction_3926bp
Chr5	5330706	5331016	Repeat_contraction_69bp
Chr5	5331686	5332385	Repeat_expansion_182bp
Chr5	5464041	5464493	Repeat_expansion_52bp
Chr5	5482571	5482614	Insertion_40bp
Chr5	5577107	5579919	Tandem_contraction_2905bp
Chr5	5611493	5611835	Repeat_expansion_106bp
Chr5	5624090	5648829	Repeat_contraction_3049bp
Chr5	5665817	5666165	Repeat_expansion_34bp
Chr5	5666410	5667287	Repeat_contraction_47bp
Chr5	5673034	5673238	Repeat_contraction_41bp
Chr5	5674978	5675318	Repeat_expansion_272bp
Chr5	5776363	5776364	Tandem_contraction_2001bp
Chr5	5873165	5873427	Repeat_contraction_72bp
Chr5	5879324	5879592	Repeat_expansion_28bp
Chr5	5905361	5906367	Repeat_contraction_347bp
Chr5	5907140	5907447	Repeat_contraction_80bp
Chr5	5935661	5935741	Repeat_contraction_20bp
Chr5	6020961	6021070	Deletion_87bp
Chr5	6047152	6047180	Insertion_58bp
Chr5	6054841	6055047	Repeat_expansion_33bp
Chr5	6056427	6057643	Repeat_expansion_145bp
Chr5	6217014	6217588	Repeat_contraction_24bp
Chr5	6382820	6383400	Repeat_contraction_52bp
Chr5	6402430	6408201	Repeat_contraction_4599bp
Chr5	6447389	6447400	Insertion_725bp
Chr5	6453075	6453198	Repeat_expansion_23bp
Chr5	6460081	6462173	Repeat_contraction_465bp
Chr5	6499116	6499244	Deletion_93bp
Chr5	6503512	6503755	Repeat_contraction_27bp

Chr5	6653976	6655334	Repeat_contraction_105bp
Chr5	6665573	6665740	Repeat_contraction_29bp
Chr5	6793364	6793881	Repeat_expansion_60bp
Chr5	6801901	6802183	Repeat_expansion_101bp
Chr5	6872845	6873827	Repeat_contraction_305bp
Chr5	6889156	6889821	Repeat_contraction_152bp
Chr5	6904182	6904625	Repeat_expansion_1530bp
Chr5	6905756	6906195	Repeat_contraction_39bp
Chr5	6913370	6918828	Repeat_contraction_1298bp
Chr5	6974603	6975248	Repeat_contraction_55bp
Chr5	6976280	6977188	Repeat_expansion_215bp
Chr5	7013993	7015039	Repeat_expansion_189bp
Chr5	7022190	7022630	Repeat_contraction_60bp
Chr5	7023517	7024375	Repeat_expansion_23bp
Chr5	7056079	7059756	Repeat_contraction_1502bp
Chr5	7083147	7083970	Repeat_contraction_241bp
Chr5	7114909	7114953	Insertion_1386bp
Chr5	7151930	7155249	Repeat_contraction_1948bp
Chr5	7156442	7157716	Repeat_expansion_141bp
Chr5	7336959	7337904	Repeat_expansion_39bp
Chr5	7351832	7352787	Repeat_expansion_291bp
Chr5	7457369	7458208	Repeat_contraction_141bp
Chr5	7477484	7480623	Repeat_expansion_4812bp
Chr5	7485498	7486346	Repeat_expansion_2137bp
Chr5	7487483	7489001	Repeat_contraction_491bp
Chr5	7530060	7530286	Repeat_contraction_30bp
Chr5	7560619	7560693	Repeat_expansion_360bp
Chr5	7645313	7645830	Tandem_expansion_8427bp
Chr5	7670319	7670594	Repeat_contraction_31bp
Chr5	7684508	7684821	Repeat_contraction_223bp
Chr5	7690016	7690134	Repeat_expansion_77bp
Chr5	7703583	7703965	Repeat_expansion_66bp
Chr5	7704499	7705036	Repeat_expansion_44bp
Chr5	7701471	7706891	Tandem_expansion_8122bp
Chr5	7709294	7716236	Repeat_contraction_3141bp
Chr5	7786427	7786521	Repeat_expansion_20bp
Chr5	7809055	7809234	Repeat_expansion_78bp
Chr5	7811246	7811499	Repeat_contraction_34bp
Chr5	7835828	7836166	Repeat_contraction_69bp
Chr5	7876826	7877207	Repeat_contraction_90bp
Chr5	7884442	7888460	Repeat_contraction_1643bp
Chr5	7956617	7957038	Deletion_393bp
Chr5	7990848	7992147	Repeat_expansion_48bp
Chr5	8007460	8009436	Repeat_expansion_112bp
Chr5	8033013	8033402	Repeat_expansion_41bp
Chr5	8035991	8036574	Repeat_expansion_282bp
Chr5	8044881	8045611	Repeat_expansion_989bp
Chr5	8067112	8068424	Repeat_contraction_250bp
Chr5	8101286	8103666	Repeat_contraction_1181bp

Chr5	8127389	8127810	Repeat_contraction_300bp
Chr5	8131250	8139245	Repeat_expansion_375bp
Chr5	8169675	8171367	Repeat_contraction_97bp
Chr5	8180259	8180264	Insertion_2282bp
Chr5	8198157	8198180	Insertion_24bp
Chr5	8200091	8211995	Repeat_expansion_1714bp
Chr5	8221096	8224699	Repeat_contraction_429bp
Chr5	8233265	8233439	Repeat_expansion_44bp
Chr5	8244906	8245278	Tandem_expansion_11764bp
Chr5	8246971	8247494	Repeat_contraction_187bp
Chr5	8269794	8270408	Repeat_contraction_55bp
Chr5	8271065	8272031	Repeat_expansion_45bp
Chr5	8290648	8290808	Repeat_expansion_24bp
Chr5	8336316	8336552	Repeat_contraction_105bp
Chr5	8338178	8339053	Repeat_expansion_83bp
Chr5	8353201	8354542	Deletion_1310bp
Chr5	8371024	8371660	Repeat_contraction_108bp
Chr5	8447710	8448239	Tandem_expansion_2896bp
Chr5	8493725	8493828	Repeat_expansion_68bp
Chr5	8497148	8500613	Repeat_expansion_1928bp
Chr5	8501219	8501450	Repeat_contraction_25bp
Chr5	8507148	8507509	Repeat_expansion_48bp
Chr5	8513415	8515069	Repeat_expansion_762bp
Chr5	8538374	8538729	Repeat_contraction_49bp
Chr5	8540381	8540989	Repeat_expansion_134bp
Chr5	8544579	8544750	Repeat_expansion_305bp
Chr5	8559672	8560836	Repeat_contraction_539bp
Chr5	8571107	8577932	Repeat_contraction_6318bp
Chr5	8611444	8611981	Repeat_contraction_451bp
Chr5	8613323	8613324	Insertion_263bp
Chr5	8623697	8629382	Repeat_contraction_4824bp
Chr5	8675149	8676492	Repeat_contraction_398bp
Chr5	8698253	8698406	Repeat_expansion_291bp
Chr5	8700316	8702449	Repeat_contraction_1794bp
Chr5	8741728	8742855	Repeat_contraction_951bp
Chr5	8743260	8746707	Repeat_contraction_2220bp
Chr5	8748671	8749623	Repeat_contraction_487bp
Chr5	8751408	8751873	Repeat_expansion_28bp
Chr5	8755319	8755558	Repeat_contraction_100bp
Chr5	8765130	8767846	Repeat_contraction_2463bp
Chr5	8781888	8782222	Repeat_expansion_120bp
Chr5	8803835	8804139	Repeat_contraction_131bp
Chr5	8807535	8807675	Repeat_contraction_21bp
Chr5	8824611	8830716	Repeat_contraction_1264bp
Chr5	8833550	8834976	Repeat_expansion_1257bp
Chr5	8849965	8850634	Repeat_expansion_111bp
Chr5	8902934	8903305	Repeat_contraction_40bp
Chr5	8905467	8905906	Repeat_expansion_81bp
Chr5	8927978	8934328	Deletion_6337bp

Chr5	8989463	8990204	Repeat_contraction_48bp
Chr5	8991104	8992708	Repeat_expansion_265bp
Chr5	9038317	9038801	Repeat_expansion_2620bp
Chr5	9045814	9049963	Repeat_contraction_432bp
Chr5	9066249	9066637	Repeat_contraction_84bp
Chr5	9068816	9072519	Repeat_contraction_1364bp
Chr5	9074312	9074402	Repeat_contraction_23bp
Chr5	9125529	9127787	Repeat_expansion_592bp
Chr5	9129033	9129238	Repeat_expansion_29bp
Chr5	9130073	9132461	Repeat_contraction_1240bp
Chr5	9134936	9135142	Repeat_expansion_398bp
Chr5	9135685	9136866	Repeat_expansion_439bp
Chr5	9142622	9142765	Repeat_expansion_447bp
Chr5	9145289	9146362	Repeat_expansion_31bp
Chr5	9151429	9153489	Repeat_expansion_347bp
Chr5	9167576	9171294	Repeat_contraction_169bp
Chr5	9172193	9172914	Repeat_expansion_23bp
Chr5	9175303	9179322	Repeat_expansion_588bp
Chr5	9181075	9181109	Insertion_1411bp
Chr5	9181649	9189422	Deletion_7769bp
Chr5	9206091	9208141	Repeat_contraction_892bp
Chr5	9210480	9226076	Repeat_contraction_14731bp
Chr5	9236881	9237040	Repeat_expansion_199bp
Chr5	9243434	9243651	Repeat_expansion_32bp
Chr5	9244564	9244859	Repeat_contraction_123bp
Chr5	9268198	9268479	Repeat_expansion_162bp
Chr5	9271062	9284404	Repeat_contraction_6077bp
Chr5	9365166	9365167	Insertion_1300bp
Chr5	9381685	9397660	Repeat_contraction_3612bp
Chr5	9410495	9416991	Repeat_contraction_5801bp
Chr5	9433049	9433827	Repeat_expansion_198bp
Chr5	9444664	9444979	Repeat_contraction_31bp
Chr5	9450660	9450705	Insertion_25bp
Chr5	9451482	9451863	Repeat_contraction_81bp
Chr5	9473795	9474400	Repeat_expansion_57bp
Chr5	9478909	9479059	Repeat_contraction_62bp
Chr5	9482673	9482892	Repeat_expansion_443bp
Chr5	9527760	9531051	Tandem_expansion_3893bp
Chr5	9531051	9531603	Repeat_contraction_214bp
Chr5	9532304	9539397	Repeat_contraction_4251bp
Chr5	9544298	9545610	Repeat_contraction_1141bp
Chr5	9560618	9561219	Repeat_contraction_220bp
Chr5	9561759	9571089	Repeat_contraction_9232bp
Chr5	9632493	9652796	Repeat_contraction_4712bp
Chr5	9661414	9661585	Repeat_expansion_21bp
Chr5	9670409	9670623	Repeat_contraction_40bp
Chr5	9715743	9717496	Repeat_expansion_11375bp
Chr5	9819145	9819250	Repeat_expansion_4362bp
Chr5	9880311	9880719	Repeat_contraction_28bp

Chr5	9882182	9884493	Repeat_contraction_1056bp
Chr5	9885082	9885512	Repeat_expansion_123bp
Chr5	9899854	9900030	Repeat_contraction_110bp
Chr5	9901317	9901783	Repeat_expansion_1327bp
Chr5	9908833	9908839	Insertion_1079bp
Chr5	9930927	9932375	Repeat_contraction_413bp
Chr5	9941584	9941949	Repeat_expansion_403bp
Chr5	9959112	9959275	Repeat_contraction_22bp
Chr5	9978000	9978241	Tandem_expansion_2866bp
Chr5	10029653	10029742	Tandem_expansion_4462bp
Chr5	10058486	10058592	Repeat_expansion_143bp
Chr5	10066603	10066646	Insertion_1293bp
Chr5	10093762	10124349	Repeat_expansion_4938bp
Chr5	10124887	10128187	Repeat_contraction_1146bp
Chr5	10191659	10192196	Repeat_contraction_21bp
Chr5	10244901	10253737	Repeat_contraction_1380bp
Chr5	10255523	10255567	Insertion_92bp
Chr5	10277139	10277317	Repeat_expansion_1904bp
Chr5	10373370	10374668	Repeat_contraction_607bp
Chr5	10409791	10409795	Insertion_1136bp
Chr5	10614293	10614734	Tandem_expansion_4911bp
Chr5	10643391	10643898	Tandem_expansion_4677bp
Chr5	10676445	10677613	Repeat_contraction_614bp
Chr5	10745618	10749086	Deletion_3457bp
Chr5	10751176	10751970	Repeat_contraction_720bp
Chr5	10785792	10796616	Repeat_expansion_79bp
Chr5	10797454	10797871	Repeat_contraction_63bp
Chr5	10803499	10804805	Tandem_expansion_2075bp
Chr5	10844069	10844221	Deletion_120bp
Chr5	10897809	10899643	Repeat_expansion_243bp
Chr5	10941231	10941257	Insertion_33bp
Chr5	11095189	11096487	Repeat_contraction_44bp
Chr5	11106801	11106804	Insertion_11584bp
Chr5	11148156	11148911	Repeat_expansion_1075bp
Chr5	11218497	11228119	Tandem_expansion_10337bp
Chr5	11219334	11219338	Insertion_11261bp
Chr5	11211525	11222880	Tandem_expansion_11707bp
Chr5	11433203	11434882	Repeat_contraction_1074bp
Chr5	11444158	11444305	Repeat_expansion_22bp
Chr5	12012532	12013115	Repeat_contraction_69bp
Chr5	11468930	11468932	Insertion_1712bp
Chr5	11485271	11485471	Repeat_expansion_137bp
Chr5	11510768	11521092	Repeat_contraction_9871bp
Chr5	11584112	11585390	Repeat_contraction_1215bp
Chr5	11606043	11610729	Tandem_expansion_5663bp
Chr5	11608699	11610728	Repeat_contraction_1804bp
Chr5	11622291	11629322	Deletion_7009bp
Chr5	11648207	11648208	Insertion_563bp
Chr5	11667989	11668100	Repeat_expansion_15228bp

Chr5	11702162	11711929	Tandem_expansion_10045bp
Chr5	11913743	11914044	Deletion_261bp
Chr5	11897520	11902768	Repeat_expansion_36bp
Chr5	11787651	11796003	Tandem_expansion_9005bp
Chr5	11773630	11785915	Repeat_contraction_6810bp
Chr5	11754954	11757691	Repeat_expansion_3192bp
Chr5	12103564	12104324	Repeat_contraction_524bp
Chr5	11970011	11970701	Repeat_expansion_91bp
Chr5	11979699	11982867	Deletion_3140bp
Chr5	11985301	11991318	Repeat_contraction_5706bp
Chr5	12008958	12028098	Repeat_contraction_8856bp
Chr5	12036664	12036669	Insertion_12031bp
Chr5	12046431	12046438	Insertion_1067bp
Chr5	12048051	12056222	Repeat_expansion_7227bp
Chr5	12057299	12057574	Repeat_expansion_356bp
Chr5	12084679	12084699	Insertion_2020bp
Chr5	12137772	12138713	Repeat_contraction_149bp
Chr5	12347212	12347384	Repeat_contraction_87bp
Chr5	12238106	12241194	Repeat_expansion_2531bp
Chr5	12248297	12251213	Repeat_expansion_370bp
Chr5	12256609	12256733	Repeat_contraction_26bp
Chr5	12294677	12307120	Deletion_12421bp
Chr5	12929490	12935335	Repeat_contraction_1706bp
Chr5	12658866	12675090	Deletion_16213bp
Chr5	12638366	12649112	Repeat_contraction_9506bp
Chr5	12613471	12613976	Tandem_expansion_10949bp
Chr5	12488314	12488381	Deletion_23bp
Chr5	12476234	12476413	Repeat_expansion_1079bp
Chr5	13134185	13135637	Tandem_expansion_6938bp
Chr5	13153696	13154767	Deletion_1038bp
Chr5	13169716	13169941	Repeat_contraction_172bp
Chr5	13172181	13180463	Repeat_contraction_2964bp
Chr5	13201224	13204325	Tandem_contraction_3889bp
Chr5	13220684	13225277	Repeat_expansion_8412bp
Chr5	13261075	13265504	Repeat_expansion_58bp
Chr5	13382397	13382424	Insertion_29bp
Chr5	13384699	13388150	Tandem_expansion_3484bp
Chr5	13384699	13388151	Tandem_expansion_3484bp
Chr5	13399416	13399677	Repeat_expansion_4977bp
Chr5	12030598	12030795	Repeat_contraction_51bp
Chr5	13434303	13434417	Repeat_expansion_1128bp
Chr5	13437653	13439057	Repeat_contraction_716bp
Chr5	13441993	13445111	Repeat_expansion_1059bp
Chr5	13446773	13449710	Repeat_expansion_1768bp
Chr5	13451216	13457029	Repeat_expansion_370bp
Chr5	13457986	13472175	Repeat_contraction_13836bp
Chr5	13545211	13546244	Repeat_expansion_61bp
Chr5	13573327	13573412	Repeat_expansion_758bp
Chr5	13575519	13575559	Insertion_319bp

Chr5	13642387	13643057	Tandem_expansion_1143bp
Chr5	13654961	13654972	Insertion_1178bp
Chr5	13656965	13657226	Repeat_expansion_1077bp
Chr5	13666038	13673304	Repeat_contraction_5515bp
Chr5	12676730	12678694	Tandem_expansion_4937bp
Chr5	13702306	13706802	Repeat_expansion_7000bp
Chr5	13707640	13709089	Repeat_expansion_656bp
Chr5	13712274	13722047	Repeat_contraction_8978bp
Chr5	13723567	13724310	Repeat_expansion_2864bp
Chr5	13755380	13765009	Repeat_contraction_4200bp
Chr5	13767938	13768217	Repeat_expansion_41bp
Chr5	13813479	13814366	Repeat_contraction_214bp
Chr5	13818755	13818785	Insertion_222bp
Chr5	13832552	13846047	Repeat_contraction_3167bp
Chr5	13876837	13877435	Repeat_contraction_88bp
Chr5	13893352	13893353	Insertion_1498bp
Chr5	13896856	13897521	Repeat_contraction_46bp
Chr5	13899184	13899491	Repeat_expansion_883bp
Chr5	13960645	13968591	Deletion_7946bp
Chr5	13969296	13988008	Repeat_contraction_5244bp
Chr5	14002785	14005690	Repeat_contraction_2501bp
Chr5	14017404	14018283	Repeat_contraction_824bp
Chr5	14022456	14023540	Deletion_1064bp
Chr5	14050116	14060706	Repeat_contraction_5211bp
Chr5	14061510	14061919	Repeat_expansion_34bp
Chr5	14074765	14091935	Repeat_contraction_11483bp
Chr5	14101097	14102077	Repeat_expansion_553bp
Chr5	14121915	14121991	Repeat_expansion_23bp
Chr5	14123331	14124408	Repeat_contraction_37bp
Chr5	14143694	14154368	Repeat_contraction_8412bp
Chr5	14185300	14185366	Repeat_expansion_1044bp
Chr5	14192107	14192323	Repeat_expansion_162bp
Chr5	14196767	14197015	Repeat_expansion_28bp
Chr5	14210057	14212184	Repeat_contraction_1309bp
Chr5	14213723	14217827	Repeat_contraction_3038bp
Chr5	14219003	14220535	Repeat_contraction_587bp
Chr5	14279565	14279577	Insertion_1064bp
Chr5	14280598	14281394	Repeat_contraction_20bp
Chr5	14289184	14290584	Repeat_contraction_1189bp
Chr5	14294448	14294597	Repeat_contraction_50bp
Chr5	14301127	14302724	Repeat_contraction_172bp
Chr5	14407893	14408248	Repeat_contraction_72bp
Chr5	14544851	14545415	Repeat_contraction_279bp
Chr5	14551136	14551838	Repeat_contraction_41bp
Chr5	14559916	14561212	Repeat_contraction_222bp
Chr5	14563578	14564113	Repeat_contraction_205bp
Chr5	14590945	14591017	Repeat_contraction_21bp
Chr5	14635600	14635609	Insertion_1334bp
Chr5	14645752	14650984	Repeat_contraction_389bp

Chr5	14686583	14687745	Repeat_expansion_3894bp
Chr5	14690406	14707819	Repeat_contraction_15584bp
Chr5	14759956	14763732	Repeat_expansion_449bp
Chr5	14768940	14769124	Repeat_expansion_81bp
Chr5	14810175	14810368	Repeat_expansion_1229bp
Chr5	14857389	14857683	Repeat_expansion_165bp
Chr5	14896000	14896728	Repeat_expansion_3352bp
Chr5	14902996	14903821	Repeat_contraction_77bp
Chr5	14904291	14905131	Repeat_contraction_67bp
Chr5	14939163	14947328	Repeat_contraction_1868bp
Chr5	14988783	14988789	Insertion_6019bp
Chr5	15005492	15007809	Repeat_contraction_69bp
Chr5	15012707	15015329	Repeat_contraction_287bp
Chr5	15016402	15016509	Repeat_contraction_26bp
Chr5	15016829	15021956	Repeat_expansion_74bp
Chr5	15045115	15046074	Repeat_contraction_49bp
Chr5	15051782	15056274	Repeat_expansion_1144bp
Chr5	15061241	15061727	Repeat_contraction_140bp
Chr5	15068331	15068424	Repeat_contraction_26bp
Chr5	15074430	15090145	Repeat_contraction_14450bp
Chr5	15094583	15095877	Repeat_expansion_1234bp
Chr5	15101507	15101980	Repeat_contraction_349bp
Chr5	15105405	15107892	Repeat_contraction_1220bp
Chr5	15108943	15120206	Repeat_contraction_3222bp
Chr5	15121940	15126163	Repeat_contraction_2526bp
Chr5	15127572	15128561	Repeat_contraction_660bp
Chr5	15133012	15133762	Repeat_expansion_270bp
Chr5	15168644	15171813	Repeat_expansion_416bp
Chr5	15183053	15184588	Repeat_contraction_1366bp
Chr5	15187046	15187443	Repeat_expansion_20bp
Chr5	15188048	15188745	Repeat_expansion_23bp
Chr5	15194500	15198077	Repeat_contraction_94bp
Chr5	15199443	15199537	Repeat_expansion_8832bp
Chr5	15200649	15207581	Repeat_contraction_4702bp
Chr5	15215001	15215319	Repeat_contraction_53bp
Chr5	15217874	15217911	Deletion_27bp
Chr5	15220100	15220815	Repeat_expansion_48bp
Chr5	15226177	15226825	Repeat_expansion_22bp
Chr5	15228472	15228473	Insertion_38bp
Chr5	15230463	15245269	Repeat_contraction_13681bp
Chr5	15297936	15303069	Repeat_contraction_4453bp
Chr5	15326512	15328692	Repeat_expansion_2754bp
Chr5	15333830	15340149	Repeat_contraction_6057bp
Chr5	15350995	15351254	Repeat_contraction_39bp
Chr5	15361367	15366751	Repeat_expansion_843bp
Chr5	15368097	15369346	Repeat_expansion_3433bp
Chr5	15381210	15382436	Tandem_expansion_3748bp
Chr5	15381873	15387893	Repeat_contraction_5402bp
Chr5	15464961	15485339	Repeat_contraction_1688bp

Chr5	15488528	15510278	Repeat_contraction_10545bp
Chr5	15526407	15529711	Repeat_contraction_267bp
Chr5	15532431	15533040	Repeat_contraction_271bp
Chr5	15535136	15536123	Repeat_contraction_855bp
Chr5	15539377	15540163	Repeat_expansion_4073bp
Chr5	15548183	15551208	Repeat_expansion_2673bp
Chr5	15589683	15590224	Repeat_expansion_62bp
Chr5	15600943	15601630	Repeat_contraction_450bp
Chr5	15642973	15643677	Repeat_expansion_89bp
Chr5	15645063	15651210	Repeat_contraction_4842bp
Chr5	15681351	15700319	Repeat_contraction_10753bp
Chr5	15714925	15722367	Repeat_contraction_5447bp
Chr5	15733197	15733286	Repeat_expansion_1854bp
Chr5	15741082	15742543	Repeat_expansion_516bp
Chr5	15761747	15764386	Repeat_contraction_723bp
Chr5	15765486	15765679	Repeat_contraction_20bp
Chr5	15790787	15791776	Repeat_contraction_637bp
Chr5	15792370	15792607	Repeat_expansion_272bp
Chr5	15793342	15793495	Repeat_expansion_218bp
Chr5	15822140	15822601	Repeat_expansion_102bp
Chr5	15824551	15824766	Repeat_contraction_24bp
Chr5	15834161	15834258	Repeat_expansion_80bp
Chr5	15835717	15836313	Repeat_contraction_44bp
Chr5	15871414	15872103	Repeat_expansion_282bp
Chr5	15890734	15890802	Repeat_expansion_182bp
Chr5	15914717	15914747	Insertion_172bp
Chr5	15917590	15919549	Repeat_contraction_660bp
Chr5	15920898	15920935	Insertion_80bp
Chr5	15921355	15928975	Repeat_contraction_5215bp
Chr5	15931021	15931584	Repeat_contraction_40bp
Chr5	15932808	15933467	Repeat_expansion_66bp
Chr5	16030477	16031409	Repeat_contraction_827bp
Chr5	16033577	16034462	Repeat_expansion_16515bp
Chr5	16038770	16039383	Repeat_contraction_34bp
Chr5	16039801	16041753	Repeat_expansion_79bp
Chr5	16067655	16068303	Repeat_expansion_219bp
Chr5	16141967	16142359	Repeat_expansion_804bp
Chr5	16146579	16146958	Repeat_contraction_39bp
Chr5	16149378	16150293	Repeat_expansion_1672bp
Chr5	16156449	16157267	Repeat_expansion_2264bp
Chr5	16212518	16212611	Repeat_expansion_20bp
Chr5	16243194	16243950	Repeat_contraction_24bp
Chr5	16267815	16268253	Repeat_contraction_288bp
Chr5	16275146	16276733	Repeat_contraction_859bp
Chr5	16309719	16310653	Repeat_contraction_180bp
Chr5	16320909	16321520	Repeat_contraction_321bp
Chr5	16364786	16364899	Repeat_contraction_38bp
Chr5	16498491	16498804	Repeat_expansion_267bp
Chr5	16497672	16501002	Tandem_expansion_3922bp

Chr5	16502467	16503357	Repeat_expansion_784bp
Chr5	16507676	16507685	Insertion_2480bp
Chr5	16513776	16515039	Repeat_contraction_372bp
Chr5	16515784	16517971	Repeat_expansion_172bp
Chr5	16522865	16523012	Repeat_expansion_30bp
Chr5	16555994	16556060	Repeat_expansion_23bp
Chr5	16594729	16595060	Repeat_contraction_33bp
Chr5	16606697	16606920	Repeat_contraction_83bp
Chr5	16618998	16619141	Repeat_contraction_20bp
Chr5	16620785	16621289	Repeat_expansion_834bp
Chr5	16625101	16625379	Repeat_contraction_51bp
Chr5	16630682	16632237	Repeat_contraction_364bp
Chr5	16634014	16635006	Repeat_expansion_380bp
Chr5	16635650	16636191	Repeat_expansion_26bp
Chr5	16656794	16662297	Repeat_contraction_182bp
Chr5	16676390	16679268	Repeat_expansion_9370bp
Chr5	16681244	16683364	Repeat_contraction_680bp
Chr5	16687663	16689761	Repeat_contraction_238bp
Chr5	16695573	16706939	Repeat_contraction_8562bp
Chr5	16712471	16713456	Repeat_contraction_407bp
Chr5	16722790	16723053	Repeat_contraction_66bp
Chr5	16747052	16754074	Repeat_contraction_5829bp
Chr5	16772087	16773623	Repeat_expansion_134bp
Chr5	16776811	16776964	Repeat_expansion_185bp
Chr5	16804804	16807468	Repeat_contraction_1767bp
Chr5	16907179	16910328	Repeat_contraction_2256bp
Chr5	16912746	16913048	Deletion_253bp
Chr5	16920893	16923638	Repeat_contraction_580bp
Chr5	16975111	16976346	Repeat_expansion_6483bp
Chr5	16993409	16994129	Repeat_expansion_137bp
Chr5	17003230	17003289	Repeat_expansion_2757bp
Chr5	17004209	17007366	Repeat_expansion_738bp
Chr5	17017631	17017950	Repeat_expansion_495bp
Chr5	17027573	17027581	Insertion_1204bp
Chr5	17038917	17043361	Tandem_contraction_20bp
Chr5	17076376	17076791	Repeat_contraction_305bp
Chr5	17090769	17104929	Repeat_contraction_4940bp
Chr5	17107782	17107858	Deletion_47bp
Chr5	17108893	17108961	Deletion_50bp
Chr5	17121782	17123725	Repeat_expansion_5516bp
Chr5	17181486	17182079	Repeat_contraction_189bp
Chr5	17194556	17194777	Repeat_contraction_31bp
Chr5	17205241	17205812	Repeat_contraction_69bp
Chr5	17209595	17209775	Repeat_expansion_231bp
Chr5	17212452	17213659	Repeat_contraction_332bp
Chr5	17231519	17231684	Repeat_contraction_63bp
Chr5	17234391	17234854	Repeat_expansion_664bp
Chr5	17236017	17237161	Repeat_contraction_489bp
Chr5	17243008	17243329	Repeat_contraction_82bp

Chr5	17247178	17255041	Repeat_contraction_4364bp
Chr5	17258525	17258761	Repeat_expansion_528bp
Chr5	17261738	17269063	Repeat_contraction_5979bp
Chr5	17288927	17289061	Repeat_expansion_41bp
Chr5	17290600	17292871	Repeat_contraction_191bp
Chr5	17298398	17298861	Repeat_expansion_788bp
Chr5	17321281	17322544	Repeat_expansion_23bp
Chr5	17323305	17325481	Repeat_expansion_319bp
Chr5	17326731	17332832	Repeat_expansion_301bp
Chr5	17341616	17346148	Repeat_contraction_1081bp
Chr5	17346748	17348889	Repeat_expansion_786bp
Chr5	17349804	17350214	Repeat_expansion_42bp
Chr5	17358262	17360146	Repeat_contraction_1058bp
Chr5	17363554	17367784	Repeat_contraction_2686bp
Chr5	17378043	17378730	Repeat_expansion_28bp
Chr5	17396368	17398754	Repeat_contraction_1255bp
Chr5	17414981	17415778	Repeat_expansion_144bp
Chr5	17416174	17416856	Repeat_contraction_25bp
Chr5	17417221	17420602	Repeat_contraction_1018bp
Chr5	17454197	17455405	Repeat_contraction_126bp
Chr5	17457931	17458230	Repeat_expansion_45bp
Chr5	17459441	17459656	Repeat_expansion_230bp
Chr5	17508417	17509308	Repeat_contraction_31bp
Chr5	17514815	17518569	Repeat_expansion_191bp
Chr5	17525293	17526447	Repeat_contraction_102bp
Chr5	17552547	17552761	Repeat_contraction_143bp
Chr5	17560910	17569220	Repeat_contraction_5657bp
Chr5	17571899	17573852	Repeat_contraction_71bp
Chr5	17574339	17575294	Repeat_expansion_44bp
Chr5	17578325	17579596	Repeat_contraction_1103bp
Chr5	17584415	17585085	Repeat_contraction_75bp
Chr5	17616777	17618658	Repeat_contraction_1502bp
Chr5	17621732	17622503	Repeat_expansion_537bp
Chr5	17627873	17628420	Repeat_contraction_74bp
Chr5	17636210	17636597	Repeat_contraction_305bp
Chr5	17654034	17654120	Repeat_expansion_1245bp
Chr5	17656686	17656890	Repeat_expansion_336bp
Chr5	17667070	17669337	Repeat_contraction_109bp
Chr5	17671644	17671758	Repeat_expansion_77bp
Chr5	17709124	17711141	Repeat_contraction_108bp
Chr5	17729828	17730717	Repeat_contraction_42bp
Chr5	17732285	17734116	Repeat_expansion_347bp
Chr5	17757438	17757552	Repeat_contraction_36bp
Chr5	17756269	17758249	Tandem_expansion_4548bp
Chr5	17757432	17757548	Repeat_contraction_34bp
Chr5	17809525	17810342	Repeat_expansion_27bp
Chr5	17811154	17813786	Repeat_contraction_1947bp
Chr5	17861532	17864017	Repeat_expansion_274bp
Chr5	17868447	17868449	Insertion_53bp

Chr5	17893539	17901536	Deletion_7965bp
Chr5	17913394	17913633	Repeat_expansion_480bp
Chr5	17942354	17942794	Repeat_expansion_43bp
Chr5	17943535	17945289	Repeat_contraction_121bp
Chr5	17951376	17953178	Repeat_expansion_3890bp
Chr5	17970084	17970453	Repeat_contraction_76bp
Chr5	18032556	18032801	Repeat_expansion_32bp
Chr5	18063559	18064226	Repeat_contraction_67bp
Chr5	18064677	18064988	Repeat_expansion_44bp
Chr5	18093808	18095538	Repeat_contraction_130bp
Chr5	18096288	18096648	Repeat_contraction_122bp
Chr5	18098314	18099361	Repeat_expansion_33bp
Chr5	18106166	18108600	Repeat_contraction_132bp
Chr5	18136768	18158662	Repeat_contraction_7648bp
Chr5	18181108	18181468	Repeat_contraction_192bp
Chr5	18186765	18211241	Repeat_contraction_5084bp
Chr5	18212034	18212273	Repeat_expansion_167bp
Chr5	18238841	18240919	Repeat_expansion_161bp
Chr5	18242916	18243361	Repeat_contraction_84bp
Chr5	18258372	18260417	Repeat_contraction_1810bp
Chr5	18281914	18283983	Repeat_expansion_9319bp
Chr5	18298440	18319972	Repeat_expansion_4674bp
Chr5	18340172	18341555	Repeat_contraction_308bp
Chr5	18343034	18344643	Repeat_expansion_467bp
Chr5	18346009	18347928	Repeat_expansion_34bp
Chr5	18500735	18501486	Deletion_759bp
Chr5	18630800	18631103	Repeat_expansion_25bp
Chr5	18653672	18662877	Repeat_contraction_7649bp
Chr5	18664216	18670027	Repeat_contraction_3781bp
Chr5	18682776	18683225	Repeat_expansion_235bp
Chr5	18691893	18692846	Repeat_expansion_149bp
Chr5	18704770	18704855	Repeat_expansion_1666bp
Chr5	18728429	18728544	Repeat_expansion_29bp
Chr5	18757326	18758855	Repeat_contraction_608bp
Chr5	18773819	18774353	Repeat_contraction_113bp
Chr5	18774661	18775632	Repeat_expansion_71bp
Chr5	18776764	18778972	Repeat_expansion_790bp
Chr5	18781937	18782138	Repeat_contraction_122bp
Chr5	18787571	18787947	Repeat_contraction_158bp
Chr5	18850788	18875228	Repeat_contraction_16967bp
Chr5	18891382	18891848	Repeat_expansion_60bp
Chr5	18916948	18920223	Repeat_contraction_305bp
Chr5	18947644	18950960	Repeat_contraction_1492bp
Chr5	18952532	18952708	Repeat_expansion_22bp
Chr5	18968847	18969176	Repeat_expansion_33bp
Chr5	19037142	19039328	Repeat_contraction_255bp
Chr5	19040888	19041591	Repeat_contraction_30bp
Chr5	19042256	19043178	Repeat_contraction_96bp
Chr5	19122893	19123052	Repeat_expansion_54bp

Chr5	19176134	19176610	Repeat_contraction_23bp
Chr5	19177843	19177956	Repeat_expansion_219bp
Chr5	19178381	19179738	Repeat_contraction_91bp
Chr5	19188719	19188882	Repeat_expansion_668bp
Chr5	19190772	19199410	Repeat_contraction_1515bp
Chr5	19199964	19200741	Repeat_contraction_111bp
Chr5	19205663	19206068	Repeat_expansion_79bp
Chr5	19206602	19206816	Repeat_contraction_26bp
Chr5	19287080	19287216	Repeat_expansion_1711bp
Chr5	19375140	19375233	Repeat_contraction_27bp
Chr5	19390832	19391550	Repeat_contraction_528bp
Chr5	19402756	19403181	Repeat_expansion_287bp
Chr5	19418815	19420891	Repeat_contraction_1942bp
Chr5	19412770	19415378	Repeat_expansion_51bp
Chr5	19465012	19465977	Repeat_expansion_1020bp
Chr5	19477461	19477744	Repeat_contraction_31bp
Chr5	19525363	19525584	Repeat_contraction_153bp
Chr5	19527303	19527472	Repeat_contraction_51bp
Chr5	19567066	19567858	Repeat_contraction_251bp
Chr5	19581128	19581170	Insertion_33bp
Chr5	19622795	19625979	Repeat_contraction_745bp
Chr5	19635747	19636065	Repeat_expansion_449bp
Chr5	19654148	19654875	Repeat_expansion_44bp
Chr5	19659663	19661275	Repeat_expansion_51bp
Chr5	19661733	19661918	Repeat_contraction_53bp
Chr5	19679615	19679644	Insertion_54bp
Chr5	19681679	19683542	Repeat_contraction_438bp
Chr5	19716970	19717217	Repeat_contraction_41bp
Chr5	19722005	19722291	Repeat_expansion_46bp
Chr5	19740352	19744172	Repeat_contraction_2278bp
Chr5	19746307	19746489	Repeat_expansion_84bp
Chr5	19748921	19749041	Repeat_expansion_37bp
Chr5	19750047	19754280	Repeat_contraction_904bp
Chr5	19769879	19770293	Repeat_expansion_605bp
Chr5	19771461	19780047	Repeat_contraction_6940bp
Chr5	19781175	19781797	Repeat_contraction_35bp
Chr5	19782231	19783728	Repeat_expansion_399bp
Chr5	19818040	19818913	Repeat_contraction_293bp
Chr5	19821019	19821527	Repeat_contraction_216bp
Chr5	19838885	19839272	Repeat_expansion_199bp
Chr5	19849249	19849429	Repeat_expansion_366bp
Chr5	19868193	19868982	Repeat_contraction_578bp
Chr5	19872613	19873616	Repeat_contraction_953bp
Chr5	19930211	19931557	Deletion_1346bp
Chr5	19991843	19991934	Repeat_expansion_3170bp
Chr5	20071594	20071924	Repeat_expansion_85bp
Chr5	20073326	20073787	Deletion_424bp
Chr5	20076291	20078568	Repeat_expansion_2369bp
Chr5	20089526	20089944	Repeat_contraction_73bp

Chr5	20095943	20095986	Insertion_140bp
Chr5	20119343	20119734	Repeat_expansion_1171bp
Chr5	20201052	20201738	Repeat_expansion_1094bp
Chr5	20209507	20210158	Repeat_contraction_490bp
Chr5	20233117	20234013	Repeat_expansion_244bp
Chr5	20249600	20250147	Repeat_contraction_173bp
Chr5	20289650	20289884	Repeat_expansion_34bp
Chr5	20296442	20296856	Repeat_contraction_251bp
Chr5	20337375	20337567	Repeat_contraction_38bp
Chr5	20882445	20883081	Repeat_contraction_27bp
Chr5	20883753	20884543	Repeat_expansion_540bp
Chr5	20960150	20960619	Repeat_contraction_24bp
Chr5	20964997	20975250	Repeat_contraction_9870bp
Chr5	20977722	20978241	Repeat_contraction_267bp
Chr5	21013375	21016946	Repeat_expansion_277bp
Chr5	21116703	21116871	Repeat_contraction_79bp
Chr5	21121273	21121415	Repeat_contraction_32bp
Chr5	21217602	21221147	Tandem_expansion_3557bp
Chr5	21249776	21250213	Repeat_expansion_21bp
Chr5	21317329	21320577	Tandem_expansion_6963bp
Chr5	21421990	21422437	Repeat_contraction_307bp
Chr5	21429638	21430255	Repeat_expansion_60bp
Chr5	21439214	21440313	Repeat_expansion_853bp
Chr5	21467895	21467969	Tandem_contraction_1225bp
Chr5	21496720	21497713	Repeat_expansion_1419bp
Chr5	21510338	21512857	Repeat_expansion_44bp
Chr5	21530058	21532250	Repeat_contraction_2033bp
Chr5	21593557	21593610	Deletion_25bp
Chr5	21600952	21601181	Repeat_contraction_100bp
Chr5	21607105	21607246	Repeat_contraction_34bp
Chr5	21667829	21667837	Insertion_26bp
Chr5	21680060	21681020	Repeat_contraction_166bp
Chr5	21799181	21801141	Repeat_contraction_1764bp
Chr5	21819647	21819992	Repeat_contraction_24bp
Chr5	21820657	21821278	Repeat_contraction_185bp
Chr5	21841508	21843214	Repeat_contraction_93bp
Chr5	21870379	21870413	Insertion_24bp
Chr5	21927727	21927836	Repeat_expansion_561bp
Chr5	21939625	21940434	Repeat_expansion_211bp
Chr5	21958600	21959858	Repeat_contraction_384bp
Chr5	21974442	21975539	Repeat_contraction_122bp
Chr5	22011966	22015121	Repeat_expansion_296bp
Chr5	22020841	22021860	Repeat_contraction_886bp
Chr5	22062606	22062638	Insertion_524bp
Chr5	22072289	22072542	Tandem_expansion_3088bp
Chr5	22094333	22095018	Tandem_contraction_739bp
Chr5	22129782	22130800	Repeat_expansion_55bp
Chr5	22154442	22155274	Repeat_contraction_94bp
Chr5	22155958	22156200	Repeat_expansion_50bp

Chr5	22159340	22160487	Repeat_expansion_4638bp
Chr5	22226510	22236106	Tandem_expansion_10246bp
Chr5	22228534	22229067	Deletion_511bp
Chr5	22232560	22233220	Repeat_expansion_646bp
Chr5	22287025	22287823	Repeat_contraction_104bp
Chr5	22288213	22288765	Repeat_expansion_31bp
Chr5	22307819	22308013	Repeat_contraction_49bp
Chr5	22338190	22338301	Repeat_contraction_25bp
Chr5	22379491	22379675	Repeat_expansion_274bp
Chr5	22384981	22386705	Repeat_expansion_450bp
Chr5	22444286	22445121	Repeat_contraction_682bp
Chr5	22510728	22512919	Deletion_2180bp
Chr5	22534308	22535896	Repeat_contraction_688bp
Chr5	22567729	22567889	Repeat_expansion_47bp
Chr5	22569370	22569683	Repeat_expansion_36bp
Chr5	22618868	22624486	Tandem_expansion_7106bp
Chr5	22645269	22645526	Repeat_expansion_20bp
Chr5	22656567	22657474	Repeat_expansion_22bp
Chr5	22693310	22693399	Repeat_expansion_30bp
Chr5	22715199	22715373	Repeat_contraction_24bp
Chr5	22879403	22879918	Repeat_expansion_41bp
Chr5	23030676	23031772	Repeat_expansion_38bp
Chr5	23036888	23038497	Repeat_contraction_258bp
Chr5	23312548	23313788	Tandem_contraction_1472bp
Chr5	23336571	23336829	Repeat_contraction_201bp
Chr5	23346076	23346380	Repeat_expansion_263bp
Chr5	23375138	23375494	Repeat_expansion_62bp
Chr5	23431150	23432893	Repeat_contraction_1356bp
Chr5	23434010	23434526	Repeat_contraction_266bp
Chr5	23654732	23654960	Repeat_expansion_44bp
Chr5	23678037	23678372	Repeat_contraction_29bp
Chr5	23681758	23683173	Repeat_expansion_149bp
Chr5	23815350	23815415	Repeat_expansion_50bp
Chr5	23817080	23817452	Repeat_contraction_81bp
Chr5	23823536	23823860	Repeat_contraction_121bp
Chr5	23843990	23844765	Repeat_contraction_32bp
Chr5	23921489	23922002	Repeat_contraction_23bp
Chr5	23994210	23994410	Repeat_expansion_413bp
Chr5	23995939	23996142	Repeat_contraction_111bp
Chr5	24016787	24050433	Repeat_contraction_16928bp
Chr5	24051361	24052025	Repeat_expansion_47bp
Chr5	24066435	24067378	Repeat_expansion_49bp
Chr5	24128098	24130107	Repeat_contraction_1550bp
Chr5	24130899	24132368	Repeat_expansion_4809bp
Chr5	24151383	24151926	Repeat_expansion_22bp
Chr5	24153440	24153794	Repeat_contraction_220bp
Chr5	24195260	24195329	Deletion_35bp
Chr5	24203321	24203347	Insertion_62bp
Chr5	24275942	24279665	Repeat_contraction_2939bp

Chr5	24282032	24282797	Repeat_expansion_90bp
Chr5	24288101	24288124	Insertion_875bp
Chr5	24744722	24744735	Insertion_873bp
Chr5	25134753	25135066	Repeat_expansion_1059bp
Chr5	25268172	25276650	Repeat_contraction_463bp
Chr5	25279322	25279715	Repeat_expansion_274bp
Chr5	25286482	25288532	Repeat_contraction_50bp
Chr5	25290395	25291540	Repeat_contraction_21bp
Chr5	25296911	25297363	Repeat_expansion_23bp
Chr5	25303511	25303657	Repeat_expansion_364bp
Chr5	25382875	25382961	Repeat_expansion_273bp
Chr5	25399489	25400316	Repeat_expansion_432bp
Chr5	25468574	25471453	Repeat_contraction_871bp
Chr5	25483825	25484112	Repeat_expansion_34bp
Chr5	25614438	25614828	Repeat_contraction_171bp
Chr5	25765933	25766596	Repeat_expansion_140bp
Chr5	25793426	25793640	Repeat_contraction_152bp
Chr5	25859810	25860014	Repeat_expansion_163bp
Chr5	25904944	25905103	Repeat_expansion_365bp
Chr5	25931446	25931502	Repeat_expansion_102bp
Chr5	25991265	25991634	Repeat_contraction_199bp
Chr5	26015336	26015809	Tandem_expansion_561bp
Chr5	26053138	26053547	Repeat_contraction_109bp
Chr5	26064368	26067629	Repeat_expansion_69bp
Chr5	26069724	26074061	Repeat_contraction_381bp
Chr5	26097577	26098160	Repeat_expansion_109bp
Chr5	26107215	26107232	Insertion_34bp
Chr5	26250242	26250399	Repeat_expansion_348bp
Chr5	26353855	26354125	Repeat_expansion_358bp
Chr5	26354434	26354866	Repeat_contraction_24bp
Chr5	26483021	26485502	Repeat_contraction_472bp
Chr5	26490676	26491842	Repeat_contraction_25bp
Chr5	26502426	26505410	Repeat_expansion_35bp
Chr5	26555624	26555801	Repeat_expansion_157bp
Chr5	26571816	26571926	Repeat_expansion_35bp
Chr5	26606501	26609239	Repeat_expansion_1045bp
Chr5	26664547	26664845	Repeat_expansion_32bp
Chr5	26758125	26758670	Repeat_expansion_375bp
Chr5	26810007	26810060	Deletion_26bp
Chr5	26879859	26880127	Repeat_contraction_162bp
Chr5	26926405	26926435	Insertion_135bp
Chr5	26935366	26935391	Deletion_20bp
Chr5	26966320	26966887	Repeat_expansion_185bp
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Sequence alignment of NOR-linked polymorphic regions

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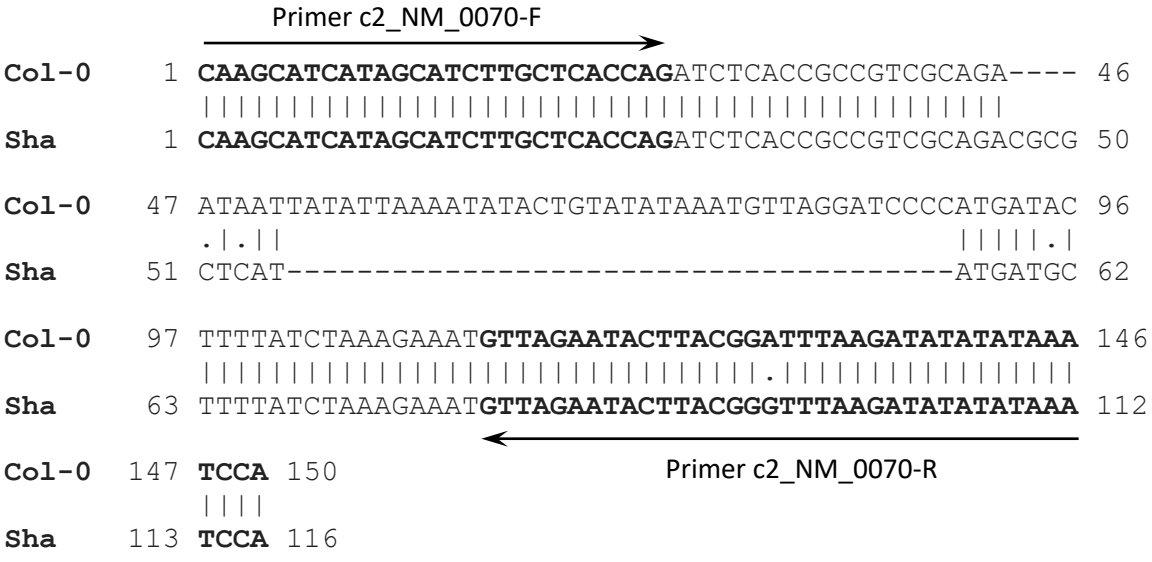

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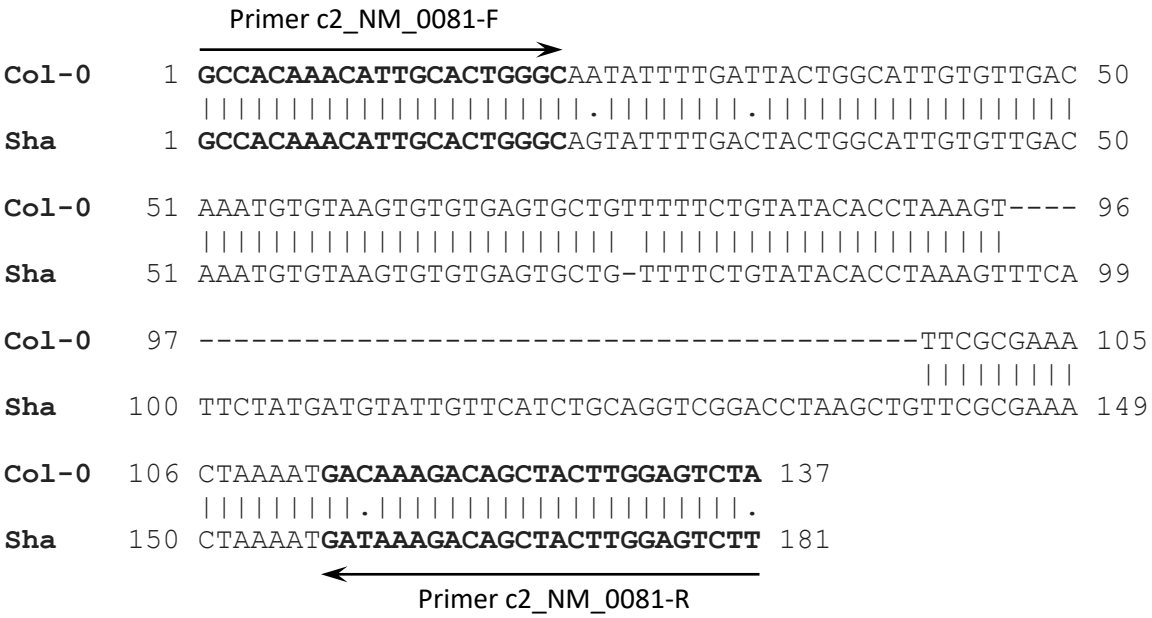
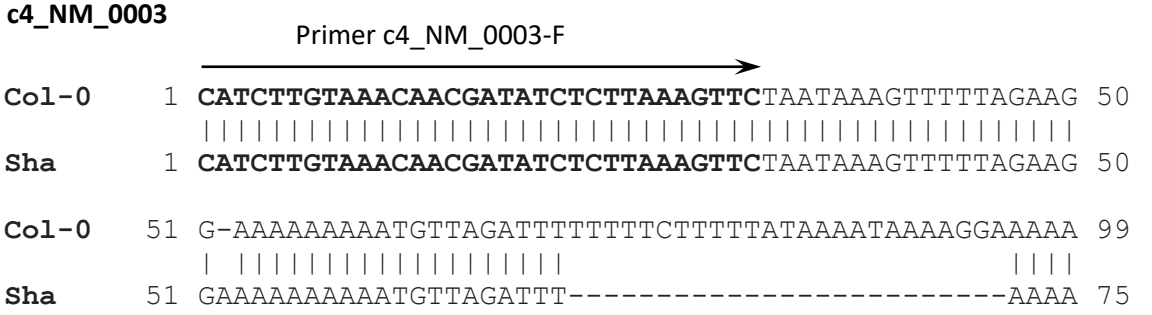


c4_NM_0003



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Sha     76 TTGCAAGTTTTTTGTTTTATTATATTTTTAGTTTAGTTTTGAAATTGAGA 125

Col-0  150 AAAATATATTTATATTGTATAT 171
           |||||||||||||||||||||
Sha    126 AAAATATATTTATATTGTATAT 147
```

Primer c4_NM_0003-R

c4_NM_0006

Primer c4_NM_0006-F

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           |||||||||||||||||||||||||||||||||||||||||||||||||
Sha      1 GGCAAGTATGAATGAGAATAAACCATGACGAACTGCAATCTTTGGCTCTT 50

Col-0   51 TTGTTGGGAAAACCATCCATAATCAGAAGGCCAGAAGCTTTTCTAATAAA 100
           |||||||||||||||||||||||||||||||||||||||||||||||||
Sha     51 TTGTTGGGAAAACCATCCATAATCAGAAGGCCAGAAGCTTTTCTAATAAA 100

Col-0  101 TACAAAGATTGTCTTTTCTAATAAAAAATTCGAGATTAGCACTCAACATT 150
           |||||||||||||||.|.|.||.||
Sha    101 TACAAAGATTGTCTGTCCCAAAAA------------------------- 124

Col-0  151 TAATTATATGTTAGCAAATAGTATAACATTAGCTAGCAAACTTATAAACG 200

Sha    125 ---------------------------------------------------- 124

Col-0  201 ATAAATTTGACCAAAACAACATAAACCAAGGTCACTTTATCTACTTTTTG 250
                                                   ||||||
Sha    125 ----------------------------------------CTACTT---- 130

Col-0  251 TTCTCTGAATTCTGAAAACGAATTTGAATATCGTATTCTAACAGTGAATA 300

Sha    131 ---------------------------------------------------- 130

Col-0  301 TTGCATTTATACTAAAATTTACGATCATAGCCATAAATAAGTAGTTATGT 350

Sha    131 ---------------------------------------------------- 130

Col-0  351 ATAGTCAAACTATATGTAGTTATGCAGTACTTTAAGACGTTTGAACCGCT 400
                                          |||      ||||
Sha    131 ----------------------------------AGA------AACC--- 137

Col-0  401 AAGATTCCCATAATCTGCATGATAATATAATGTATGTAAACTGATACATG 450

Sha    138 ---------------------------------------------------- 137

Col-0  451 CACAATTGCACATGATAAATATAACTAAATTGATACATGCCGATTTGCGC 500

Sha    138 ---------------------------------------------------- 137
```

```
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                 ||||
Sha    138 ----------TAAT----------------------------------- 141

Col-0  551 AGAGCAAATGGTTCAAGGCTGCAACTTGGTGACGCCACCAAATTGTTGTA 600
                                                 |||||||||
Sha    142 ----------------------------------------ATTGTTGTA 150

Col-0  601 TGTAACAAAATGTCTCTAGCTTTGATGAGTTAATCTGACACTTCTTAGAA 650
           ||||||||||||||||||||||||||||||||||||||||||||||||||
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Col-0  651 AGAGATGCATGTGCTAAATTGATCACATCAATGTTACTAAAAATTGCTCT 700
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Sha    201 AGAGATGCATGTGCTAAATTGATCACATAAATGTTACTAAAAATTGCTCT 250
                                                      <------

Col-0  701 CTACAGTTATAAGGAAACTTGCCTC 725
           |||||||||||||||||||||||||
Sha    251 CTACAGTTATAAGGAAACTTGCCTC 275
           ------------------------
                 Primer c4_NM_0006-R
```

c4_NM_0047

```
                 Primer c4_NM_0047-F
           ------------------------>
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           ||||||||||||||||||||||||||||||||||||||||||||||||||
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Col-0   51 AAAATAACCATCAATATTATAACCGAAAGTTGCAATGAAGAGACACAACC 100

Sha     50 -------------------------------------------------- 49

Col-0  101 GAGGAAAAATAACCATCAATATTATAACCGAAAGTTGCAATGAAGAGACA 150
               ||||||||||||||||||||||||||||||||||||||||||||||
Sha     50 ----AAAAATAACCATCAATATTATAACCGAAAGTTGCAATGAAGAGACA 95

Col-0  151 CAACCGAGGAAAAATAACCATCAATATTTTTACAAAAAGTTGTGATAACA 200
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Sha     96 CAACCGAGGAAAAATAACCATCAATATTTTTACAAAAAGTTGTGATAACA 145

Col-0  201 ACACAAACAAAAAATAACCGATAATATTAACGAAACATTACGATGATAAA 250
           ||||||||||||||||||||||||||||||||||||||||||||||||||
Sha    146 ACACAAACAAAAAATAACCGATAATATTAACGAAACATTACGATGATAAA 195

Col-0  251 CACGAAAAAAAAAAA-CCCCATCAATATTTTAATGGAAATTTGCGAT 296
           ||||||||||||||| ||||||||||||||||||||||||||||||
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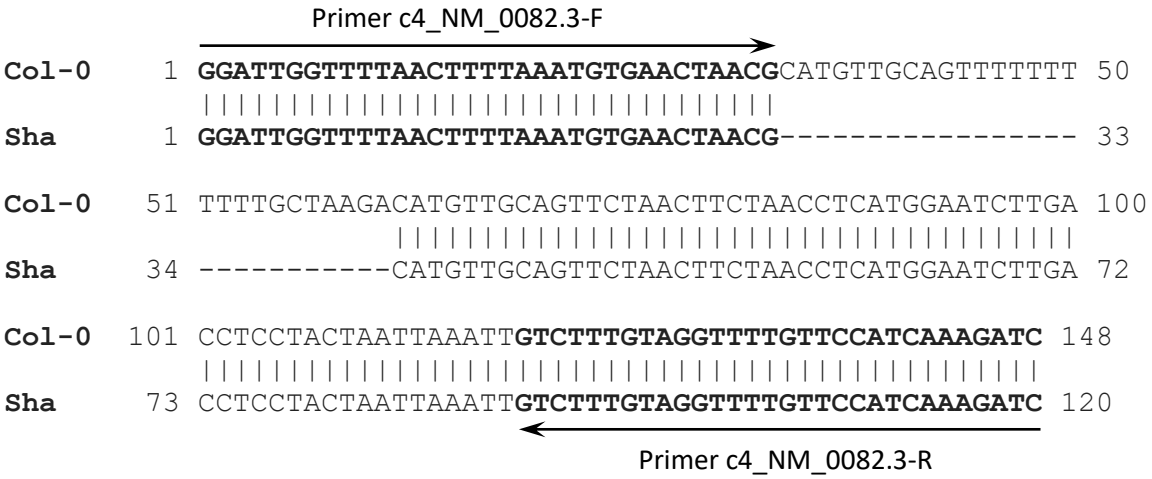

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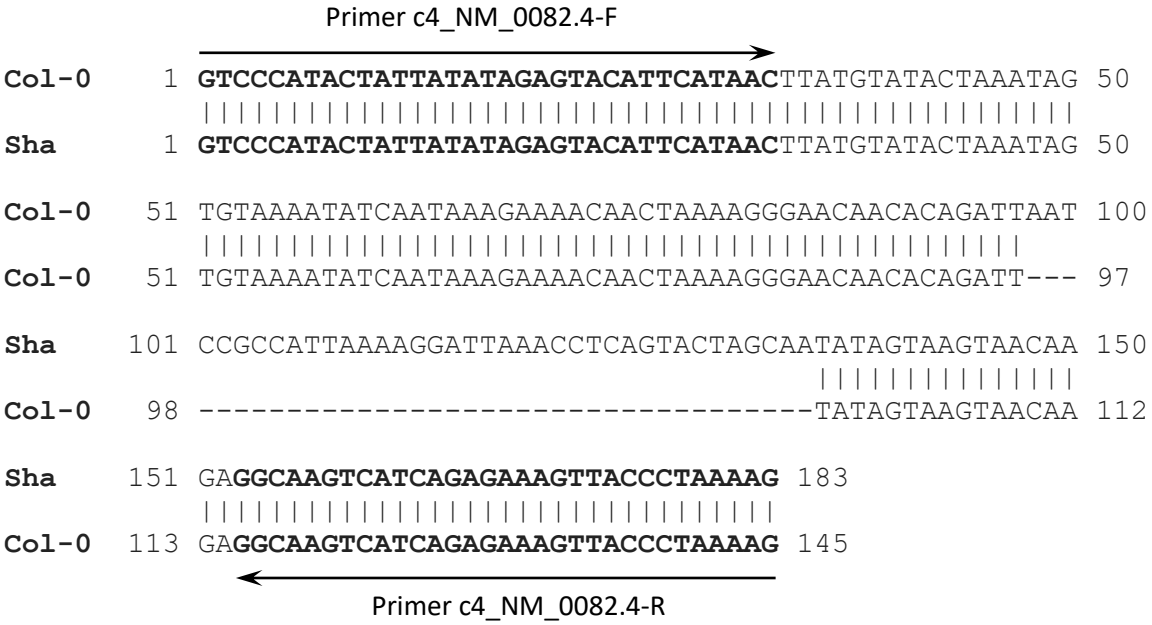

Figure S4: Sequence alignment of NOR-linked polymorphic regions of Col-0 and Sha that were used to design new NOR-linked markers. Forward and reverse arrows indicate the primer binding sites, and the corresponding sequences are highlighted in bold font.

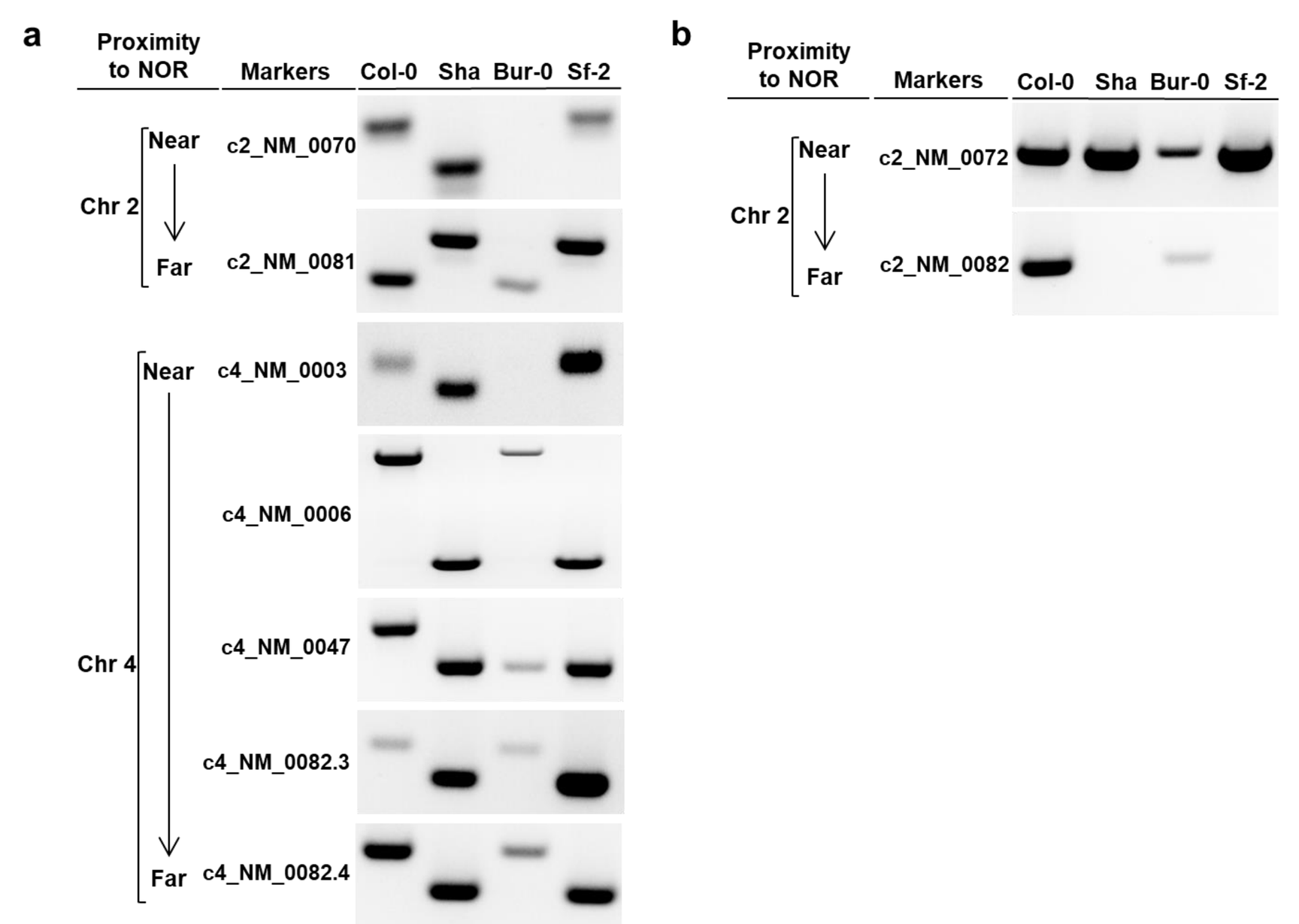

Figure S5: Length polymorphism for the NOR-linked markers exists among multiple ecotypes of Arabidopsis. **(a)** Gel images show the PCR amplification of the new NOR-linked markers in multiple ecotypes of Arabidopsis. **(b)** Gel images show the PCR amplification of the two putative NOR-linked markers which did not show length polymorphism as predicted**.**

45S rRNA gene sequence

CCCTCCCCTAAATCACTCCAAAAAAAACAATCCCCAATTCTACACAAGTGTTTCTACACTAACAAAGC
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Figure S6: The 45S rRNA gene sequence is used as a reference to map the Sha NORs

Figure S7: Long-sequencing reads obtained from Oxford Nanopore sequencing of the Sha genome that contain putative NOR-telomere junctions

(a) Long-sequencing reads containing Sha NOR-telomere ‘A’ junction

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(b) Long-sequencing reads containing Sha NOR-telomere ‘B’ junction

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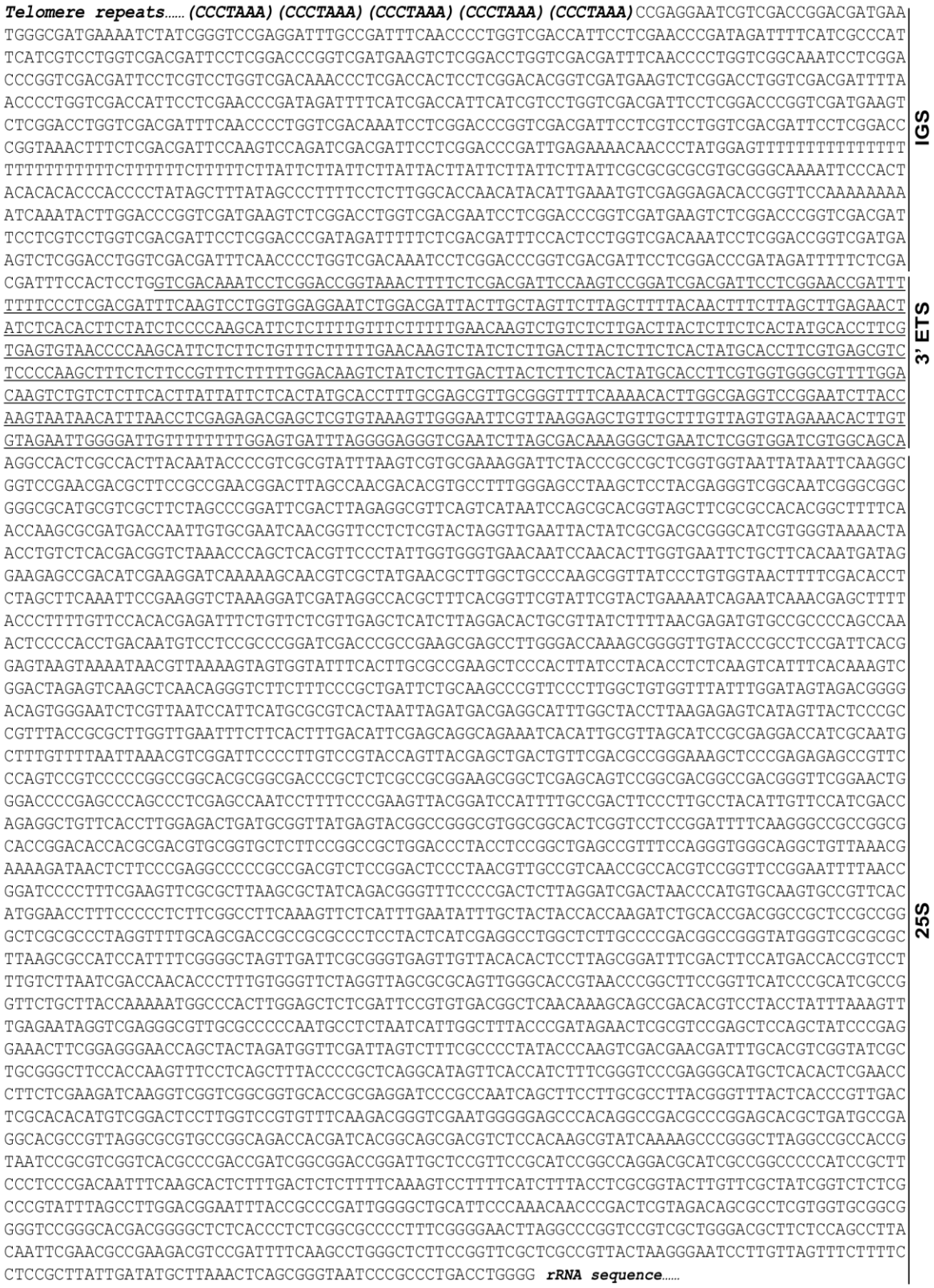
ATCTGTATACTGACGTTGTTCTTGGCTCCATGTGTCGTATGGATCAAGCTCACCACCCATGCTACCGTCAACCGCGTGCAACA
CACGGGGGCATCAGCCACCCCGCACGCTGAAAGGATGGCGAGGGACGACGAT

a. Predicted Sha NOR-telomere junction A

Telomere repeats**……** ***(CCCTAAA) (CCCTAAA) (CCCTAAA) (CCCTAAA)***CCCTAAANNNNNNNNNNCCGATTGAGAAAACA
ACTCATGGAGTTT

b. Predicted Sha NOR-telomere junction B

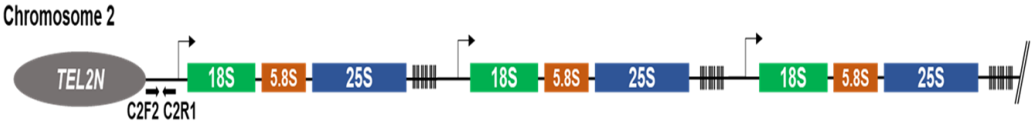


c. Sha *NOR2-TEL2N* junction sequence based on Sanger sequencing

d. Sha *NOR4-TEL4N* junction sequence based on Sanger sequencing

Figure S8: The NOR-telomere junctions in Sha ecotype. **(a-b)** Bioinformatically predicted putative NOR-telomer junction sequences. These were assembled based using ONP reads that contained both telomeric sequences and rRNA gene sequences. **(c-d)** The *NOR2-TEL2N* junction region was amplified by using PCR primers Sha C2F1, composed of concatenated telomere repeats (shown in parentheses), and Sha C2R corresponding to a sequence in the 5' ETS of the first rRNA gene repeat. The *NOR4-TEL4N* junction region was amplified by using PCR primers Sha C4 F, composed of concatenated telomere repeats (shown in parentheses), and Sha C4 R corresponding to a sequence in the IGS of the first rRNA gene repeat.

a. PCR cloning of NOR-telomere junctions of Sha ecotype



b. *NOR2-TEL2N* junction sequence of Sha ecotype

Sha C2 F2

Telomere repeats……**CCGATTGAGAAAACAACTCTTATGGAG**TTTTTTTTTTTTTTTTTTT
TTTTTTTTTTTTTTCTTATTCTTATTCTTATTACTTATTCTTATTCTTATTCGCGCGCGCG
CGTGCGGGCAAAATTCCCACTACACACACCCACCCCTATATAGCTTTATAGCCCTTTTCCC
TCTTGGCACCAACATACATTGAAATGTCTGAGGAGACACCGGTTCCAANAAAAAATCAAAT
ACTTGGACCCGGTCGATGAAGTCTCAGACCTGGTCGACGAATCCTCGGACCCGGTCGATGA
AGTCTCGGACCTGGTCGRCGATTTCAACCCCTGGTCGACAAATCCTCGGACCCGGTCGACG
ATTCCTCGTCCTGGTCGACGATTCCTCGGACCCGATAGATTTTTCTCGACGATTTCCACTC
CTGGTCGACAAATCCTCGGACCCGGTCGATGAAGTCTCGGACCTGGTCGACGATTTCAACC
CCTGGTCGACAAATCCTCGGACCCGGTCGACGATTCCTCGTCCTGGTCGACGATTCCTCGG
ACCCGATAGATTTTTCTCGACGATTTCCACTCCTGGTCGACAAATCCTCGGACCCGGTAAA
CTTTTCTCGACGATTCCAAGTCCGGATCGACGATTCCTCGGAACCGATTTTTTTCCCTCGA
CGATTTCAAGTCCTGTTGAGCTT**GACTCTACCAGGATTCCTCCACCAG** ……rRNA sequence

Sha C2 R1

c. PCR amplification of NOR-specific telomere junctions of Sha ecotype

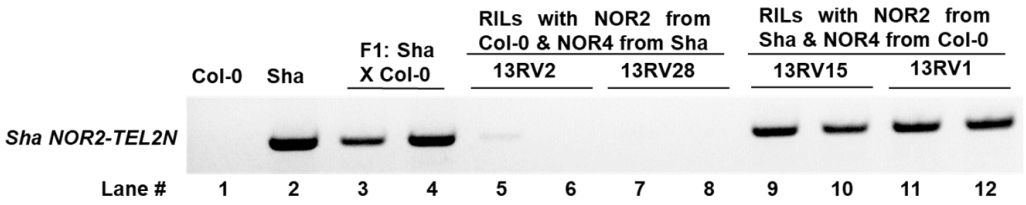
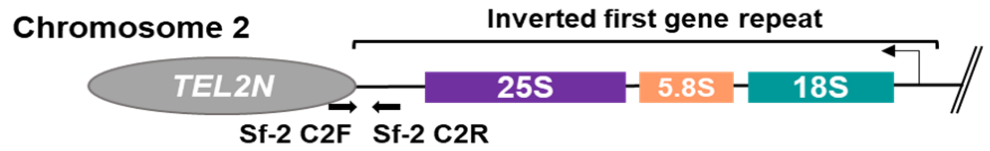


Figure S9: Mapping the *NOR2-TEL2N* junction in Sha ecotype. **(a)** The diagram depicting the NOR2-telomere junction and the binding sites for primers used to uniquely amplify this region. **(b)** The *NOR2-TEL2N* junction region was amplified by using PCR primers Sha C2 F2 and Sha C2R1 corresponding to the 5' ETS of the first rRNA gene repeat. The sequence of the cloned PCR product is shown. **(c)** The gel image show PCR amplification of *NOR2-TEL2N* junction in the F1 and selected RILs of Sha X Col-0. The RILs 13RV2 and 13RV28 are homozygous for Col-0 NOR2 and Sha NOR4, whereas the RILs 13RV1 and 13RV15 are homozygous for Sha NOR2 and Col-0 NOR4.

The primer pairs used in this PCR are different from those used in Fig.5.

a. *NOR2-TEL2N* junction of Sf-2 ecotype



b. *NOR2-TEL2N* junction sequence of Sf-2 ecotype

Primer Sf-2F

Telomere repeats.....**CTAAA) (CCCTAAA) (CCCTAAA) (CCCTAAA) CCATTCTC**TTTTGTTTCTTTTC
GAACAAGTCTGTCTCTTGACTTACTCTTCTCACTATGCACCTTCGTGAGTGTAACCCCAAGCATTCT
CTTCTGTTTCTTTTTGAACAAGTCTATCTCTTGACTTACTCTTCTCACTATGCACCTTCGTGAGCGT
CTCCCCAAGCTTTCTCTTCCGTTTCTTTTTGGACAAGTCTATCTCTTGACTTACTCTTCTCACTATG
CACCTTCGTGGTGGGCGTTTTGGACAAGTCTGTCTCTTCACTTATTATTCTCACTATCCACCTTTGC
GAGCGTTGCGGGTTTTCAAAACACTTGGCGAGGTCCGGAATCTTACCAAGTAATAACATTTAACCTC
GAGAGACGAGCTCGTGTAAAGTTGGGAATTCGTTAAGGAGCTGTTGCTTTGTTAGTGTAGAAACACT
TGCGTAGAATTGGGGATTGTTTTTTTTGGAGTGATTTAGGGGAGGGTCGAATCTTAGCGACAAAGGG
CTGAATCTCAGTGGATCGTGGCAG**CAAGGCCACTCTGCCACTTACAATACC**.....rRNA sequence

Primer Sf-2R

c. PCR with NOR-specific telomere junction primers

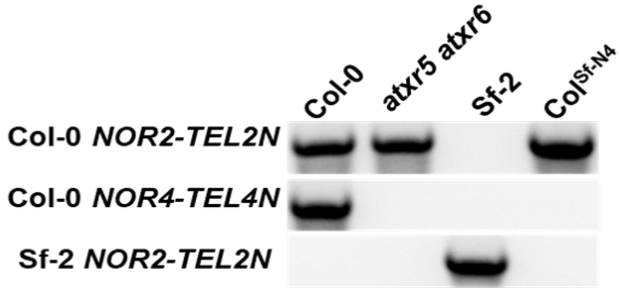


Figure S10: *NOR2-TEL2N* junction of Sf-2 ecotype show that the first repeat is inverted. **(a)** Diagram depicting the *NOR2-TEL2N* junction in Sf-2 ecotype. The diagram also depicts the binding sites for primers used to amplify this region. **(b)** The *NOR2-TEL2N* junction region was amplified by using PCR primers Sf-2F, composed of four concatenated telomere repeats (shown in parentheses), and Sf-2R corresponding to a sequence in the 3' ETS of the first rRNA gene repeat that has been inverted in this NOR. The sequence of the cloned PCR product is shown. **(c)** Gel images show PCR amplification with primer pairs specific for either the Col-0 *NOR2-TEL2N* or *NOR4-TEL4N* junctions or Sf-2 *NOR2-TEL2N* junction were used to amplify genomic DNA of Col-0 wild-type, *atxr5 atxr6* double mutant (known to have only *NOR2-TEL2N*), Sf-2 wild-type and a $Col^{Sf\text{-}N4}$ introgression line, which is homozygous for Col-0 *NOR2-TEL2N* and Sf-2 *NOR4-TEL4N (Chandrasekhara et al. 2016; Mohannath et al. 2016)*