

Additional file 4: List of CNVR identified and their respective annotated genes. In the table: **Chr:** chromosome, **CNVR_ID:** n° of region of copy number variants, **CNVR_start:** starting position of the region, **CNVR_end:** Ending position of the region, **Num_SNP:** n° of SNPs inside the region, **Length:** of the region expressed in kb, **CNVR_Value:** type of CNV, **Type:** state of the CNVR, **Start_SNP:** starting SNP that defines the region, **End_SNP:** ending SNP that defines the region, **Gene:** annotated genes inside the region

Chr	CNVR_ID	CNVR_Start	CNVR_End	Num_SNP	Length	CNVR_Value	Type	Start_SNP	End_SNP	Gene
1	1	33323	147940	61	114618	1	Loss	AX-80834308	AX-75299712	HCL51
1	2	554975	681804	52	126830	1	Loss	AX-75470962	AX-75495238	LMF2
1	3	765450	786350	8	20901	3	Gain	AX-75512838	AX-75516342	No gene
1	4	920194	982574	37	62381	1	Loss	AX-75542816	AX-75555881	CEP41
1	5	3329919	3351177	14	21259	0	Loss	AX-75427895	AX-75428288	No gene
1	6	4126872	4139661	8	12790	1	Loss	AX-75448253	AX-80984719	LOC419112
1	7	5201252	5259315	36	58064	1	Loss	AX-75469352	AX-80924220	No gene
1	8	5415367	5572114	95	156748	1	Loss	AX-80767545	AX-75477669	No gene
1	10	7453361	7478853	12	25493	1	Loss	AX-75516509	AX-75516893	DCLRE1C
1	11	7907672	7967553	31	59882	1	Loss	AX-75525128	AX-80738279	No gene
1	12	8674040	8777596	47	103557	1	Loss	AX-75540556	AX-75542668	SEMA3A
1	13	9249464	9323741	38	74278	1	Loss	AX-75558546	AX-75560139	No gene
1	14	9332370	9368236	18	35867	1	Loss	AX-75560342	AX-80864537	No gene
1	15	9511354	9618992	47	107639	1	Loss	AX-80789264	AX-75565975	SEMA3E
1	16	10510445	10540100	15	29656	1	Loss	AX-80763636	AX-75204821	CACNA2D1
1	17	11293049	11323669	14	30621	1	Loss	AX-75221282	AX-75221724	GNAI1
1	18	11633407	11638986	6	5580	0	Loss	AX-75227860	AX-75227976	No gene
1	19	11824418	11829097	6	4680	0	Loss	AX-75232042	AX-75232136	MAGI2
1	20	16311267	16315382	7	4116	1	Loss	AX-75324749	AX-75324837	TBC1D22A
1	21	16370205	16405824	23	35620	1	Loss	AX-75326121	AX-75326960	No gene
1	22	16713319	16801805	46	88487	1	Loss	AX-75334431	AX-75336424	No gene
1	23	17409271	17417555	8	8285	4	Mixed	AX-75351084	AX-80995260	No gene
1	24	18114649	18204547	52	89899	1	Mixed	AX-75368200	AX-75184968	No gene
1	25	19418093	19464082	29	45990	1	Loss	AX-75402220	AX-80946171	No gene
1	26	21508092	21516253	9	8162	1	Loss	AX-75406452	AX-75406465	POT1
1	27	24024711	24088548	36	63838	1	Loss	AX-75411618	AX-75411752	KCND2
1	28	25256920	25348967	42	92048	0	Loss	AX-75414021	AX-75414216	TFEC
1	29	25485463	25546101	33	60639	1	Loss	AX-80748306	AX-75414603	No gene
1	30	25898507	25909828	6	11322	0	Loss	AX-75415327	AX-75415356	FOX2P
1	31	26057879	26074632	11	16754	1	Loss	AX-75415660	AX-75415691	No gene
1	32	26144551	26187708	25	43158	1	Loss	AX-75415841	AX-75415931	No gene
1	33	27568824	27605421	18	36598	1	Loss	AX-75418771	AX-75418858	IMMP2L
1	34	28229886	28368372	82	138487	1	Loss	AX-75420168	AX-75420441	No gene
1	35	28655725	28677661	12	21937	1	Loss	AX-75420999	AX-75421044	NRCAM
1	36	29957082	30010205	23	53124	1	Loss	AX-75423583	AX-80748070	No gene
1	37	30225443	30318375	47	92933	1	Loss	AX-75424138	AX-75424315	No gene
1	38	31205461	31334128	62	128668	1	Loss	AX-80781968	AX-75426348	AMIGO2
1	39	31363396	31438657	40	75262	1	Loss	AX-75426411	AX-75426540	RPAP3
1	40	31495114	31553662	37	58549	1	Loss	AX-75426656	AX-75426778	No gene
1	41	31803793	31838138	28	34346	1	Loss	AX-75427322	AX-75427387	No gene
1	42	32181362	32242944	27	61583	1	Mixed	AX-75428069	AX-75428178	SLC16A7
1	43	36902989	36931105	14	28117	1	Loss	AX-80866041	AX-80896962	No gene
1	44	37297742	37383753	40	86012	0	Loss	AX-75439036	AX-80820929	No gene
1	45	39834496	39953241	60	118746	1	Loss	AX-75444446	AX-75444668	No gene
1	46	40244317	40279442	16	35126	1	Loss	AX-75445297	AX-75445356	No gene
1	47	40462412	40486737	10	24326	1	Loss	AX-75445725	AX-75445773	No gene
1	48	40870647	40885323	13	14677	1	Loss	AX-75446495	AX-75446520	No gene
1	49	42100420	42130218	14	29799	0	Mixed	AX-75448792	AX-75448847	NTS
1	50	42902309	42923587	19	21279	1	Loss	AX-75450380	AX-75450430	No gene
1	51	42933787	42940209	7	6423	0	Loss	AX-75450450	AX-75450472	No gene
1	52	43018423	43026595	7	8173	0	Loss	AX-75450635	AX-75450652	KITLG
1	53	43118884	43179077	31	60194	3	Gain	AX-75450845	AX-75450982	No gene
1	54	43459840	43465827	6	5988	0	Loss	AX-80882544	AX-80772145	No gene
1	55	43627523	43643425	10	15903	0	Loss	AX-80914009	AX-75451969	No gene
1	56	43645322	43787687	74	142366	1	Loss	AX-75451972	AX-75452282	No gene
1	57	43938048	43967635	19	29588	1	Loss	AX-75452600	AX-80814680	EPYC
1	58	44008350	44035157	16	26808	1	Loss	AX-75452737	AX-80765268	DCN
1	59	44139042	44150914	6	11873	0	Loss	AX-75453028	AX-75453045	No gene
1	60	45947109	45999300	33	52192	1	Loss	AX-75456682	AX-75456805	No gene
1	61	46937150	46979152	26	42003	1	Loss	AX-75458657	AX-75458749	ANKS1B
1	62	51583409	51605623	14	22215	3	Gain	AX-75468416	AX-75186095	No gene
1	63	55399610	55466490	20	66881	1	Loss	AX-75476951	AX-75477066	PARPBP
1	64	57871593	57885925	9	14333	3	Gain	AX-75482166	AX-80758476	No gene
1	65	58311289	58333744	13	22456	1	Loss	AX-80954688	AX-75184512	No gene
1	66	58608539	58623312	10	14774	3	Gain	AX-75483742	AX-75483781	No gene
1	67	61042778	61077442	25	34665	1	Loss	AX-80802251	AX-75488869	CHUNK-1
1	68	61788722	61813654	12	24933	1	Loss	AX-75490285	AX-75490334	CECR2
1	69	63489906	63695319	103	205414	1	Loss	AX-75493875	AX-75494289	No gene
1	70	63799022	63837263	21	38242	0	Loss	AX-75494487	AX-75494576	No gene
1	71	64060249	64313841	132	253593	1	Loss	AX-75495031	AX-75495576	CAPZA3
1	72	64525827	64560726	15	34900	0	Loss	AX-75496014	AX-75496081	No gene
1	73	64870070	64880201	6	10132	1	Loss	AX-75496817	AX-80926785	No gene
1	74	65617998	65646220	13	28223	1	Loss	AX-75498449	AX-75498521	No gene
1	75	65784806	65888210	66	103405	1	Loss	AX-75498829	AX-75499050	No gene
1	76	66582442	66610105	13	27664	0	Loss	AX-75500656	AX-75500714	No gene
1	77	68004089	68097309	53	93221	1	Loss	AX-80802069	AX-75503957	FGFR10P2
1	78	68263157	68306935	30	43779	1	Loss	AX-75504344	AX-75504444	No gene
1	79	69295648	69304433	6	8786	1	Loss	AX-80997799	AX-75506550	No gene
1	80	70635676	70721390	58	85715	1	Loss	AX-75509271	AX-75509462	No gene
1	81	71404516	71435938	11	31423	3	Gain	AX-80922189	AX-80873547	No gene
1	82	72722269	72780057	31	57789	1	Loss	AX-75513761	AX-80791988	No gene
1	83	73973190	74028561	22	55372	1	Loss	AX-80744425	AX-80876156	No gene
1	84	75399605	75568433	60	168829	1	Loss	AX-75517127	AX-80759220	TEAD4
1	85	78738658	78773680	21	35023	0	Loss	AX-75523577	AX-75523657	No gene
1	86	79428145	79619422	95	191278	3	Gain	AX-75525052	AX-75525455	METTL16
1	87	83907182	84028996	76	121815	1	Loss	AX-75534191	AX-75534458	XCL1
1	88	84153371	84163611	8	10241	1	Loss	AX-80919010	AX-75534746	No gene
1	89	85112116	85130660	9	18545	0	Loss	AX-75536620	AX-75536656	No gene

1	90	89098695	89135838	28	37144	0	Loss	AX-75545250	AX-75545320	No gene
1	91	90435655	90463634	11	27980	1	Loss	AX-75548049	AX-75548127	No gene
1	92	91032577	91055300	11	22724	1	Loss	AX-75549392	AX-75549442	No gene
1	93	94002604	94017741	9	15138	1	Loss	AX-75555247	AX-75555276	No gene
1	94	94100166	94127120	19	26955	1	Loss	AX-75555448	AX-80846772	No gene
1	95	94369326	94486334	57	117009	1	Loss	AX-75556010	AX-80803700	No gene
1	96	94901339	94971946	35	70608	1	Loss	AX-75556999	AX-80983300	No gene
1	97	95043624	95064998	11	21375	1	Loss	AX-75557264	AX-75557315	No gene
1	98	95443959	95630056	104	186098	1	Loss	AX-75558103	AX-75558488	No gene
1	99	95759236	95879976	71	120741	1	Loss	AX-75558742	AX-80799604	No gene
1	100	96259276	98121722	915	1862447	1	Loss	AX-75559861	AX-75563798	HSPA13
1	101	99486131	99630340	67	144210	0	Loss	AX-75567101	AX-75567453	No gene
1	102	100330637	100356204	15	25568	1	Loss	AX-75187063	AX-75187129	No gene
1	103	100611813	100710194	42	98382	1	Loss	AX-75187695	AX-75188009	No gene
1	104	100824542	100837281	10	12740	1	Loss	AX-75188307	AX-75188335	No gene
1	105	101869020	101894239	21	25220	1	Mixed	AX-75190717	AX-75190776	No gene
1	106	102132572	102208965	31	76394	0	Loss	AX-75191296	AX-75191441	No gene
1	107	102336438	102363756	14	27319	0	Loss	AX-75191721	AX-75191772	No gene
1	108	103182193	103282004	47	99812	1	Loss	AX-75193706	AX-75193930	No gene
1	109	106884640	106914693	20	30054	1	Loss	AX-75202075	AX-75202140	No gene
1	110	106931383	106960764	18	29382	1	Loss	AX-75202178	AX-80768584	No gene
1	111	107141745	107145519	6	3775	1	Loss	AX-75202704	AX-75202713	No gene
1	112	107886683	107889705	6	3023	0	Loss	AX-80789941	AX-75204477	No gene
1	113	108688278	108709960	12	21683	1	Loss	AX-80870267	AX-75206272	No gene
1	114	113536109	113661246	76	125138	1	Loss	AX-75216817	AX-75217130	No gene
1	115	113712582	113760460	31	47879	1	Loss	AX-75217276	AX-75217401	No gene
1	116	114002040	114223858	139	221819	1	Mixed	AX-75217908	AX-75218458	No gene
1	117	114874628	114910450	20	35823	1	Loss	AX-80806276	AX-75219951	DMD
1	118	116246187	116289730	26	43544	1	Loss	AX-75222582	AX-75222670	No gene
1	119	116925923	116977700	20	51778	3	Mixed	AX-75223994	AX-75224092	No gene
1	120	118878430	118899102	11	20673	1	Loss	AX-75228053	AX-75228082	PHFX
1	121	119451901	119498222	27	46322	1	Loss	AX-75229317	AX-80911469	No gene
1	122	121415646	121433132	12	17487	3	Gain	AX-75233439	AX-75233475	RBBP7
1	123	122632017	122637431	7	5415	0	Loss	AX-75236160	AX-75236168	No gene
1	124	123614896	123740980	61	126085	1	Loss	AX-75238243	AX-75238525	No gene
1	125	124344777	124369837	17	25061	1	Loss	AX-75239837	AX-75239896	No gene
1	126	124751425	124822285	43	70861	1	Loss	AX-75240667	AX-75240815	No gene
1	127	125865870	125903514	19	37645	0	Loss	AX-75242991	AX-75243063	MIR7448
1	128	126581809	126607212	12	25404	0	Loss	AX-75244370	AX-75244428	No gene
1	129	127645475	127683699	17	38225	1	Mixed	AX-75246334	AX-75246410	NLGN4Y
1	130	128975628	128987711	7	12084	1	Loss	AX-75249078	AX-75249109	No gene
1	131	129466511	129520887	40	54377	1	Loss	AX-75250100	AX-75250240	No gene
1	132	134845031	134882188	32	37158	0	Loss	AX-75261887	AX-75261977	No gene
1	133	138790652	138894481	39	103830	1	Loss	AX-75270747	AX-75270987	COL4A1
1	134	139285775	139474359	116	188585	1	Loss	AX-75271828	AX-80775979	No gene
1	135	139772949	139839404	26	66456	1	Loss	AX-75272929	AX-75273085	SOX1
1	136	140637664	140665784	12	28121	1	Loss	AX-75274750	AX-75274818	No gene
1	137	141252808	141447790	80	194983	1	Loss	AX-75276031	AX-75276343	No gene
1	138	141859473	142266257	129	406785	3	Mixed	AX-75276959	AX-75277601	No gene
1	139	142522366	142593800	39	71435	1	Loss	AX-75278018	AX-75278174	No gene
1	140	143034491	143153105	63	118615	1	Loss	AX-75279203	AX-75279507	FGF14
1	141	143264072	143397256	79	133185	1	Loss	AX-75279802	AX-75280090	No gene
1	142	143485098	143661643	95	176546	1	Loss	AX-75280306	AX-75280768	No gene
1	143	144875406	144936679	34	61274	1	Loss	AX-75283480	AX-75283611	FARP1
1	144	145044870	145070771	16	25902	0	Loss	AX-80847164	AX-75283894	No gene
1	145	146654237	146714245	34	60009	1	Loss	AX-75287264	AX-75287408	No gene
1	146	146945489	147012288	38	66800	1	Mixed	AX-75287892	AX-75288035	No gene
1	147	147204911	147226224	13	21314	1	Loss	AX-75288469	AX-75288513	No gene
1	148	147272936	147296656	14	23721	1	Loss	AX-75288618	AX-75288664	No gene
1	149	147476963	147635292	93	158330	1	Loss	AX-75289044	AX-75289399	No gene
1	150	147779394	147796394	8	17001	1	Loss	AX-80981463	AX-75289741	No gene
1	151	147958539	147991671	23	33133	1	Loss	AX-75290090	AX-75290173	No gene
1	152	148036416	148076298	24	39883	1	Loss	AX-75290273	AX-75290360	No gene
1	153	148154948	148335460	66	180513	1	Loss	AX-80865718	AX-75290774	No gene
1	154	148726625	148754983	12	28359	1	Mixed	AX-75291409	AX-75291452	No gene
1	155	149104066	149129537	12	25472	1	Loss	AX-75292053	AX-75292092	No gene
1	156	149163053	149207602	19	44550	1	Loss	AX-75292148	AX-80781279	No gene
1	157	149307645	149329832	16	22188	0	Loss	AX-75292397	AX-75292443	No gene
1	158	149413820	149434626	15	20807	1	Loss	AX-75292618	AX-75292663	No gene
1	159	149507598	149543485	18	35888	0	Loss	AX-75292812	AX-75292887	No gene
1	160	150019368	150063626	25	44259	1	Loss	AX-75293683	AX-77278419	No gene
1	161	150181945	150240475	28	58531	1	Loss	AX-75293940	AX-80832771	No gene
1	162	150386624	150472224	56	85601	1	Loss	AX-75294325	AX-75294519	No gene
1	163	150789220	150870947	50	81728	1	Loss	AX-75295078	AX-75295249	No gene
1	164	151230941	151312359	52	81419	1	Mixed	AX-75295917	AX-75296095	No gene
1	165	151697797	152187867	240	490071	3	Mixed	AX-75296815	AX-75297735	No gene
1	166	152525886	152573350	32	47465	1	Loss	AX-75298363	AX-75298463	No gene
1	167	154243939	154333169	51	89231	1	Loss	AX-75302227	AX-75302419	No gene
1	168	154343944	154375517	16	31574	1	Loss	AX-75302448	AX-75302522	No gene
1	169	154585624	154656894	41	71271	0	Loss	AX-75302923	AX-80945126	No gene
1	170	154834838	154845321	7	10484	1	Loss	AX-75303486	AX-75303513	No gene
1	171	156537488	156647020	54	109533	1	Loss	AX-75307275	AX-75307533	No gene
1	172	156996120	157016652	13	20533	1	Mixed	AX-75308396	AX-75308447	DACH1
1	173	158672650	158683224	7	10575	1	Loss	AX-75311864	AX-75311885	No gene
1	174	158884350	158892064	6	7715	0	Loss	AX-75312247	AX-75312272	No gene
1	175	158897540	158913966	8	16427	1	Loss	AX-75312278	AX-75312308	No gene
1	176	161404613	161436426	16	31814	1	Mixed	AX-75316548	AX-75316616	MIR7445-1
1	177	162155697	162249408	39	93712	0	Loss	AX-75318184	AX-80865457	TDRD3
1	178	162491625	162530897	22	39273	1	Loss	AX-75318899	AX-75318981	No gene
1	179	162578915	162602268	15	23354	1	Loss	AX-75319093	AX-75319132	No gene
1	180	162861040	163058022	114	196983	1	Loss	AX-75319692	AX-75320119	No gene
1	181	163247412	163291624	27	44213	0	Loss	AX-75320503	AX-75320598	No gene
1	182	163427224	163506277	34	79054	1	Loss	AX-75320831	AX-80741219	No gene
1	183	163822437	164214078	207	391642	1	Mixed	AX-80787419	AX-75322332	No gene

1	185	168450070	168509504	35	59435	0	Loss	AX-75332080	AX-75332228	No gene
1	186	171637938	171690708	33	52771	1	Loss	AX-75339529	AX-75339653	UFM1
1	187	172509472	172555625	30	46154	1	Loss	AX-75341550	AX-80987087	No gene
1	188	173387955	173428840	20	40886	1	Loss	AX-75343719	AX-75343810	NBEA
1	189	173927640	173975150	22	47511	1	Loss	AX-75344943	AX-75345053	No gene
1	190	180577294	180590981	11	13688	3	Gain	AX-75360924	AX-75360962	No gene
1	191	181013340	181057580	26	44241	0	Loss	AX-75362013	AX-75362115	No gene
1	192	181296556	181319238	22	22683	1	Loss	AX-75362690	AX-75362755	GRIA4
1	193	181371904	181385710	7	13807	1	Loss	AX-75362879	AX-77278700	No gene
1	194	181508377	181548385	32	40009	1	Loss	AX-75363182	AX-75363284	No gene
1	195	181755998	181767292	10	11295	0	Loss	AX-75363782	AX-75363802	No gene
1	196	183336765	183354151	11	17387	1	Loss	AX-75367661	AX-75367695	No gene
1	197	183464144	183559585	72	95442	1	Loss	AX-75368014	AX-75368237	CNTN5
1	198	184287406	184343323	35	55918	1	Mixed	AX-75369931	AX-75370068	No gene
1	199	186833503	186840899	6	7397	0	Loss	AX-75376512	AX-80756321	No gene
1	200	188497832	188501908	7	4077	0	Loss	AX-75380821	AX-80783518	No gene
1	201	189431365	189441084	7	9720	0	Loss	AX-75383348	AX-75383373	No gene
1	202	189526028	189917962	245	391935	1	Loss	AX-75383633	AX-75384746	No gene
1	203	189954618	189998004	25	43387	1	Loss	AX-75384848	AX-75384940	No gene
1	204	190277250	190318922	28	41673	1	Loss	AX-75385755	AX-75385871	No gene
1	205	190809281	190844191	19	34911	1	Mixed	AX-75387164	AX-75387239	No gene
1	206	192653064	192662098	8	9035	0	Loss	AX-75391766	AX-75391784	No gene
1	207	194815113	194870319	12	55207	1	Loss	AX-75397807	AX-80857104	CHRNA10
1	208	195429039	195496578	38	67540	1	Loss	AX-75399673	AX-75399841	No gene
2	209	193962	729303	191	535342	1	Loss	AX-76051007	AX-80943922	MIR10585
2	210	766867	958830	73	191964	1	Loss	AX-80821260	AX-76193885	CSPG5
2	211	2001466	2055201	30	53736	1	Loss	AX-76052995	AX-76054010	HHATL
2	212	2362807	2411308	23	48502	1	Loss	AX-80959401	AX-76059896	ARF1
2	213	6271126	6288680	13	17555	1	Loss	AX-76128145	AX-76128470	CRYGN
2	214	7759067	7767530	8	8464	1	Loss	AX-76155971	AX-80806142	No gene
2	215	8500843	8539526	17	38684	0	Loss	AX-76169433	AX-76170221	LMBR1
2	216	9069349	9122411	20	53063	1	Loss	AX-76179987	AX-76180949	No gene
2	217	9973506	10002961	9	29456	1	Loss	AX-76196653	AX-76197211	No gene
2	218	11157617	11189978	18	32362	1	Mixed	AX-75970166	AX-75970809	No gene
2	219	11683989	11716850	14	32862	0	Loss	AX-75979899	AX-80969108	No gene
2	220	11984980	12015052	12	30073	0	Loss	AX-75985311	AX-75985826	No gene
2	221	12019871	12086830	25	66960	1	Loss	AX-75985913	AX-75986994	No gene
2	222	12280318	12315968	21	35651	1	Loss	AX-75990813	AX-75991563	MIR6628
2	223	13786055	13835315	19	49261	0	Loss	AX-76020530	AX-76021587	No gene
2	224	15955067	15974023	8	18957	1	Loss	AX-76045054	AX-76045101	ACBD5
2	225	18885233	18994513	50	109281	1	Loss	AX-76050448	AX-80757255	MALRD1
2	226	19417339	19483367	31	66029	1	Loss	AX-76051481	AX-76051617	LOC428421
2	227	20713402	20788776	28	75375	3	Mixed	AX-76053930	AX-80989756	ABCB1
2	228	21145507	21189261	21	43755	0	Loss	AX-76054654	AX-80896918	No gene
2	229	22264738	22315238	19	50501	1	Loss	AX-80944743	AX-76056678	No gene
2	230	25368442	25404708	14	36267	1	Loss	AX-76061975	AX-80907442	No gene
2	231	25670273	25775222	39	104950	1	Mixed	AX-76062538	AX-76062705	No gene
2	232	26343545	26589411	107	245867	1	Loss	AX-80822119	AX-80963079	PHF14
2	233	27112818	27272376	66	159559	1	Loss	AX-80927249	AX-76065659	No gene
2	234	27394763	27474915	24	80153	1	Loss	AX-76065903	AX-76066040	No gene
2	235	27777463	27786921	8	9459	1	Loss	AX-76066642	AX-76066670	No gene
2	236	27983288	28145273	84	161986	1	Loss	AX-76067063	AX-76067357	MEOX2
2	237	28733561	28868734	62	135174	1	Loss	AX-76068482	AX-76068752	AHR1A
2	238	29472320	29565849	39	93530	1	Loss	AX-76069876	AX-76070027	HDAC9
2	239	30484378	30637131	67	152754	1	Loss	AX-76071724	AX-76072009	No gene
2	240	31448085	31454348	6	6264	1	Loss	AX-76073415	AX-76073425	No gene
2	241	32494049	32530969	13	36921	0	Loss	AX-76075376	AX-76075451	No gene
2	242	33238238	33254119	8	15882	0	Loss	AX-76076684	AX-76076713	No gene
2	243	33602335	33751488	62	149154	1	Loss	AX-80739344	AX-76077554	No gene
2	244	34104383	34183255	36	78873	1	Loss	AX-76078130	AX-77279723	No gene
2	245	34826547	34854522	20	27976	1	Loss	AX-76079373	AX-76079419	No gene
2	246	34978184	35026028	16	47845	1	Loss	AX-80841701	AX-76079727	No gene
2	247	35472260	35788355	140	316096	1	Loss	AX-76080514	AX-76081068	No gene
2	248	36384225	36404469	13	20245	1	Loss	AX-76082124	AX-80750803	No gene
2	249	36507462	36699606	75	192145	1	Loss	AX-76082368	AX-76082710	No gene
2	250	36798344	36807563	6	9220	1	Loss	AX-76082877	AX-76082893	No gene
2	251	39142027	39167742	10	25716	1	Loss	AX-76087099	AX-76087134	No gene
2	252	39501101	39602223	50	101123	1	Loss	AX-76087662	AX-76087861	No gene
2	253	40183038	40322804	55	139767	1	Loss	AX-76088880	AX-80742272	STT3B
2	254	41532439	41558083	8	25645	1	Loss	AX-76090999	AX-76091043	No gene
2	255	42535514	42567907	17	32394	1	Loss	AX-80819885	AX-76092627	No gene
2	256	44782450	44818756	21	36307	1	Loss	AX-76096372	AX-76096445	No gene
2	257	44832304	44880100	27	47797	1	Loss	AX-76096472	AX-80825857	CLASP2
2	258	46400772	46417690	6	16919	0	Loss	AX-76099193	AX-76099220	No gene
2	259	46426939	46435672	6	8734	0	Loss	AX-76099245	AX-76099260	No gene
2	260	48020100	48120313	41	100214	1	Loss	AX-80789987	AX-76102193	No gene
2	261	49234028	49423967	93	189940	1	Loss	AX-76104426	AX-76104826	AMPH
2	262	49484688	49503380	12	18693	1	Loss	AX-76104935	AX-76104972	VP541
2	263	49510238	49650709	70	140472	1	Loss	AX-76104977	AX-80775091	No gene
2	264	49965958	50038951	37	72994	1	Loss	AX-76105792	AX-76105930	No gene
2	265	50217864	50327631	53	109768	1	Loss	AX-76106273	AX-76106479	No gene
2	266	54791846	54804218	7	12373	1	Loss	AX-76112506	AX-76112518	No gene
2	267	55146387	55182029	16	35643	3	Gain	AX-76113083	AX-76113145	No gene
2	268	61614625	61635213	11	20589	0	Loss	AX-76125164	AX-76125198	No gene
2	269	63823854	63868244	22	44391	1	Loss	AX-76129075	AX-76129151	No gene
2	270	67749837	67826029	33	76193	0	Loss	AX-80811465	AX-76136598	No gene
2	271	68650193	68675727	14	25535	1	Loss	AX-76138124	AX-76138179	No gene
2	272	70297714	70342748	24	45035	1	Loss	AX-80758160	AX-76141281	No gene
2	273	71102066	71155542	17	53477	0	Loss	AX-76142613	AX-80740978	No gene
2	274	72257076	72328071	30	70996	1	Mixed	AX-76144544	AX-76144664	CDH10
2	275	73072568	73152259	39	79692	1	Loss	AX-80856957	AX-80744319	No gene
2	276	74466886	74538831	35	71946	1	Loss	AX-76148418	AX-76148552	No gene
2	277	74907823	74923816	9	15994	1	Loss	AX-76149256	AX-76149276	No gene
2	278	75514368	75524133	7	9766	0	Loss	AX-76150423	AX-76150450	No gene

2	279	75916619	75948099	12	31481	1	Loss	AX-76151244	AX-76151296	ZNF622
2	280	76188270	76212764	13	24495	1	Loss	AX-80947399	AX-76151797	No gene
2	281	76355803	76374088	12	18286	0	Loss	AX-76152072	AX-76152111	No gene
2	282	76906502	77032816	72	126315	1	Loss	AX-76153184	AX-80863829	No gene
2	283	77135458	77492677	155	357220	1	Loss	AX-76153681	AX-76154459	No gene
2	284	77736914	77778967	22	42054	1	Loss	AX-76154950	AX-80931504	No gene
2	285	78602443	78615659	7	13217	0	Loss	AX-80936980	AX-80962142	No gene
2	286	79049708	79103649	18	53942	1	Loss	AX-76157502	AX-76157595	No gene
2	287	79852033	79883566	14	31534	1	Loss	AX-76159028	AX-76159096	No gene
2	288	80128312	80149472	7	21161	1	Loss	AX-76159561	AX-76159593	No gene
2	289	80371498	80464960	52	93463	1	Loss	AX-76160035	AX-76160205	No gene
2	290	82253684	82358865	42	105182	3	Mixed	AX-76163410	AX-80880323	MIR6562
2	291	86808718	86876504	22	67787	1	Loss	AX-76171503	AX-76171616	No gene
2	292	87207854	87329756	41	121903	3	Mixed	AX-80737406	AX-76172359	No gene
2	293	87609030	87642778	15	33749	1	Loss	AX-76172894	AX-76172956	No gene
2	294	88076720	88095081	13	18362	1	Loss	AX-76173693	AX-76173728	No gene
2	295	92567566	92609982	22	42417	1	Loss	AX-76182131	AX-76182218	MIR1803
2	296	93332317	93405180	39	72864	1	Mixed	AX-76183519	AX-80960663	No gene
2	297	93855757	93975556	53	119800	1	Loss	AX-76184527	AX-76184772	MIR6584
2	298	94254110	94325261	41	71152	1	Mixed	AX-76185296	AX-76185437	MIR1681
2	299	95108790	95208566	42	99777	1	Loss	AX-76186872	AX-76187074	CDH19
2	300	96440217	96510242	29	70026	1	Loss	AX-76189209	AX-76189349	No gene
2	301	96655947	96669532	8	13586	1	Loss	AX-80871366	AX-76189670	No gene
2	302	99539297	99550405	6	11109	1	Loss	AX-76195190	AX-76195215	No gene
2	303	99975878	100136232	69	160355	1	Loss	AX-76196103	AX-76196441	No gene
2	304	100750069	100934653	10	184585	1	Loss	AX-77280188	AX-77280206	No gene
2	305	101827992	101871547	22	43556	1	Loss	AX-75950031	AX-75950118	No gene
2	306	101906268	101920168	7	13901	0	Loss	AX-75950185	AX-75950208	No gene
2	307	101956854	101977967	10	21114	0	Loss	AX-75950287	AX-75950333	No gene
2	308	103630426	103668225	22	37800	1	Loss	AX-75953553	AX-75953630	No gene
2	309	105365133	105715255	174	350123	1	Loss	AX-75956937	AX-75957585	No gene
2	310	106024587	106035397	8	10811	1	Loss	AX-75958132	AX-75958154	No gene
2	311	106902590	107024256	55	121667	0	Loss	AX-75959867	AX-80809209	KLHL14
2	312	107085126	107167903	33	82778	1	Loss	AX-75960228	AX-80971948	MIR6707
2	313	109509141	109584133	33	74993	1	Loss	AX-75964828	AX-75964997	No gene
2	314	110115476	110155078	20	39603	0	Loss	AX-75965996	AX-75966069	No gene
2	315	110307863	110340325	19	32463	1	Loss	AX-75966355	AX-75966431	No gene
2	316	112348025	112364014	6	15990	1	Loss	AX-75970351	AX-75970378	UBXN2B
2	317	112557870	112581913	10	24044	0	Loss	AX-75970754	AX-75970798	TOX
2	318	112830479	113001416	69	170938	1	Loss	AX-75971256	AX-75971613	No gene
2	319	113849428	113960444	41	111017	1	Loss	AX-75973190	AX-75973386	No gene
2	320	114077897	114121308	21	43412	1	Loss	AX-75973586	AX-75973680	No gene
2	321	114564424	114580311	9	15888	1	Loss	AX-75974472	AX-75974511	No gene
2	322	116286530	116385991	41	99462	1	Loss	AX-75977627	AX-75977799	No gene
2	323	116583706	116615734	17	32029	1	Loss	AX-75978111	AX-75978166	No gene
2	324	117192188	117209059	12	16872	0	Loss	AX-75979175	AX-75979207	XKR9
2	325	118059914	118091074	15	31161	1	Loss	AX-75980833	AX-75980885	TERF1
2	326	118952001	119005084	23	53084	1	Mixed	AX-75982527	AX-75982634	CRISPLD1
2	327	120155682	120244515	52	88834	1	Mixed	AX-75984779	AX-75984955	No gene
2	328	122379953	122520807	66	140855	1	Loss	AX-80815484	AX-80975428	No gene
2	329	122920462	122961268	16	40807	1	Loss	AX-75989618	AX-80902902	No gene
2	330	124316361	124328067	6	11707	0	Loss	AX-75992439	AX-80868496	MMP16
2	331	128069189	128118722	25	49534	1	Loss	AX-75999800	AX-75999903	No gene
2	332	128550457	128677171	46	126715	1	Loss	AX-76000749	AX-76000993	No gene
2	333	129965497	129992633	12	27137	3	Gain	AX-76003559	AX-76003627	FZD6
2	334	130086347	130094998	7	8652	1	Loss	AX-76003812	AX-76003830	No gene
2	335	130324947	130355134	11	30188	1	Loss	AX-76004292	AX-76004349	No gene
2	336	130857947	130922941	26	64995	1	Loss	AX-80934294	AX-76005476	No gene
2	337	131564486	131676550	48	112065	1	Loss	AX-76006773	AX-76007029	No gene
2	338	131717332	132056584	157	339253	1	Loss	AX-80802457	AX-80966880	ANGPT1
2	339	132250572	132279694	12	29123	1	Loss	AX-76008075	AX-80762550	EIF3E
2	340	132337699	132426309	38	88611	1	Loss	AX-80841502	AX-76008398	EMC2
2	341	132560506	132643491	38	82986	1	Loss	AX-76008662	AX-76008830	EBAG9
2	342	132752132	132765555	9	13424	1	Loss	AX-76009042	AX-76009066	No gene
2	343	133068373	133162039	37	93667	1	Loss	AX-76009629	AX-76009763	No gene
2	344	134654185	134685757	20	31573	1	Loss	AX-76012498	AX-80947257	No gene
2	345	138001606	138064183	30	26258	1	Loss	AX-76019163	AX-76019282	DERL1
2	346	141658840	141670030	6	11191	0	Loss	AX-76026532	AX-76026549	No gene
2	347	141715539	141838625	58	123087	1	Loss	AX-76026650	AX-76026924	PHF20L1
2	348	142436774	142493358	26	56585	1	Loss	AX-76028214	AX-76028353	No gene
2	349	143426636	143490837	21	64202	0	Loss	AX-80936354	AX-76030252	No gene
2	350	143664766	143719513	27	54748	1	Loss	AX-76030565	AX-76030675	No gene
2	351	144157223	144218993	25	61771	1	Loss	AX-76031562	AX-76031696	No gene
2	352	145490860	145510493	11	19634	1	Loss	AX-80932473	AX-80767487	No gene
2	353	148946023	149257498	51	311476	1	Loss	AX-76042107	AX-76042418	LOC100858444
3	354	3418825	3429370	10	10546	1	Loss	AX-77280865	AX-76460048	No gene
3	355	4336442	4466083	57	129642	1	Loss	AX-76479444	AX-76482057	MIR6542
3	356	5427323	5451699	17	24377	3	Gain	AX-76502303	AX-76502889	No gene
3	357	6666012	6739474	39	73463	1	Loss	AX-80820726	AX-76531114	No gene
3	358	12468709	12552677	38	83969	1	Loss	AX-76416233	AX-76416401	COQ8A
3	359	15451280	15571339	65	120060	1	Loss	AX-76422167	AX-76422410	DSTN
3	360	16161759	16207320	30	45562	1	Loss	AX-76423675	AX-76423761	No gene
3	361	17757520	17794505	23	36986	0	Loss	AX-76426728	AX-76426802	No gene
3	362	18119466	18172707	28	53242	0	Loss	AX-76427421	AX-76427545	No gene
3	363	19323866	19338143	7	14278	1	Loss	AX-76430042	AX-76430068	No gene
3	364	19624619	19678377	33	53759	1	Loss	AX-76430668	AX-76430786	No gene
3	365	19790909	19814191	13	23283	1	Loss	AX-76431045	AX-76431097	GPATCH2
3	366	21668466	21692373	17	23908	1	Loss	AX-76434822	AX-76434885	No gene
3	367	21924066	21939158	10	15093	1	Loss	AX-76435363	AX-76435389	No gene
3	368	23976667	24043131	34	66465	1	Loss	AX-76439492	AX-76439621	No gene
3	369	24497691	24550212	26	52522	1	Loss	AX-76440593	AX-76440695	No gene
3	370	25667744	25721657	27	53914	1	Loss	AX-76442764	AX-76442866	CAMKMT
3	371	30315392	30486444	81	171053	1	Loss	AX-76452057	AX-80921973	HSP90AB1
3	372	34349794	34358665	6	8872	0	Loss	AX-80848309	AX-80958045	No gene

3	373	34361577	34586242	117	224666	1	Loss	AX-76460163	AX-76460626	No gene
3	374	34867104	34872260	6	5157	0	Loss	AX-76461177	AX-76461189	No gene
3	375	36100177	36144559	26	44383	1	Loss	AX-76463793	AX-76463895	RG57
3	376	36370900	36399814	20	28915	1	Loss	AX-80990168	AX-76464440	CHRM3
3	377	37333166	37565285	100	232120	1	Loss	AX-76466452	AX-76466870	MIR135B
3	378	39168373	39186030	12	17658	1	Loss	AX-80859133	AX-76470384	No gene
3	379	42654102	42666039	8	11938	1	Loss	AX-76477837	AX-76477863	RNASET2
3	380	43420967	43461352	22	40386	1	Loss	AX-76479524	AX-76479608	No gene
3	381	44479931	44573144	55	93214	1	Loss	AX-76481747	AX-76481981	No gene
3	382	44655860	44664928	8	9069	3	Mixed	AX-76482160	AX-76482187	No gene
3	383	44939043	44955202	10	16160	0	Loss	AX-80900704	AX-76482845	No gene
3	384	44975969	45001601	17	25633	1	Loss	AX-76482895	AX-76482947	No gene
3	385	45338044	45343182	6	5139	0	Loss	AX-76483670	AX-76483686	No gene
3	386	46138599	46187012	25	48414	1	Loss	AX-76485371	AX-76485479	No gene
3	387	47001081	47040983	18	39903	0	Loss	AX-76487262	AX-76487340	RAB32
3	388	47163710	47231461	27	67752	1	Loss	AX-76487607	AX-80997102	No gene
3	389	48002274	48092556	52	90283	0	Loss	AX-80875868	AX-76489505	No gene
3	390	48166307	48183763	13	17457	1	Loss	AX-76489653	AX-76489693	No gene
3	391	49522530	49594270	43	71741	1	Loss	AX-76492428	AX-80846787	VIP
3	392	50020572	50064498	20	43927	0	Loss	AX-76493448	AX-76493509	No gene
3	393	50834260	50872135	29	37876	1	Loss	AX-76495046	AX-76495128	No gene
3	394	51413275	51424924	9	11650	1	Loss	AX-76496170	AX-76496199	No gene
3	395	51795685	51804546	6	8862	0	Loss	AX-76496961	AX-76496983	No gene
3	396	52585347	52597312	7	11966	1	Loss	AX-80936238	AX-76498738	No gene
3	397	53441121	53489942	25	48822	1	Loss	AX-76500595	AX-76500688	No gene
3	398	54548422	54559142	9	10721	1	Loss	AX-76503032	AX-76503063	No gene
3	399	55278713	55318939	23	40227	1	Loss	AX-76504669	AX-76504756	MAP7
3	400	55473000	55706937	131	233938	1	Loss	AX-80846570	AX-76505650	No gene
3	401	56489867	56549829	34	59963	1	Loss	AX-76507249	AX-76507370	No gene
3	402	57709556	57724112	11	14557	1	Loss	AX-76510043	AX-76510082	No gene
3	403	58038967	58130543	52	91577	1	Loss	AX-76510798	AX-76511023	No gene
3	404	58424157	58642487	121	218331	1	Loss	AX-76511769	AX-76512285	MIR1660
3	405	58795677	58864536	34	68860	1	Loss	AX-76512616	AX-80813861	No gene
3	406	60709166	60758626	32	49461	1	Loss	AX-76516792	AX-76516911	NKAIN2
3	407	61012024	61186683	86	174660	1	Loss	AX-76517425	AX-76517853	No gene
3	408	61339559	61382677	25	43119	1	Loss	AX-76518193	AX-76518299	FABP7
3	409	61661731	61707690	26	45960	1	Loss	AX-76518887	AX-76518984	No gene
3	410	61824368	61904956	36	80589	1	Loss	AX-80817176	AX-76519427	No gene
3	411	61996382	62034430	20	38049	1	Loss	AX-80821793	AX-76519726	No gene
3	412	62175477	62188542	8	13066	0	Loss	AX-76520063	AX-76520096	No gene
3	413	62198673	62268147	38	69475	1	Loss	AX-76520118	AX-76520282	No gene
3	414	62677122	62693761	10	16640	1	Loss	AX-76521214	AX-76521244	No gene
3	415	64318563	64486690	76	168128	1	Loss	AX-76524588	AX-76524934	No gene
3	416	64683059	64712410	13	29352	1	Loss	AX-76525306	AX-76525367	No gene
3	417	64845598	64898166	28	52569	0	Loss	AX-80794514	AX-76525773	No gene
3	418	65539732	65566757	19	27026	1	Loss	AX-76527182	AX-80823510	No gene
3	419	65696077	65726688	15	30612	1	Loss	AX-76527529	AX-76527606	No gene
3	420	66398714	66416388	12	17675	1	Loss	AX-76529030	AX-80923629	SLC16A10
3	421	68391577	68466273	37	74697	1	Loss	AX-76533585	AX-76533772	ATG5
3	422	70528626	70546147	9	17522	1	Mixed	AX-76537670	AX-76537703	No gene
3	423	71437982	71528037	40	90056	1	Loss	AX-76539509	AX-76539709	No gene
3	424	72417638	72447709	15	30072	1	Loss	AX-76541721	AX-76541800	No gene
3	425	72639945	72694630	25	54686	1	Loss	AX-76542196	AX-76542325	No gene
3	426	73354831	73380557	15	25727	1	Loss	AX-76543813	AX-76543874	No gene
3	427	73812524	73912762	56	100239	1	Loss	AX-76544744	AX-76544951	No gene
3	428	74932239	74979235	27	46997	1	Mixed	AX-76546959	AX-76547066	EPHA7
3	429	77979141	77996375	7	17235	1	Loss	AX-76553560	AX-76553595	SNAP91
3	430	79071034	79089242	11	18209	0	Loss	AX-76556009	AX-76556049	No gene
3	431	79522068	79589235	34	67168	1	Loss	AX-76556926	AX-80886142	ELOVL4
3	432	80441430	80452472	7	11043	0	Loss	AX-76558888	AX-76558905	No gene
3	433	80682458	80703516	14	21059	1	Loss	AX-76559384	AX-76559418	IMP1
3	434	81379247	81547589	92	168343	1	Loss	AX-76560901	AX-76561251	No gene
3	435	82249169	82360107	58	110939	1	Loss	AX-76562804	AX-76563050	No gene
3	436	83646814	83941834	162	259021	1	Loss	AX-76565851	AX-76566412	No gene
3	437	84987268	85018373	15	31106	1	Mixed	AX-76568223	AX-76568286	MIR6605
3	438	85625574	85682713	19	57140	1	Loss	AX-76569429	AX-76569515	No gene
3	439	86228721	86312337	46	83617	1	Loss	AX-76570658	AX-76570829	No gene
3	440	86456040	86501175	24	45136	1	Loss	AX-76571140	AX-76571232	No gene
3	441	86569507	86613586	18	44080	1	Loss	AX-80974179	AX-76571486	No gene
3	442	86810614	86850482	20	39869	1	Loss	AX-76571876	AX-80868692	No gene
3	443	87509532	87766909	137	257378	1	Loss	AX-76573508	AX-76574034	BMP5
3	444	88104182	88137441	21	33260	1	Loss	AX-76574757	AX-76574829	No gene
3	445	88229176	88255557	8	26382	1	Loss	AX-76575037	AX-77281299	TINAG
3	446	89201004	89436189	120	235186	1	Loss	AX-76577050	AX-80769308	No gene
3	447	90826250	90887161	28	60912	1	Mixed	AX-80926469	AX-76580536	MIR6634
3	448	91084508	91124871	22	40364	1	Loss	AX-76580913	AX-76581004	MYOM2
3	449	91861636	91879326	11	17691	3	Gain	AX-80860304	AX-80925317	ERIC1
3	450	92476309	92507457	20	31149	0	Loss	AX-76584080	AX-80821400	No gene
3	451	92801711	92844632	23	42922	1	Mixed	AX-80847946	AX-76584909	No gene
3	452	94544452	94571424	19	26973	0	Loss	AX-76588855	AX-76588919	No gene
3	453	95808722	95827524	9	18803	1	Loss	AX-76591656	AX-80805376	No gene
3	454	96347037	96375354	16	28318	1	Loss	AX-76592769	AX-76592841	MBOAT2
3	455	98250366	98259393	8	9028	1	Loss	AX-76597018	AX-76597039	No gene
3	456	98933443	98986619	35	53177	1	Mixed	AX-76598499	AX-76598633	No gene
3	457	99439604	99486441	26	46838	0	Loss	AX-76599631	AX-76599734	No gene
3	458	99716007	99837701	49	121695	1	Loss	AX-80763057	AX-80985534	No gene
3	459	100349730	100396500	27	46771	0	Loss	AX-76601718	AX-76601809	No gene
3	460	101088349	101184984	56	96636	1	Loss	AX-76390180	AX-76390395	No gene
3	461	101860122	101889231	20	29110	1	Loss	AX-76391987	AX-76392059	LAPTM4A
3	462	103326777	103399763	38	72987	1	Loss	AX-76395277	AX-76395438	MIR6678
3	463	104973510	105071958	21	98449	1	Loss	AX-76399137	AX-76399303	DNMT3A
3	464	105310081	105333435	16	23355	1	Loss	AX-76399828	AX-76399870	ASXL2
3	465	105473412	105599038	63	125627	1	Loss	AX-76400191	AX-76400466	CHRNA2
3	466	107627607	107663053	27	35447	1	Loss	AX-76405287	AX-76405386	No gene

3	467	107809297	107834985	22	25689	1	Loss	AX-76405765	AX-76405834	CTSB
3	468	110191128	110232366	27	41239	0	Loss	AX-76411860	AX-76411988	No gene
3	469	111117755	111228447	47	110693	0	Loss	AX-76414269	AX-76414524	No gene
4	470	1093077	1166745	30	73669	1	Loss	AX-76606050	AX-76607449	No gene
4	471	1660697	1720440	27	59744	1	Loss	AX-76616507	AX-76617592	No gene
4	472	1744762	1863023	55	118262	1	Loss	AX-76618021	AX-76619748	CCNB3
4	473	2118564	2169058	33	50495	1	Loss	AX-77276377	AX-76625162	DKC1
4	474	2299287	2364742	32	65456	1	Loss	AX-80858688	AX-76628987	GJB1
4	475	5703082	5738292	17	35211	0	Loss	AX-80836801	AX-76694148	No gene
4	476	6207558	6268689	29	61132	1	Loss	AX-76704304	AX-76705678	No gene
4	477	6391152	6547043	69	155892	1	Loss	AX-76708165	AX-76711371	No gene
4	478	6778962	6835400	27	56439	1	Loss	AX-76715933	AX-76716980	No gene
4	479	6923573	7043864	58	120292	1	Loss	AX-80934063	AX-76721165	No gene
4	480	7178424	7219254	26	40831	1	Loss	AX-76723624	AX-76724415	No gene
4	481	7335063	7374316	31	39254	1	Loss	AX-76726739	AX-76727520	No gene
4	482	7393403	7438041	23	44639	1	Loss	AX-76727901	AX-76728840	No gene
4	483	7894865	8061543	75	166679	1	Loss	AX-76738465	AX-76742149	No gene
4	484	8817931	8840362	13	22432	1	Loss	AX-76758721	AX-76759218	No gene
4	485	9825915	9929083	47	103169	1	Loss	AX-76764541	AX-76764730	No gene
4	486	9997099	10017920	12	20822	1	Loss	AX-80952871	AX-76603307	No gene
4	487	10173772	10195765	14	21994	1	Loss	AX-76603605	AX-76603644	No gene
4	488	11218626	11263168	22	44543	1	Loss	AX-76605651	AX-76605743	EDNRB2
4	489	11464480	11522896	28	58417	1	Loss	AX-76606133	AX-76606223	No gene
4	490	13677833	13714461	22	36629	1	Loss	AX-76610289	AX-76610363	No gene
4	491	15070600	15183222	45	112623	1	Loss	AX-80797334	AX-76613296	No gene
4	492	19471058	19538543	19	67486	1	Loss	AX-76619933	AX-76619826	No gene
4	493	20851473	20956560	46	105088	1	Loss	AX-76621612	AX-76621825	No gene
4	494	21009358	21042500	14	33143	1	Loss	AX-76621908	AX-76621971	CTSO
4	495	21611659	21692381	43	80723	1	Loss	AX-76623084	AX-76623235	GRIA2
4	496	23008068	23052151	22	44084	1	Mixed	AX-80997748	AX-76625857	No gene
4	497	23668921	23761507	46	92587	1	Loss	AX-76627076	AX-76627276	MARCH1
4	498	24124677	24197769	35	73093	1	Loss	AX-80760929	AX-76628106	No gene
4	499	24418871	24455673	23	36803	1	Loss	AX-76628557	AX-76628632	No gene
4	500	25977261	26209073	134	231813	1	Loss	AX-76631621	AX-76632103	No gene
4	501	26519692	26565709	28	46018	1	Loss	AX-76632757	AX-76632854	No gene
4	502	26867703	26897110	16	29408	1	Loss	AX-76633510	AX-76633568	No gene
4	503	28488855	28507809	10	18955	1	Loss	AX-76636512	AX-76636550	No gene
4	504	30836998	30847793	6	10796	1	Loss	AX-76640978	AX-76641003	No gene
4	505	30904175	30970473	35	66299	1	Loss	AX-76641037	AX-76641152	No gene
4	506	31049803	31093025	17	43223	0	Loss	AX-76641280	AX-76641350	No gene
4	507	32440963	32488734	24	47772	0	Loss	AX-76643923	AX-76644023	NR3C2
4	508	33007348	33057239	32	49892	1	Loss	AX-76645167	AX-76645291	No gene
4	509	33129263	33195399	36	66137	1	Loss	AX-76645449	AX-76645588	No gene
4	510	33348800	33371680	11	22881	1	Loss	AX-76645933	AX-80736756	No gene
4	511	34216609	34302027	44	85419	0	Loss	AX-76647833	AX-76648000	MIR6668
4	512	35603163	35629262	12	26100	0	Loss	AX-76650433	AX-76650481	No gene
4	513	36072686	36093280	15	20595	1	Loss	AX-76651252	AX-76651298	No gene
4	514	36149735	36235887	46	86153	1	Loss	AX-76651399	AX-76651580	No gene
4	515	36409433	36441860	20	32428	1	Loss	AX-76651910	AX-76651957	No gene
4	516	36473897	36586320	48	112424	1	Loss	AX-76652023	AX-76652208	No gene
4	517	36788430	36841394	30	52965	1	Loss	AX-76652574	AX-76652658	No gene
4	518	37657762	37664075	6	6314	0	Loss	AX-76654162	AX-76654173	No gene
4	519	37711446	37730135	9	18690	1	Loss	AX-76654257	AX-76654290	No gene
4	520	38908125	38934861	12	26737	1	Loss	AX-80772762	AX-76656586	No gene
4	521	39189228	39256669	30	67442	0	Loss	AX-76657065	AX-76657183	No gene
4	522	39456494	39521173	27	64680	0	Loss	AX-76657548	AX-76657667	TACR3
4	523	39732556	39747573	7	15018	1	Loss	AX-76658061	AX-81004363	ACSL1
4	524	40835298	40952065	74	116768	1	Loss	AX-76660201	AX-76660445	No gene
4	525	41860502	41881730	13	21229	1	Loss	AX-76662098	AX-76662143	No gene
4	526	42494211	42532128	24	37918	0	Loss	AX-76663229	AX-80826035	AGA
4	527	42570344	42612906	25	42563	1	Loss	AX-76663357	AX-76663447	No gene
4	528	42675820	42759417	50	83598	1	Loss	AX-76663580	AX-76663747	No gene
4	529	42829446	42855906	15	26461	1	Loss	AX-76663891	AX-76663954	No gene
4	530	42920112	43010981	61	90870	1	Loss	AX-76664078	AX-76664265	No gene
4	531	43078967	43207781	66	128815	1	Loss	AX-76664387	AX-76664642	No gene
4	532	43872540	43907833	19	35294	1	Loss	AX-76665977	AX-80768421	MIR1776
4	533	43990798	44019417	18	28620	0	Loss	AX-80906179	AX-80831259	No gene
4	534	44185627	44206421	12	20795	1	Loss	AX-76666605	AX-76666647	No gene
4	535	44509108	44536177	14	27070	1	Loss	AX-76667172	AX-76667212	GPM6A
4	536	47249621	47268852	9	19232	1	Loss	AX-76672386	AX-76672424	No gene
4	537	47908913	47964431	23	55519	1	Loss	AX-76673588	AX-76673707	No gene
4	538	49727220	49748098	12	20879	0	Loss	AX-76677145	AX-76677180	TNKS
4	539	50217467	50298999	29	81533	0	Loss	AX-80837079	AX-76678174	No gene
4	540	50403594	50432081	16	28488	0	Loss	AX-76678367	AX-76678419	MIR1751
4	541	51934570	51958395	13	23826	0	Loss	AX-76681237	AX-76681275	CENPC
4	542	52445541	52529806	39	84266	1	Loss	AX-76682243	AX-76682388	No gene
4	543	52568246	52609534	20	41289	1	Loss	AX-76682451	AX-80806080	No gene
4	544	53108338	53123950	9	15613	0	Loss	AX-76683517	AX-76683548	No gene
4	545	54428727	54533308	52	104582	1	Loss	AX-76686126	AX-80937245	QRFRP
4	546	55174379	55185480	8	11102	0	Loss	AX-76687636	AX-76687658	No gene
4	547	55543776	55576689	20	32914	1	Loss	AX-76688372	AX-76688441	No gene
4	548	55583997	55679940	49	95944	1	Loss	AX-76688454	AX-80895461	No gene
4	549	56059171	56141132	41	81962	1	Loss	AX-76689439	AX-76689596	No gene
4	550	56329974	56422017	50	92044	1	Loss	AX-76689949	AX-76690162	No gene
4	551	57887675	58033684	75	146010	1	Loss	AX-76693111	AX-76693412	No gene
4	552	59383684	59398293	9	14610	1	Loss	AX-76696308	AX-76696342	No gene
4	553	59835656	59878249	25	42594	1	Loss	AX-76697319	AX-76697406	No gene
4	554	60189153	60216251	17	27099	0	Loss	AX-76698075	AX-80987757	No gene
4	555	61115484	61164005	25	48522	0	Loss	AX-80809084	AX-76700116	No gene
4	556	61546702	61611774	24	65073	0	Loss	AX-76700934	AX-76701075	No gene
4	557	62806348	62865204	30	58857	0	Mixed	AX-76703568	AX-76703694	MTNR1A
4	558	63552514	63587582	15	35069	1	Loss	AX-76705189	AX-76705271	CNOT7
4	559	64479369	64510692	17	31324	1	Mixed	AX-76707183	AX-76707242	MIR383
4	560	66862422	66889600	17	27179	1	Loss	AX-76711997	AX-76712043	No gene

4	561	66991650	67013477	15	21828	0	Loss	AX-76712217	AX-76712263	CNGA1
4	562	67103150	67158858	35	55709	1	Loss	AX-76712453	AX-76712578	No gene
4	563	67649001	67812304	87	163304	1	Loss	AX-80788411	AX-76713819	No gene
4	564	68300418	68366613	35	66196	1	Loss	AX-76714817	AX-76714957	No gene
4	565	68587799	68651828	33	64030	1	Loss	AX-76715412	AX-76715539	No gene
4	566	70095703	70161296	33	65594	0	Loss	AX-76718272	AX-76718393	TBC1D1
4	567	72818366	72832917	13	14552	1	Mixed	AX-76723453	AX-76723489	No gene
4	568	74512684	74585890	32	73207	1	Loss	AX-76726735	AX-76726862	PPARGC1A
4	569	75020339	75031434	9	11096	0	Loss	AX-76727756	AX-76727786	No gene
4	570	75180019	75188504	8	8486	1	Loss	AX-76728044	AX-76728066	KCNIP4
4	571	75843284	76192363	150	349080	1	Mixed	AX-76729384	AX-80782814	MIR218-1
4	572	76391199	76437993	25	46795	1	Loss	AX-76730487	AX-76730598	LCORL
4	573	76545438	76568675	12	23238	1	Loss	AX-76730816	AX-76730877	QDPR
4	574	76597705	76620788	13	23084	1	Loss	AX-76730934	AX-76730988	No gene
4	575	78280266	78303739	14	23474	1	Loss	AX-76734468	AX-76734508	No gene
4	576	78356098	78364212	10	8115	1	Loss	AX-76734605	AX-76734625	No gene
4	577	78369547	78520299	70	150753	1	Loss	AX-76734633	AX-76734929	No gene
4	578	79618332	79648420	13	30089	1	Loss	AX-76737152	AX-76737218	No gene
4	579	79990827	80034697	27	43871	0	Loss	AX-76737988	AX-76738082	No gene
4	580	80703576	80729816	18	26241	1	Loss	AX-76739531	AX-76739590	No gene
4	581	81028174	81119176	44	91003	1	Loss	AX-76740201	AX-76740420	No gene
4	582	81303760	81431203	62	127444	1	Loss	AX-76740835	AX-76741146	MIR12274
4	583	81782442	81800781	13	18340	1	Loss	AX-76741937	AX-76741978	CPZ
4	584	81851514	81863627	9	12114	4	Gain	AX-76742085	AX-76742112	No gene
4	585	84684424	84714199	20	29776	3	Gain	AX-76748159	AX-76748246	No gene
4	586	86238371	86256635	11	18265	1	Loss	AX-76751557	AX-76751602	CD8A
4	587	87404154	87469640	37	65487	1	Loss	AX-76754017	AX-76754170	CTNNA2
5	588	274587	282112	6	7526	0	Loss	AX-76792775	AX-76791130	No gene
5	589	1517405	1558454	19	41050	1	Loss	AX-76784754	AX-76785662	IFITM5
5	590	1903712	1918448	8	14737	0	Loss	AX-76793339	AX-76793667	No gene
5	591	2215730	2315571	37	99842	0	Loss	AX-76800145	AX-76802305	No gene
5	592	3048918	3066904	7	17987	0	Loss	AX-80937409	AX-76818977	No gene
5	593	3867987	3936389	18	68403	0	Loss	AX-76836162	AX-76837650	METTL15P1
5	594	4766948	4820533	28	53586	1	Loss	AX-76856825	AX-76858239	No gene
5	595	4975914	5011836	18	35923	1	Loss	AX-80794540	AX-76862576	DNAJC24
5	596	5742203	5796535	8	54333	1	Loss	AX-76884597	AX-76879714	No gene
5	597	6400404	6433254	23	32851	1	Loss	AX-76883088	AX-76883168	SPON1
5	598	6754509	6803279	24	48771	1	Loss	AX-76883929	AX-76884030	No gene
5	599	8161799	8200457	26	38659	1	Loss	AX-76886941	AX-76887029	USP47
5	600	8831415	8879021	27	47607	1	Loss	AX-80820617	AX-76888600	No gene
5	601	12007378	12046597	23	39220	1	Loss	AX-76774441	AX-76774535	No gene
5	602	13473461	13488400	6	14940	1	Loss	AX-76777593	AX-76777630	No gene
5	603	15092456	15101818	10	9363	1	Loss	AX-76781154	AX-76781181	AP2A2
5	604	15491855	15504976	8	13122	0	Loss	AX-76782083	AX-76782108	No gene
5	605	15712610	15780039	42	67430	1	Loss	AX-76782587	AX-76782751	PNPLA2
5	606	16187598	16214456	17	26859	1	Loss	AX-76783543	AX-76783599	No gene
5	607	16650919	16663625	9	12707	1	Loss	AX-76784590	AX-76784612	CPT1A
5	608	19870230	19962036	48	91807	1	Loss	AX-76791689	AX-76791890	No gene
5	609	19967461	20023683	30	56223	1	Loss	AX-76791901	AX-76792035	No gene
5	610	20145925	20406546	120	260622	1	Loss	AX-76792324	AX-76792881	No gene
5	611	20449536	20455389	6	5854	0	Loss	AX-76792980	AX-80746507	No gene
5	612	20782420	20828723	22	46304	1	Loss	AX-76793727	AX-76793819	No gene
5	613	21041117	21173780	63	132664	1	Loss	AX-76794315	AX-76794627	No gene
5	614	22560836	22642976	33	82141	1	Loss	AX-80897654	AX-76797837	FUT8
5	615	22651114	22663177	8	12064	0	Loss	AX-76797848	AX-76797883	No gene
5	616	27000696	27019127	10	18432	1	Loss	AX-76807267	AX-80927621	SIPA1L1
5	617	27937413	27960906	15	23494	1	Loss	AX-76809288	AX-80746875	No gene
5	618	28198822	28221375	13	22554	1	Loss	AX-76809907	AX-76809953	ACTN1
5	619	29166550	29223404	39	56855	1	Loss	AX-76812198	AX-76812345	GPHN
5	620	29909416	29973102	25	63687	0	Loss	AX-76813913	AX-76814035	No gene
5	621	30268300	30407581	80	139282	3	Mixed	AX-76814722	AX-76815029	RYR3
5	622	30632942	30658090	13	25149	0	Loss	AX-76815558	AX-76815627	ARHGAP11B
5	623	31156430	31191362	16	34933	1	Loss	AX-76816683	AX-76816756	No gene
5	624	31553913	31663093	60	109181	1	Loss	AX-76817541	AX-76817790	C5H15orf41
5	625	32049000	32124417	40	75418	1	Loss	AX-77282143	AX-76818689	No gene
5	626	32239819	32266527	12	26709	0	Loss	AX-76818935	AX-80758987	No gene
5	627	33072864	33161174	32	88311	1	Mixed	AX-76820354	AX-76820475	NOVA1
5	628	33720832	33758216	25	37385	1	Loss	AX-76821568	AX-76821645	PRKD1
5	629	34321040	34363075	21	42036	1	Loss	AX-76822936	AX-76823032	No gene
5	630	34607236	34762119	95	154884	1	Loss	AX-76823562	AX-76823879	No gene
5	631	34802049	34809761	9	7713	0	Loss	AX-76823981	AX-76824003	No gene
5	632	34901562	34931998	14	30437	1	Loss	AX-76824218	AX-76824293	No gene
5	633	35044966	35064682	14	19717	1	Loss	AX-76824540	AX-76824590	No gene
5	634	35197034	35207043	6	10010	1	Loss	AX-76824873	AX-80917313	No gene
5	635	35295991	35332017	17	36027	1	Loss	AX-76825110	AX-76825186	No gene
5	636	36921715	36956801	16	35087	0	Loss	AX-76828719	AX-76828802	No gene
5	637	37048228	37078100	15	29873	1	Loss	AX-80858992	AX-76829066	No gene
5	638	37243928	37282956	25	39029	1	Loss	AX-76829433	AX-76829531	No gene
5	639	37518657	37598059	56	79403	1	Loss	AX-76830083	AX-76830270	No gene
5	640	39248269	39272252	17	23984	1	Loss	AX-76833865	AX-76833910	TMED8
5	641	39681139	39716769	19	35631	0	Loss	AX-76834779	AX-76834857	No gene
5	642	40362741	40404840	24	42100	1	Loss	AX-76836320	AX-76836421	NRXN3
5	643	40501538	40527504	15	25967	1	Loss	AX-76836661	AX-76836727	No gene
5	644	40680327	40798689	62	118363	1	Loss	AX-76837084	AX-80824842	DIO2
5	645	40981835	41000480	14	18646	3	Gain	AX-76837738	AX-76837777	No gene
5	646	41155190	41235374	49	80185	1	Loss	AX-76838166	AX-76838362	No gene
5	647	42695840	42740345	23	44506	1	Mixed	AX-80909989	AX-76841822	No gene
5	648	43194860	43321709	62	126850	1	Loss	AX-80792086	AX-76843212	No gene
5	649	47437374	47483689	32	46316	1	Loss	AX-76852542	AX-76852649	No gene
5	650	48731601	48745550	12	13950	3	Gain	AX-76855557	AX-76855594	No gene
5	651	49039490	49135680	41	96191	1	Loss	AX-76856299	AX-76856506	DLK1
5	652	49550165	49579144	18	28980	1	Loss	AX-76857589	AX-76857664	HSP90AA1
5	653	49721584	49756268	19	34685	1	Loss	AX-76858043	AX-76858125	No gene
5	654	51007414	51041056	24	33643	1	Loss	AX-76861280	AX-76861373	No gene

5	655	53790648	53804154	10	13507	1	Loss	AX-76868322	AX-76868359	No gene
5	656	56869657	56938728	38	69072	3	Gain	AX-76875702	AX-80836136	No gene
5	657	57903599	57946324	21	42726	1	Loss	AX-76878314	AX-76878427	ATP55
5	658	58061819	58171550	58	109732	1	Loss	AX-76878714	AX-80942453	C5H14orf166
6	659	1449590	1459759	9	10170	0	Loss	AX-76972186	AX-76972457	No gene
6	660	1691566	1769048	43	77483	1	Loss	AX-76897015	AX-76898927	No gene
6	661	3315038	3332418	13	17381	3	Gain	AX-76938298	AX-76938736	No gene
6	662	3964368	3980411	16	16044	1	Loss	AX-76955255	AX-76955658	No gene
6	663	5110186	5130799	17	20614	1	Loss	AX-76959233	AX-76959284	TMEM254
6	664	5242985	5255882	11	12898	1	Loss	AX-76959588	AX-76959621	CISD1
6	665	5524387	5556644	23	32258	1	Loss	AX-76960445	AX-76960552	No gene
6	666	5957536	6013096	30	55561	0	Loss	AX-76961567	AX-76961708	No gene
6	667	6170562	6194286	15	23725	1	Loss	AX-76962033	AX-76962095	No gene
6	668	6812679	6837926	12	25248	1	Loss	AX-76963780	AX-76963846	CTNNA3
6	669	6851374	6858043	7	6670	0	Loss	AX-76963885	AX-80798079	No gene
6	670	9355438	9376569	17	21132	1	Loss	AX-80924856	AX-76970505	ERLIN1
6	671	9997854	10019857	18	22004	0	Loss	AX-76972181	AX-76972247	No gene
6	672	11896567	11935601	25	39035	1	Loss	AX-76895923	AX-76896030	No gene
6	673	12453770	12478744	15	24975	1	Loss	AX-76897327	AX-76897397	No gene
6	674	12887749	12946226	39	58478	1	Loss	AX-76898393	AX-76898545	No gene
6	675	13073125	13079017	6	5893	0	Loss	AX-76898878	AX-76898886	No gene
6	676	13612731	13625222	11	12492	1	Loss	AX-76900180	AX-76900205	KCNMA1
6	677	13825838	13863225	22	37388	1	Loss	AX-76900694	AX-76900799	No gene
6	678	13873839	13970152	73	96314	1	Loss	AX-76900830	AX-76901064	No gene
6	679	14115654	14191204	43	75551	1	Loss	AX-80768626	AX-76901675	No gene
6	680	15188879	15218238	16	29360	1	Loss	AX-76904277	AX-76904348	ADK
6	681	15624101	15785193	110	161093	1	Loss	AX-76905357	AX-76905777	No gene
6	682	16179151	16313669	82	134519	1	Loss	AX-76906775	AX-76907083	ANXA7
6	683	16924865	16979296	27	54432	1	Loss	AX-76908609	AX-76908743	MIR3537
6	684	18858402	18902279	22	43878	1	Loss	AX-76913314	AX-76913444	No gene
6	685	19342057	19349657	7	7601	1	Loss	AX-76914631	AX-76914653	No gene
6	686	19499512	19587523	59	88012	1	Loss	AX-76915069	AX-76915293	No gene
6	687	19855292	19915568	38	60277	1	Loss	AX-76915962	AX-76916132	TNKS2
6	688	20708632	20799267	63	90636	1	Loss	AX-76918067	AX-76918316	KIF11
6	689	21321929	21401533	52	79605	3	Mixed	AX-76919575	AX-80751986	No gene
6	690	21420859	21432956	9	12098	0	Loss	AX-80748793	AX-80915001	No gene
6	691	21630591	21738048	62	107458	1	Loss	AX-76920315	AX-76920558	No gene
6	692	22235436	22330050	46	94615	1	Loss	AX-76921811	AX-76922017	CRTAC1
6	693	22920448	22945192	15	24745	1	Loss	AX-76923506	AX-76923560	No gene
6	694	24836125	24958033	84	121909	1	Loss	AX-76928333	AX-76928636	No gene
6	695	25032011	25111267	74	79257	1	Loss	AX-76928810	AX-76929043	No gene
6	696	27683085	27700739	16	17655	1	Loss	AX-76935786	AX-80751598	No gene
6	697	28384489	28426615	29	42127	1	Loss	AX-76937662	AX-76937781	GFRA1
6	698	30603923	30646475	25	42553	1	Loss	AX-76943429	AX-76943563	No gene
6	699	30670323	30714405	34	44083	1	Loss	AX-76943603	AX-76943726	No gene
6	700	32495437	32521814	16	26378	1	Loss	AX-76948440	AX-76948513	No gene
6	701	34971387	34990739	19	19353	1	Loss	AX-76955404	AX-80988100	No gene
7	702	1015858	1034115	14	18258	1	Loss	AX-76974017	AX-76974512	No gene
7	703	1549606	1599131	38	49526	1	Loss	AX-76987312	AX-76988695	No gene
7	704	1793791	1901220	66	107430	1	Loss	AX-76993896	AX-76996924	No gene
7	705	8673558	8685298	8	11741	1	Loss	AX-80983172	AX-77052475	No gene
7	706	8848010	8943649	38	95640	0	Loss	AX-77052852	AX-77053069	No gene
7	707	10191894	10201775	6	9882	1	Loss	AX-77056068	AX-77056095	No gene
7	708	11259284	11291841	21	32558	0	Loss	AX-76974935	AX-76975014	AOX1
7	709	12448660	12484961	17	36302	0	Loss	AX-80905225	AX-76978111	No gene
7	710	14651174	14669641	13	18468	1	Loss	AX-76983520	AX-76983575	No gene
7	711	14936823	14958844	17	22022	3	Gain	AX-80932576	AX-76984303	No gene
7	712	15156004	15213247	41	57244	1	Loss	AX-76984787	AX-76984936	No gene
7	713	15909691	15933708	15	24018	1	Loss	AX-76986716	AX-76986765	No gene
7	714	16736237	16745005	8	8769	1	Loss	AX-76988857	AX-76988882	ATF2
7	715	17070906	17094041	17	23136	1	Loss	AX-76989723	AX-80940815	OLA1
7	716	18191620	18244559	39	52940	1	Loss	AX-76992626	AX-76992769	No gene
7	717	18412851	18455419	28	42569	0	Loss	AX-76993215	AX-76993345	No gene
7	718	18575875	18597599	17	21725	0	Loss	AX-76993721	AX-80950987	No gene
7	719	19217760	19261794	32	44035	0	Loss	AX-76995581	AX-76995702	No gene
7	720	19506070	19667336	96	161267	1	Loss	AX-76996353	AX-80763808	SCN9A
7	721	19718475	19777777	42	59303	1	Loss	AX-76996945	AX-76997107	No gene
7	722	20015044	20068026	33	52983	1	Loss	AX-76997697	AX-76997829	No gene
7	723	21198183	21255146	31	56964	0	Loss	AX-77000812	AX-77000969	FAP
7	724	21310506	21339481	22	28976	0	Mixed	AX-80832951	AX-77001200	No gene
7	725	22180732	22222543	20	41812	1	Mixed	AX-77003446	AX-77003561	DNPEP
7	726	22675716	22747880	33	72165	1	Loss	AX-77004667	AX-77004851	AAMP
7	727	24992352	25016143	18	23792	1	Loss	AX-77010824	AX-77010900	No gene
7	728	25242708	25286221	27	43514	1	Loss	AX-77011519	AX-77011621	No gene
7	729	25953589	25993892	23	40304	1	Loss	AX-77013248	AX-80878490	GLI2
7	730	28965496	28990050	22	24555	1	Loss	AX-77021160	AX-77021223	INSIG2
7	731	29355621	29590872	162	235252	1	Loss	AX-77022239	AX-77022861	No gene
7	732	29709563	29726105	12	16543	3	Gain	AX-77023216	AX-77023261	No gene
7	733	31931541	31941653	6	10113	1	Loss	AX-77029123	AX-77029144	No gene
7	734	31986983	32001958	9	14976	1	Loss	AX-77029265	AX-80864990	No gene
7	735	32046732	32233465	126	186734	1	Loss	AX-77029426	AX-77029947	No gene
7	736	32456251	32513613	47	57363	1	Loss	AX-77030545	AX-77030711	No gene
7	737	32932705	32972291	26	39587	1	Loss	AX-77031832	AX-77031942	ARHGAP15
7	738	35083710	35104564	20	20855	1	Loss	AX-80768337	AX-77037723	No gene
7	739	35543420	35588292	33	44873	1	Loss	AX-77038897	AX-80954131	CACNB4
7	740	35692694	35705604	9	12911	1	Loss	AX-80855933	AX-77039287	No gene
7	741	36267454	36408629	88	141176	1	Loss	AX-77040827	AX-77041238	No gene
7	742	36437512	36452800	9	15289	3	Mixed	AX-80926535	AX-77041357	ATVR1
7	743	36639225	36664256	12	25032	3	Gain	AX-77041863	AX-80791296	No gene
8	744	161914	207419	23	45506	0	Loss	AX-77071450	AX-77083300	No gene
8	745	1115996	1147095	17	31100	1	Loss	AX-77059184	AX-77059923	VAV3
8	746	2182338	2191579	8	9242	1	Loss	AX-80966544	AX-80840995	NEK7
8	747	2309966	2472739	104	162774	1	Loss	AX-77090115	AX-77094473	No gene
8	748	2547042	2578471	24	31430	1	Loss	AX-77096480	AX-77097323	No gene

8	749	2977759	3051360	46	73602	1	Loss	AX-80748764	AX-77107006	No gene
8	750	3784102	3917318	79	133217	1	Loss	AX-77108841	AX-77109148	HSD17B7
8	751	4259374	4355522	55	96149	1	Loss	AX-77109917	AX-77110150	PRDX6
8	752	4715620	4744804	16	29185	1	Loss	AX-77111049	AX-80825640	ITPA
8	753	5244742	5332752	38	88011	1	Loss	AX-77112350	AX-77112558	PBX1
8	754	5629853	5736951	60	107099	1	Loss	AX-77113319	AX-77113565	GLUL
8	755	5785543	5841275	34	55733	1	Loss	AX-77113674	AX-77113826	STX10
8	756	6722845	6745798	11	22954	1	Loss	AX-77115995	AX-77116053	No gene
8	757	8816519	8862946	23	46428	0	Loss	AX-77120953	AX-77121068	No gene
8	758	8989813	9023348	11	33536	1	Loss	AX-77121387	AX-80860256	No gene
8	759	9543850	9585336	16	41487	0	Loss	AX-77122616	AX-77122724	No gene
8	760	9721737	9830043	53	108307	0	Loss	AX-77123019	AX-77123259	PLA2G4A
8	761	11126796	11142376	7	15581	1	Loss	AX-77057118	AX-77057161	No gene
8	762	12859966	12944840	54	84875	0	Loss	AX-77060826	AX-77061039	No gene
8	763	15368527	15399203	19	30677	1	Loss	AX-77067299	AX-80967392	No gene
8	764	15484429	15551963	40	67535	0	Loss	AX-77067618	AX-77067793	No gene
8	765	16720839	16756941	26	36103	1	Loss	AX-80976769	AX-77071150	No gene
8	766	16895547	16951822	31	56276	0	Loss	AX-77071566	AX-77071722	No gene
8	767	17184257	17226198	30	41942	1	Loss	AX-77072352	AX-77072461	No gene
8	768	18059077	18098178	30	39102	1	Loss	AX-77074594	AX-77074698	No gene
8	769	18164285	18179554	9	15270	1	Loss	AX-77074879	AX-80960364	No gene
8	770	18343280	18376192	15	32913	1	Loss	AX-77075388	AX-77075483	No gene
8	771	19722359	19765815	22	43457	1	Loss	AX-77078988	AX-77079081	CDC20
8	772	21972304	21994401	19	22098	1	Loss	AX-77084697	AX-77084768	TAL1
8	773	24064514	24073185	6	8672	0	Loss	AX-77090040	AX-77090060	RNF11
8	774	24365467	24373962	6	8496	0	Loss	AX-77090880	AX-77090898	No gene
8	775	24958196	24990469	26	32274	3	Gain	AX-77092519	AX-77092625	No gene
8	776	28337148	28385184	33	48037	1	Loss	AX-77101761	AX-77101917	JAK1
8	777	28513164	28538630	21	25467	1	Loss	AX-77102325	AX-77102400	No gene
8	778	29132835	29144376	10	11542	0	Loss	AX-77104151	AX-80891497	No gene
8	779	29150520	29161277	14	10758	0	Loss	AX-77104226	AX-77104264	No gene
9	780	765728	847197	59	81470	1	Loss	AX-80909456	AX-77170415	No gene
9	781	892506	925231	21	32726	1	Loss	AX-77171653	AX-77172552	LOC424740
9	782	1269265	1280334	10	11070	1	Loss	AX-77184312	AX-77184674	PROC
9	783	3134769	3149668	14	14900	3	Gain	AX-77167027	AX-77167071	No gene
9	784	3703902	3729181	21	25280	1	Loss	AX-77168548	AX-80872250	No gene
9	785	4599704	4643806	30	44103	1	Loss	AX-77171026	AX-77171140	AQP12A
9	786	4806968	4925569	78	118602	1	Loss	AX-77171582	AX-77171908	MIR1704
9	787	5046851	5151446	78	104596	1	Loss	AX-77172258	AX-80915098	BOK
9	788	5180737	5209202	23	28466	1	Loss	AX-77172630	AX-77172717	UBE2G2
9	789	5637083	5649065	8	11983	0	Loss	AX-77173779	AX-77173818	PIK3CB
9	790	7022234	7080514	51	58281	0	Loss	AX-77177689	AX-77177850	No gene
9	791	7255674	7260004	6	4331	0	Loss	AX-77178355	AX-77178371	No gene
9	792	9675303	9679796	6	4494	1	Loss	AX-77185533	AX-77185551	No gene
9	793	10147202	10161050	13	13849	0	Loss	AX-77186936	AX-77186973	No gene
9	794	12351025	12363623	11	12599	1	Loss	AX-77129543	AX-77129580	No gene
9	795	12795793	12841178	34	45386	1	Loss	AX-77130902	AX-77131032	No gene
9	796	14776170	14832511	37	56342	1	Loss	AX-77136742	AX-77136908	BCL6
9	797	14967193	15078506	64	111314	1	Loss	AX-80803575	AX-77137628	SLC51A
9	798	15318386	15384417	43	66032	1	Loss	AX-77138358	AX-77138537	NCL
9	799	15584399	15647944	45	63546	1	Loss	AX-77139111	AX-77139295	No gene
9	800	15839760	16029972	113	190213	1	Loss	AX-80818937	AX-77140390	AP2M1
9	801	16176540	16206543	31	30004	1	Loss	AX-77140821	AX-80868284	FETUB
9	802	17479420	17489284	8	9865	1	Loss	AX-77144912	AX-77144939	NDUF85
9	803	17605616	17644248	36	38633	1	Loss	AX-77145300	AX-77145420	PIK3CA
9	804	17896130	17904281	8	8152	1	Loss	AX-77146234	AX-77146253	No gene
9	805	18278581	18294538	13	15958	1	Loss	AX-77147282	AX-77147342	No gene
9	806	18984581	18990253	7	5673	1	Loss	AX-77149595	AX-77149615	NLGN1
9	807	22184218	22187800	6	3583	0	Loss	AX-77159981	AX-77159992	No gene
9	808	23448024	23477911	21	29888	1	Loss	AX-77164100	AX-77164196	P2RY1
9	809	23506536	23552474	37	45939	1	Loss	AX-77164283	AX-77164418	MBNL1
10	810	2346748	2368842	19	22095	1	Loss	AX-75603664	AX-75603733	CPLX3
10	811	2482967	2574517	76	91551	1	Loss	AX-80803681	AX-75604365	COMMD4
10	812	3506220	3539267	38	33048	0	Loss	AX-75607114	AX-75607229	No gene
10	813	3662130	3674895	16	12766	1	Loss	AX-75607592	AX-75607643	WDR61
10	814	4280406	4288619	8	8214	0	Loss	AX-75609532	AX-75609560	No gene
10	815	4946941	4957609	12	10669	0	Loss	AX-75611695	AX-75611727	RORA
10	816	5405167	5409706	7	4540	1	Loss	AX-75613216	AX-75613230	No gene
10	817	5752274	5789792	24	37519	0	Loss	AX-75614320	AX-75614408	No gene
10	818	5863714	5883811	16	20098	0	Loss	AX-75614616	AX-75614669	No gene
10	819	5986799	6036998	45	50200	0	Loss	AX-75614958	AX-75615100	No gene
10	820	7079052	7136672	48	57621	0	Loss	AX-75618353	AX-75618545	ALDH1A2
10	821	7183484	7191767	11	8284	1	Loss	AX-75618655	AX-75618676	No gene
10	822	8310255	8329641	20	19387	0	Loss	AX-75622119	AX-80788686	No gene
10	823	9082210	9090396	11	8187	1	Loss	AX-80889466	AX-75624578	LYSMD2
10	824	10054605	10114051	62	59447	1	Loss	AX-75628026	AX-75628239	MYEF2
10	825	10507920	10561535	58	53616	1	Loss	AX-75568539	AX-75568704	FGF7
10	826	10632100	10651261	24	19162	1	Loss	AX-75568957	AX-75569029	No gene
10	827	10667404	10682490	20	15087	1	Loss	AX-75569089	AX-75569138	MIR147-1
10	828	11942749	11947137	6	4389	0	Loss	AX-75573593	AX-75573622	No gene
10	829	12570300	12578425	10	8126	1	Loss	AX-75575848	AX-75575878	FAH
10	830	13156638	13198271	37	41634	1	Loss	AX-75577919	AX-75578068	MRPL46
10	831	13327188	13334157	9	6970	0	Loss	AX-75578500	AX-75578519	NTRK3
10	832	14114929	14118607	9	3679	1	Loss	AX-75581335	AX-81001509	No gene
10	833	15713732	15725981	9	12250	1	Loss	AX-75586797	AX-75586833	No gene
10	834	16124047	16151835	17	27789	1	Loss	AX-80809731	AX-80870427	No gene
10	835	17010052	17013665	6	3614	1	Loss	AX-75591274	AX-75591291	No gene
10	836	19159960	19184359	31	24400	1	Loss	AX-75599246	AX-75599324	CALML4
10	837	19502786	19534953	25	32168	1	Loss	AX-75600490	AX-75600585	No gene
10	838	20031893	20067660	19	35768	1	Loss	AX-75602445	AX-75602568	AP3S2
10	839	20111115	20151158	18	40044	1	Loss	AX-75602703	AX-75602800	FURIN
11	840	172319	187988	13	15670	1	Loss	AX-75635688	AX-75640071	No gene
11	841	573463	604051	17	30589	1	Loss	AX-75664382	AX-80971150	No gene
11	842	1031903	1090052	37	58150	1	Loss	AX-75677765	AX-75629947	CTRL

11	843	1115320	1126278	12	10959	0	Loss	AX-80750282	AX-75630739	LOC107049164
11	844	1142812	1167021	19	24210	1	Loss	AX-75631248	AX-75631878	LOC101747680
11	845	1203740	1233711	22	29972	1	Loss	AX-75632961	AX-75633871	AARS1
11	846	1703064	1782965	51	79902	1	Loss	AX-75646518	AX-75648783	HYDIN
11	847	2025659	2105439	61	79781	1	Loss	AX-75655343	AX-75655649	CFDP1
11	848	2587079	2624689	23	37611	1	Loss	AX-75656931	AX-80782161	No gene
11	849	5147852	5185536	21	37685	0	Loss	AX-75662265	AX-75662362	No gene
11	850	6016794	6038023	18	21230	0	Loss	AX-75664808	AX-75664865	No gene
11	851	10043899	10115823	57	71925	1	Loss	AX-75676737	AX-75676968	NUDT19
11	852	10509014	10541686	19	32673	0	Loss	AX-75678111	AX-80981877	PEPD
11	853	10730488	10823365	64	92878	1	Loss	AX-80844547	AX-75629610	No gene
11	854	12116686	12202195	73	85510	1	Loss	AX-75633035	AX-75633287	No gene
11	855	12621492	12692791	59	71300	1	Mixed	AX-75634450	AX-80887269	No gene
11	856	12764482	12773936	10	9455	0	Loss	AX-75634861	AX-75634888	No gene
11	857	12822598	12872883	49	50286	1	Loss	AX-75635018	AX-75635171	No gene
11	858	13090420	13254204	119	163785	1	Loss	AX-75635757	AX-75636238	CDH8
11	859	13772990	13785958	10	12969	0	Loss	AX-75637660	AX-75637698	MIR6595
11	860	14136761	14146018	10	9258	1	Loss	AX-75638683	AX-75638708	No gene
11	861	16395240	16418751	13	23512	1	Loss	AX-75644974	AX-80900372	CDH13
11	862	16717340	16726798	12	9459	1	Loss	AX-75645875	AX-75645904	No gene
11	863	16861736	16868174	10	6439	1	Loss	AX-80886574	AX-75646312	No gene
11	864	17870794	17990000	56	119207	1	Loss	AX-75649183	AX-75649480	No gene
11	865	18775797	18809740	22	33944	1	Loss	AX-75651648	AX-75651748	CBFA2T3
11	866	18875867	19174146	179	298280	1	Loss	AX-75651896	AX-75652677	FANCA
11	867	19384706	19455005	42	70300	1	Loss	AX-75653295	AX-75653495	No gene
12	868	781983	801671	15	19689	1	Loss	AX-80742973	AX-75722760	GLT8D1
12	869	1163048	1250587	68	87540	3	Gain	AX-75681574	AX-75684110	RFT1
12	870	1266496	1297984	23	31489	0	Loss	AX-75684566	AX-75685491	No gene
12	871	1449156	1483799	16	34644	1	Mixed	AX-75689826	AX-75690840	NPR12
12	872	1850448	1872286	19	21839	1	Loss	AX-75701992	AX-75702695	CISH
12	873	2818341	3009804	126	191464	1	Loss	AX-75709687	AX-75710224	MIR135A1
12	874	3083810	3254044	109	170235	1	Loss	AX-75710413	AX-75710858	GNAI2
12	875	3573876	3601562	20	27687	0	Loss	AX-75711760	AX-75711842	No gene
12	876	4360538	4376728	10	16191	1	Loss	AX-75713988	AX-75714036	No gene
12	877	5705035	5739692	32	34658	1	Loss	AX-80793133	AX-75717805	HDAC11
12	878	5861581	5876927	16	15347	1	Loss	AX-75718156	AX-75718192	No gene
12	879	6675036	6696162	19	21127	1	Loss	AX-75720489	AX-75720554	No gene
12	880	7441494	7528092	75	86599	1	Loss	AX-75722746	AX-75723017	No gene
12	881	8076301	8080273	8	3973	1	Loss	AX-75724630	AX-80984384	No gene
12	882	8838638	8848890	9	10253	1	Loss	AX-75727017	AX-75727049	No gene
12	883	8937166	9102516	123	165351	1	Loss	AX-75727328	AX-75727768	SLC26A6
12	884	9130950	9207911	52	76962	1	Loss	AX-75727859	AX-75728055	GATA2
12	885	11022439	11056682	18	34244	1	Loss	AX-75681167	AX-80922242	No gene
12	886	11499070	11525888	10	26819	1	Loss	AX-75682417	AX-75682475	ARPC4
12	887	11569949	11612863	24	42915	1	Loss	AX-75682609	AX-75682705	LAMB2
12	888	19281915	19322968	32	41054	1	Loss	AX-75705640	AX-75705778	CAV3
13	889	88869	986877	68	98009	1	Loss	AX-75753695	AX-75756062	CD14
13	890	1034184	1054232	13	20049	1	Loss	AX-80745008	AX-80938760	No gene
13	891	1746688	1753701	7	7014	0	Mixed	AX-75733611	AX-75733804	No gene
13	892	1876523	2002885	72	126363	1	Loss	AX-80944984	AX-75739780	HDAC3
13	893	2557786	2590051	24	32266	1	Loss	AX-75750148	AX-80765159	No gene
13	894	2939454	2962946	23	23493	1	Mixed	AX-75751058	AX-75751125	No gene
13	895	3847777	3911389	37	63613	0	Loss	AX-75753258	AX-75753411	LCP2
13	896	4517646	4525351	7	7706	1	Loss	AX-80745904	AX-75754909	SLIT3
13	897	5869555	5875793	6	6239	1	Loss	AX-75758262	AX-75758272	No gene
13	898	6159124	6177884	14	18761	0	Loss	AX-75759008	AX-75759060	No gene
13	899	6258108	6280610	18	22503	0	Loss	AX-75759268	AX-80973643	No gene
13	900	7741983	7802187	47	60205	3	Gain	AX-75763221	AX-75763373	MIR146A
13	901	8491368	8570330	38	78963	1	Loss	AX-75765124	AX-75765320	MIR143
13	902	10329677	10392178	24	62502	1	Loss	AX-75769488	AX-75769630	MIR7460
13	903	11714379	11727765	10	13387	1	Loss	AX-75732694	AX-75732727	No gene
13	904	12249607	12263792	8	14186	1	Loss	AX-75734118	AX-75734147	No gene
13	905	12855473	13118125	163	262653	1	Loss	AX-80837671	AX-75736346	ANXA6
13	906	14004880	14060649	39	55770	3	Gain	AX-75738658	AX-75738783	RASGEF1C
13	907	14914009	14975649	37	61641	1	Loss	AX-75740904	AX-75741055	No gene
13	908	15870251	16025635	94	155385	1	Loss	AX-75743434	AX-75743831	PPP2CA
13	909	16895590	16995112	77	99523	1	Loss	AX-75746098	AX-75746335	IRF1
13	910	17144360	17167329	18	22970	1	Loss	AX-77279212	AX-80868469	GDF9
13	911	17754688	17778384	19	23697	1	Loss	AX-75748124	AX-75748183	No gene
14	912	1673142	1686327	13	13186	0	Loss	AX-75788228	AX-75788269	No gene
14	913	1868552	1889001	23	20450	0	Loss	AX-75788785	AX-75788838	No gene
14	914	2100774	2125280	25	24507	0	Loss	AX-75789459	AX-75789527	No gene
14	915	3176306	3245355	61	69050	1	Loss	AX-75792647	AX-75792863	GRIFIN
14	916	4029349	4051249	20	21901	1	Loss	AX-80897163	AX-75795466	MIR12224
14	917	4081106	4098979	14	17874	1	Loss	AX-75795556	AX-75795612	WIPI2
14	918	4121992	4255289	90	133298	1	Loss	AX-75795688	AX-75796057	ACTB
14	919	4437628	4555579	85	117952	1	Loss	AX-75796648	AX-75796965	MAP2K3
14	920	4912181	4959169	32	46989	1	Loss	AX-75798054	AX-81004149	MIR1682
14	921	5006842	5100360	66	93519	1	Loss	AX-80943986	AX-75798636	ALKBH5
14	922	5162339	5200189	39	37851	1	Loss	AX-75798840	AX-75798959	GRAPL
14	923	5247634	5279574	29	31941	1	Loss	AX-75799107	AX-75799221	EPN2
14	924	6057133	6078499	20	21367	1	Loss	AX-75801550	AX-75801628	FAHD1
14	925	6211770	6241137	26	29368	1	Loss	AX-75801970	AX-75802049	SYNGR3
14	926	8324175	8328820	7	4646	3	Gain	AX-75808532	AX-75808546	No gene
14	927	8879555	8942935	61	63381	1	Loss	AX-75810378	AX-75810595	No gene
14	928	10918395	10985514	67	67120	3	Gain	AX-75773346	AX-75773588	No gene
14	929	12140117	12209434	27	69318	1	Loss	AX-75777666	AX-75787645	HBA1
14	930	12713624	12822004	60	108381	1	Loss	AX-75779301	AX-80824937	COR07
14	931	12882137	12908782	25	26646	1	Loss	AX-80867418	AX-80927821	LOC772096
14	932	13057958	13135625	50	77668	1	Loss	AX-75780394	AX-75780626	NME4
14	933	13196223	13260855	48	64633	1	Loss	AX-75780758	AX-75780975	FAM173A
14	934	13307847	13340853	30	33007	1	Loss	AX-75781140	AX-80886915	UBN1
14	935	13481050	13565479	64	84430	1	Loss	AX-75781744	AX-80893820	No gene
14	936	13612052	13665969	36	53918	1	Loss	AX-75782207	AX-75782502	RAB40C

14	937	13727313	13815423	87	88111	1	Loss	AX-80790466	AX-75783084	IFT140
14	938	13878454	13940845	70	62392	1	Loss	AX-80793689	AX-75783523	AMDHD2
14	939	13969298	14052316	71	83019	1	Loss	AX-75783622	AX-75783899	MIR1588
14	940	14249404	14268581	24	19178	1	Loss	AX-75784552	AX-75784628	C14H16orf59
14	941	14298061	14310102	15	12042	1	Loss	AX-75784744	AX-75784800	MIR1715
15	942	718516	755315	28	36800	0	Loss	AX-75843355	AX-75844409	MIR12226
15	943	883149	906717	21	23569	0	Loss	AX-80986016	AX-75849808	No gene
15	944	2030677	2039885	11	9209	1	Loss	AX-75826717	AX-75826747	No gene
15	945	2928917	2937007	6	8091	0	Loss	AX-75829363	AX-75829390	STX2
15	946	4421559	4430546	11	8988	1	Loss	AX-75833879	AX-75833908	No gene
15	947	4848772	4851149	6	2378	0	Loss	AX-75835088	AX-75835102	No gene
15	948	6474118	6556776	83	82659	1	Loss	AX-75840205	AX-75840443	CMKLR1
15	949	7168696	7234333	63	65638	1	Loss	AX-80752519	AX-75842267	CRYBA4
15	950	7362598	7395879	20	33282	1	Loss	AX-75842691	AX-75842789	No gene
15	951	7892915	7991686	85	98772	1	Loss	AX-75844585	AX-75844904	IGLL1
15	952	8885557	8895319	11	9763	1	Loss	AX-75848089	AX-75848127	No gene
15	953	9794425	9834825	35	40401	1	Loss	AX-75814832	AX-75814956	No gene
15	954	10011154	10055641	21	44488	1	Loss	AX-75815550	AX-75815680	MIR1640
15	955	10115804	10170236	46	54433	1	Loss	AX-75815877	AX-75816065	DGCR6
15	956	10771767	10825805	53	54039	1	Loss	AX-75818083	AX-75818267	No gene
15	957	10902423	10920236	14	17814	1	Loss	AX-75818515	AX-75818582	No gene
15	958	10969334	10986858	14	17525	1	Loss	AX-75818758	AX-75818813	MTMR3
15	959	11101038	11122278	19	21241	1	Loss	AX-75819222	AX-75819302	NF2
15	960	11263752	11293355	22	29604	1	Loss	AX-75819762	AX-80882020	No gene
15	961	11437455	11462338	21	24884	1	Loss	AX-75820304	AX-75820401	No gene
16	962	51519	68165	37	16647	1	Loss	AX-75852144	AX-75852364	C4
16	963	70151	89031	19	18881	0	Loss	AX-80954596	AX-80824437	BF1
16	964	90518	119081	52	28564	1	Loss	AX-75852459	AX-75851066	BLB1
16	965	189722	197891	33	8170	1	Loss	AX-75851513	AX-75851579	SLURP1
17	966	1121319	1210930	72	89612	1	Loss	AX-75879546	AX-75882750	PTGDS
17	967	1419455	1487622	67	68168	1	Loss	AX-75854540	AX-75854726	ENTPD8
17	968	1842470	1898383	50	55914	1	Loss	AX-75855820	AX-75855975	RGS3
17	969	1946451	1963711	16	17261	1	Loss	AX-75856124	AX-75856162	No gene
17	970	2254044	2311755	56	57712	1	Loss	AX-75857129	AX-75857315	No gene
17	971	2407892	2493746	65	85855	1	Loss	AX-75857602	AX-80975821	ARRDC1
17	972	2892618	2961264	39	68647	1	Loss	AX-80747086	AX-75859272	MIR7442
17	973	4765068	4774148	11	9081	0	Loss	AX-75865120	AX-75865150	No gene
17	974	5408555	5475999	47	67445	1	Loss	AX-75867308	AX-75867545	CDK9
17	975	5803963	5818625	19	14663	1	Loss	AX-75868728	AX-75868785	SPOUT1
17	976	5901462	5928799	23	27338	1	Loss	AX-75869022	AX-75869107	SH3GLB2
17	977	5976224	6166952	169	190729	1	Loss	AX-75869265	AX-75869923	ASB6
17	978	6327915	6380018	49	52104	1	Loss	AX-75870497	AX-75870690	ASS1
17	979	6526973	6557041	32	30069	1	Loss	AX-75871229	AX-75871327	No gene
17	980	6599639	6646822	46	47184	1	Loss	AX-75871467	AX-75871621	No gene
17	981	7223842	7298751	69	74910	1	Loss	AX-75873724	AX-75873991	CEL
17	982	7419771	7474730	55	54960	1	Loss	AX-75874465	AX-75874658	TMEM8C
17	983	8213239	8320514	86	107276	1	Loss	AX-75877210	AX-75877583	EGFL7
17	984	8407162	8434668	31	27507	1	Loss	AX-75877913	AX-75878006	No gene
17	985	8704436	8733835	32	29400	1	Loss	AX-75878972	AX-75879081	KCNT1
18	986	494037	530751	30	36715	3	Gain	AX-75898221	AX-75899414	MYH1A
18	987	1075135	1089548	19	14414	1	Loss	AX-75885689	AX-75886191	No gene
18	988	1317362	1333839	15	16478	3	Gain	AX-75888398	AX-75888447	No gene
18	989	1693378	1728066	25	34689	1	Loss	AX-75889598	AX-75889690	NDEL1
18	990	1855925	1868661	15	12737	1	Loss	AX-75890072	AX-80753754	MYH10
18	991	1974345	2040939	17	66595	1	Loss	AX-77275862	AX-80864219	PIK3R5
18	992	2151218	2178655	29	27438	1	Loss	AX-80760666	AX-75890653	STX8
18	993	2246152	2316511	62	70360	1	Loss	AX-75890873	AX-75891091	FAM188B
18	994	3523234	3539516	19	16283	1	Loss	AX-75895128	AX-75895191	No gene
18	995	4181107	4215032	33	33926	1	Loss	AX-75897233	AX-75897335	No gene
18	996	4321720	4419005	72	97286	1	Loss	AX-80777759	AX-75897993	AANAT
18	997	4462446	4559111	74	96666	1	Loss	AX-75898125	AX-75898433	EXOC7
18	998	4685947	4725352	43	39406	1	Loss	AX-75898815	AX-75898928	WBP2
18	999	4768727	4800112	36	31386	1	Loss	AX-75899071	AX-75899168	No gene
18	1000	5577361	5584793	8	7433	0	Loss	AX-75901823	AX-75901848	No gene
18	1001	7963352	7980123	24	16772	1	Loss	AX-75910292	AX-75910361	No gene
18	1002	9255945	9279333	19	23389	1	Loss	AX-80880451	AX-75914960	MIR338
18	1003	9785675	9910846	85	125172	1	Loss	AX-80852102	AX-75917097	MIR7443
18	1004	9970448	10005222	27	34775	1	Loss	AX-75917215	AX-75917324	GCGR
18	1005	10305904	10331032	19	25129	0	Loss	AX-75885499	AX-80773375	No gene
18	1006	10364066	10416144	36	52079	1	Loss	AX-75885709	AX-75885870	No gene
18	1007	10584662	10634829	38	50168	1	Loss	AX-75886480	AX-75886645	TMEM104
19	1008	382	33870	26	33489	1	Loss	AX-75927242	AX-75924335	MYH7
19	1009	371973	382196	11	10224	1	Loss	AX-75928864	AX-75929170	No gene
19	1010	505261	526457	17	21197	1	Loss	AX-75933354	AX-75934060	MIR142
19	1011	647619	658392	23	10774	1	Loss	AX-75184021	AX-75942054	No gene
19	1012	1831113	1835391	8	4279	1	Loss	AX-75921471	AX-75921488	No gene
19	1013	2603906	2613064	10	9159	1	Loss	AX-75924125	AX-75924150	GATSL2
19	1014	2644953	2650003	7	5051	1	Loss	AX-75924258	AX-75924285	No gene
19	1015	2789716	2847643	18	57928	1	Loss	AX-80943091	AX-75924678	LAT2
19	1016	3067721	3075281	8	7561	0	Loss	AX-75925408	AX-75925432	No gene
19	1017	3794084	3804593	15	10510	1	Loss	AX-75928065	AX-75928101	No gene
19	1018	4150841	4231810	70	80970	1	Loss	AX-75929220	AX-75929490	HSPB1
19	1019	4732373	4763048	31	30676	1	Loss	AX-75931116	AX-75931208	No gene
19	1020	5010127	5022888	16	12762	3	Gain	AX-75932004	AX-75932051	KCTD7
19	1021	5061806	5127920	64	66115	1	Loss	AX-75932199	AX-80759302	No gene
19	1022	5329291	5345449	16	16159	1	Loss	AX-75933143	AX-75933194	No gene
19	1023	5476874	5585580	81	108707	1	Loss	AX-75933637	AX-75933988	DPH1
19	1024	5733396	5763498	19	30103	1	Loss	AX-75934502	AX-75934589	ALDOC
19	1025	5794463	5960273	139	165811	1	Loss	AX-75934699	AX-75935277	CRYBA1
19	1026	6297857	6342417	28	44561	1	Loss	AX-75936454	AX-75936586	No gene
19	1027	6809522	6828685	21	19164	3	Gain	AX-75938209	AX-75938299	ALDH3A2
19	1028	6914008	6925805	11	11798	1	Loss	AX-75938573	AX-75938611	No gene
20	1029	1529788	1568633	31	38846	0	Loss	AX-76208752	AX-76208882	No gene
20	1030	2067101	2085968	8	18868	1	Loss	AX-80794552	AX-76210323	MIR7453

20	1031	2282757	2358160	53	75404	1	Loss	AX-76210821	AX-76211012	CBFA2T2
20	1032	2751709	2822202	53	70494	1	Loss	AX-76211991	AX-76212183	No gene
20	1033	3908239	3950881	27	42643	1	Loss	AX-76215151	AX-76215258	PPP1R16B
20	1034	4122239	4221625	85	99387	1	Loss	AX-76215680	AX-76215986	No gene
20	1035	5113198	5164797	32	51600	1	Loss	AX-80874116	AX-76218550	No gene
20	1036	5207118	5265227	44	58110	1	Loss	AX-76218679	AX-76218835	BLCAP
20	1037	5287593	5329870	31	42278	1	Loss	AX-76218893	AX-76219002	SDC4
20	1038	5487269	5529921	25	42653	1	Loss	AX-76219465	AX-80810239	ADA
20	1039	5574788	5660704	56	85917	1	Loss	AX-76219703	AX-76219930	HNFA4
20	1040	6011734	6069054	51	57321	1	Loss	AX-76220757	AX-76220938	No gene
20	1041	7253918	7296988	34	43071	1	Loss	AX-76224398	AX-76224519	No gene
20	1042	10070302	10135632	28	65331	1	Loss	AX-76231589	AX-76197492	PSMF1
20	1043	10188896	10223492	27	34597	1	Loss	AX-76197638	AX-80954279	BCL2L1
20	1044	10251384	10284130	20	32747	1	Loss	AX-76197807	AX-76197889	IRF9
20	1045	10716222	10807052	47	90831	1	Loss	AX-76199060	AX-76199301	MIR12245
20	1046	10879680	10913467	21	33788	1	Loss	AX-76199500	AX-76199579	No gene
20	1047	12534867	12544363	11	9497	0	Loss	AX-76203955	AX-76203975	PFND4
20	1048	12697720	12727824	26	30105	0	Loss	AX-76204434	AX-76204508	No gene
20	1049	12858682	12864570	7	5889	1	Loss	AX-76204895	AX-80762545	MIR1619
21	1050	123021	192201	37	69181	1	Loss	AX-76231782	AX-76234749	PADI1
21	1051	270242	306098	34	35857	0	Loss	AX-76241178	AX-76242816	PER3
21	1052	574140	605909	15	31770	1	Loss	AX-76255291	AX-76256683	ICMT
21	1053	2099153	2123437	45	24285	3	Gain	AX-76236716	AX-76236835	SSU72
21	1054	2485310	2494876	13	9567	1	Loss	AX-76238358	AX-76238392	No gene
21	1055	2675044	2691239	23	16196	1	Loss	AX-76239170	AX-76239231	LOC419429
21	1056	2738920	2765851	31	26932	1	Loss	AX-76239380	AX-76239481	AGRN
21	1057	2893355	2931170	40	37816	1	Loss	AX-76239958	AX-80859911	NOC2L
21	1058	3524327	3535871	19	11545	1	Loss	AX-76242678	AX-76242735	No gene
21	1059	4220220	4251329	31	31110	1	Loss	AX-76245831	AX-76245965	No gene
21	1060	5140651	5143529	7	2879	0	Loss	AX-76249989	AX-76250000	No gene
21	1061	5177803	5190839	23	13037	1	Loss	AX-76250179	AX-76250270	No gene
21	1062	5554332	5568083	22	13752	1	Loss	AX-76252157	AX-76252215	CNP3
21	1063	6333455	6356288	37	22834	1	Loss	AX-76255619	AX-76255725	WNT4
21	1064	6543659	6622106	59	78448	1	Loss	AX-76256559	AX-76256825	ALPL
22	1065	254230	282932	31	28703	3	Gain	AX-76264673	AX-80966212	No gene
22	1066	1282942	1304653	10	21712	1	Loss	AX-80877440	AX-76259790	TNFRSF10B
22	1067	2786707	2803903	25	17197	1	Loss	AX-76265746	AX-76265840	No gene
22	1068	2828769	2852499	31	23731	1	Loss	AX-80800512	AX-76265971	ACTG2
22	1069	2892190	2899017	17	6828	1	Loss	AX-76266103	AX-76266145	MTHFD2
22	1070	3001474	3566902	30	565429	1	Loss	AX-80833808	AX-76266832	NCAPH
22	1071	3599437	3613945	8	14509	1	Loss	AX-76266963	AX-76267022	TGFA
22	1072	4122154	4129667	19	7514	0	Loss	AX-76270023	AX-76270071	No gene
22	1073	4352672	4359332	20	6661	0	Loss	AX-76271712	AX-76271759	No gene
22	1074	4634704	4679301	28	44598	1	Loss	AX-80940108	AX-76273463	MIR12247-1
23	1075	442664	465085	27	22422	1	Loss	AX-76290499	AX-76291492	MIR3531
23	1076	589281	599898	11	10618	1	Loss	AX-76296089	AX-76296133	FABP3
23	1077	739482	776471	53	36990	1	Loss	AX-80843589	AX-76296952	No gene
23	1078	1082982	1177411	96	94430	1	Loss	AX-76275986	AX-76276354	No gene
23	1079	1811514	1908956	117	97443	1	Loss	AX-76279014	AX-76279415	SLC9A1
23	1080	2007317	2105185	40	97869	1	Loss	AX-80846411	AX-76280007	FAM76A
23	1081	2149239	2208545	41	59307	1	Loss	AX-76280174	AX-76280382	ID3
23	1082	2381369	2423542	51	42174	1	Loss	AX-76281122	AX-76281265	RHCE
23	1083	2595993	2684449	123	88457	1	Loss	AX-80980485	AX-76282409	EPB41
23	1084	3194811	3243737	56	48927	1	Loss	AX-76284650	AX-76284867	No gene
23	1085	4098619	4110416	10	11798	1	Loss	AX-80979261	AX-80929831	TRAPPC3
23	1086	4422620	4476944	52	54325	1	Loss	AX-76290366	AX-76290582	GJA4
23	1087	4858438	4890139	37	31702	1	Loss	AX-76292320	AX-76292443	COL9A2
23	1088	4968335	5027331	40	58997	1	Loss	AX-76292784	AX-76293045	No gene
23	1089	5252464	5271118	16	18655	1	Loss	AX-76294039	AX-76294129	No gene
23	1090	5295395	5383432	66	88038	1	Mixed	AX-76294249	AX-80824723	AZIN2
24	1091	247115	382890	152	135776	1	Loss	AX-76304361	AX-80739143	CHEK1
24	1092	407243	463321	59	56079	1	Loss	AX-76311281	AX-76313635	FAM118B
24	1093	1564358	1594335	43	29978	1	Loss	AX-76300550	AX-76300691	No gene
24	1094	3072305	3083378	19	11074	1	Loss	AX-76306825	AX-76306868	HSPA8
24	1095	4143739	4212728	67	68990	1	Loss	AX-76311329	AX-76311625	MCAM
24	1096	4256559	4291441	39	34883	1	Loss	AX-80850067	AX-76311937	No gene
24	1097	4937087	4941990	7	4904	0	Loss	AX-76314689	AX-76314715	No gene
24	1098	5293505	5432693	154	139189	1	Loss	AX-80804656	AX-76316687	FXD1
24	1099	5600323	5681265	90	80943	1	Loss	AX-80805905	AX-76317832	HYOU1
24	1100	6234184	6242705	10	8522	0	Loss	AX-76320427	AX-76320486	No gene
25	1101	918286	947321	35	29036	1	Loss	AX-76327711	AX-80763283	No gene
25	1102	976189	983707	13	7519	1	Loss	AX-80780558	AX-76330728	F-KER
25	1103	1046442	1049940	10	3499	0	Loss	AX-76322617	AX-76322637	LOC396480
25	1104	1232038	1236381	12	4344	1	Loss	AX-76323674	AX-76323700	NCSTN
25	1105	1251952	1276420	26	24469	1	Loss	AX-76323766	AX-76323890	No gene
25	1106	1304881	1330952	22	26072	1	Loss	AX-76327896	AX-80930303	RHBG
25	1107	1665299	1894118	117	228820	1	Loss	AX-76329252	AX-76329603	CHRN2
25	1108	2123254	2203157	55	79904	1	Loss	AX-76324326	AX-76324594	C25H1ORF43
25	1109	2322260	2350652	32	28393	1	Loss	AX-76325277	AX-80980140	ENSA
25	1110	2383427	2411445	35	28019	1	Loss	AX-76325548	AX-76325666	FCRL4
25	1111	2511946	2513695	6	1750	1	Loss	AX-76326136	AX-76326144	No gene
25	1112	2573009	2590272	26	17264	1	Loss	AX-80965033	AX-76326233	ARNT
25	1113	2634857	2723706	72	88850	1	Loss	AX-76326425	AX-80918404	PIP5K1A
26	1114	207240	518493	259	311254	1	Loss	AX-76334826	AX-76349209	ARL8A
26	1115	587332	668890	75	81559	1	Loss	AX-76349689	AX-76350015	No gene
26	1116	904258	913153	10	8896	1	Loss	AX-76351021	AX-76351056	MGAT4C
26	1117	1115602	1148805	16	33204	1	Loss	AX-76331211	AX-80853650	No gene
26	1118	1321714	1336596	15	14883	1	Loss	AX-76331532	AX-76331586	No gene
26	1119	1484960	1556931	97	71972	1	Loss	AX-76332216	AX-76332543	No gene
26	1120	1578153	1605564	29	27412	1	Loss	AX-76332640	AX-76332736	CDKN1A
26	1121	1760945	1769834	11	8890	1	Loss	AX-76333384	AX-80919445	MIR6618
26	1122	1989382	2002201	20	12820	1	Loss	AX-76334415	AX-76334473	CNTN2
26	1123	2334674	2360624	35	25951	1	Loss	AX-76335937	AX-76336043	No gene
26	1124	2630404	2712709	110	82306	1	Loss	AX-76337184	AX-76337548	C4BPG

26	1125	3243736	3261978	27	18243	1	Loss	AX-76340011	AX-76340108	No gene
26	1126	3493109	3507115	18	14007	1	Loss	AX-76341195	AX-76341251	WNT2B
26	1127	3544074	3555087	11	11014	1	Loss	AX-76341457	AX-76341509	MOV10
26	1128	3656951	3665083	15	8133	1	Loss	AX-80876671	AX-76341983	No gene
26	1129	3801993	3810003	11	8011	1	Loss	AX-76342656	AX-76342695	OLFML3
26	1130	4077553	4158636	91	81084	1	Loss	AX-80950619	AX-76344516	MKRN3
26	1131	4184863	4195070	13	10208	1	Loss	AX-76344617	AX-76344660	No gene
26	1132	4342268	4459673	144	117406	1	Loss	AX-76345334	AX-76345838	HMG1
26	1133	4526627	4556401	37	29775	1	Loss	AX-76346176	AX-76346322	No gene
26	1134	4625298	4700805	87	75508	1	Loss	AX-76346631	AX-76346931	BAK1
26	1135	4770230	4980158	209	209929	1	Loss	AX-76347328	AX-76348152	TFEB
27	1136	1056316	1060853	7	4538	0	Loss	AX-76370824	AX-76370835	No gene
27	1137	1401683	1414567	17	12885	1	Loss	AX-80959249	AX-76352568	No gene
27	1138	1467952	1482249	17	14298	1	Loss	AX-76352801	AX-80996642	KIF18B
27	1139	1706289	1809019	74	102731	1	Loss	AX-76353787	AX-76354131	PLEKHM1
27	1140	1873445	1894748	27	21304	1	Mixed	AX-76354405	AX-76354482	PSMC5
27	1141	2569331	2575427	8	6097	1	Loss	AX-76357769	AX-76357795	No gene
27	1142	2844971	2885385	48	40415	1	Loss	AX-76358972	AX-76359150	ACE
27	1143	3064218	3229777	135	165560	1	Loss	AX-76360077	AX-76360606	DLX3
27	1144	3316964	3335743	32	18780	1	Loss	AX-76361025	AX-76361115	No gene
27	1145	3383154	3455494	97	72341	1	Loss	AX-76361358	AX-76361697	NGFR
27	1146	3626425	3634635	15	8211	1	Loss	AX-76362560	AX-76362606	PHOSPHO1
27	1147	4213695	4434449	110	220755	1	Loss	AX-76364675	AX-80839682	CBX1
27	1148	4469238	4484473	19	15236	1	Loss	AX-76365324	AX-76365380	LASP1
27	1149	4501441	4544086	41	42646	1	Loss	AX-76365459	AX-76365629	RPL19
27	1150	4789874	4867908	77	78035	3	Mixed	AX-76366497	AX-76366789	MED24
27	1151	4916063	4924540	15	8478	3	Gain	AX-76367005	AX-76367059	KRT22
27	1152	5046312	5083450	30	37139	1	Loss	AX-76367726	AX-76367902	JUP
27	1153	5184779	5321286	108	136508	1	Loss	AX-80773329	AX-76368890	DHX58
28	1154	460629	484110	28	23482	1	Loss	AX-76386875	AX-76387442	TIMM44
28	1155	769068	812872	54	43805	1	Loss	AX-76388707	AX-76388888	BTN1A1
28	1156	850581	889630	34	39050	1	Loss	AX-76389028	AX-76389185	ADMP
28	1157	954729	976106	17	21378	1	Loss	AX-76389452	AX-76389543	PCASP2
28	1158	1030245	1062065	27	31821	1	Loss	AX-76371011	AX-76371134	CDH1-C
28	1159	1163055	1239838	53	76784	1	Loss	AX-80911518	AX-76371563	No gene
28	1160	1479490	1496410	25	16921	1	Loss	AX-76372427	AX-76372508	No gene
28	1161	1732536	1766918	40	34383	1	Loss	AX-76373661	AX-76373815	ANP32B
28	1162	1956754	1993079	50	36326	1	Loss	AX-80765849	AX-76374699	No gene
28	1163	2126623	2205513	49	78891	1	Loss	AX-76375357	AX-76375612	No gene
28	1164	2363497	2387889	21	24393	1	Loss	AX-76376350	AX-76376438	TCF3
28	1165	2649008	2672346	28	23339	1	Loss	AX-76377664	AX-76377789	LOC428335
28	1166	2766860	2799936	27	33077	1	Loss	AX-77284915	AX-76378252	PALM
28	1167	2908287	2955400	58	47114	1	Loss	AX-76378744	AX-76378977	ARHGAP45
28	1168	3091908	3163115	40	71208	1	Loss	AX-76379491	AX-76379785	EFNA2
28	1169	3189644	3201025	11	11382	1	Loss	AX-76379903	AX-76379953	DAZAP1
28	1170	3236910	3264128	22	27219	1	Loss	AX-80797126	AX-80853872	APC2
28	1171	3547490	3611350	65	63861	1	Loss	AX-76380972	AX-76381252	BORCS8
28	1172	3706609	3715116	17	8508	1	Loss	AX-76381783	AX-76381823	No gene
28	1173	3882850	4085374	161	202525	1	Loss	AX-80889978	AX-76383442	PEX11G
28	1174	4603468	4669362	62	65895	1	Loss	AX-76386059	AX-76386343	No gene