

Sequencing data statistics

Sample	Sequencing data	Coverage per haplotype	Read length	Mean accuracy (QV)
DH647	WGS short reads	26 ×	2 × 150 bp	35
DH647	WGS ONT reads	31 ×	30 kb (N50)	11
DH647	Hi-C reads	25 ×	2 × 110 bp	35
Sikem	WGS short reads	26 ×	2 × 150 bp	35
Sikem	WGS ONT reads	41 ×	46 kb (N50)	10
Sikem	WGS PacBio HiFi reads	20 ×	16 kb (N50)	33
Sikem	Hi-C reads	25 ×	2 × 110 bp	35

DH647 phased SNPs with PhaseGrass

Sample	Chromosome (Chr)	Number of blocks	Heterozygous SNPs	Phased SNPs	Fraction of phased SNPs	Fraction of phased SNPs in the largest block	Phase block N50
DH647	Chr1	3	406'683	405'858	0.9980	0.9996	252'115'434
DH647	Chr2	2	1'114'329	1'112'094	0.9980	1.0000	328'061'788
DH647	Chr3	1	1'161'192	1'159'099	0.9982	1.0000	353'996'801
DH647	Chr4	1	786'817	785'377	0.9982	1.0000	406'061'665
DH647	Chr5	5	858'763	857'434	0.9985	1.0000	165'167'366
DH647	Chr6	1	864'878	862'985	0.9978	1.0000	274'008'430
DH647	Chr7	2	1'051'570	1'049'197	0.9977	1.0000	321'979'893
DH647	ALL	15	6'244'232	6'232'044	0.9980	1.0000	321'979'893

DH647 phase block information

Sample	Chromosome (Chr)	Phase block	Start	End	SNPs (#)	Block length (bp)
DH647	Chr4	Chromosome-level	5'464	406'067'129	785'377	406'061'665
DH647	Chr3	Chromosome-level	28	353'996'829	1'159'099	353'996'801
DH647	Chr7	Chromosome-level	50	334'192'480	1'049'195	334'192'430
DH647	Chr2	Chromosome-level	12'341	333'278'978	1'112'078	333'266'637
DH647	Chr6	Chromosome-level	1'290	274'009'720	862'985	274'008'430
DH647	Chr1	Chromosome-level	421	271'784'613	405'705	271'784'192
DH647	Chr5	Chromosome-level	34'675	267'971'454	857'399	267'936'779
DH647	Chr2	Small	4'945'310	5'074'387	16	129'077
DH647	Chr1	Small	14'376'408	14'499'098	151	122'690
DH647	Chr5	Small	97'439'316	97'558'906	20	119'590
DH647	Chr7	Small	322'052'712	322'107'899	2	55'187
DH647	Chr5	Small	102'633'364	102'664'668	8	31'304
DH647	Chr5	Small	86'947'648	86'965'891	2	18'243
DH647	Chr1	Small	19'554'833	19'570'860	2	16'027
DH647	Chr5	Small	102'722'810	102'734'676	5	11'866

Sikem phased SNPs with PhaseGrass using different combinations of phasing data

Sample	Phasing data combination	Chromosome (Chr)	Number of blocks	Heterozygous SNPs	Phased SNPs	Fraction of phased SNPs	Fraction of phased SNPs in the largest block	Phase block N50
Sikem	PacBio HiFi + Hi-C	Chr1	301	810'188	809'804	0.9995	0.9968	2'077'164
Sikem	PacBio HiFi + Hi-C	Chr2	294	1'040'644	1'040'277	0.9996	0.9978	2'506'660
Sikem	PacBio HiFi + Hi-C	Chr3	469	1'113'894	1'113'292	0.9995	0.9960	1'784'116
Sikem	PacBio HiFi + Hi-C	Chr4	433	1'267'363	1'266'626	0.9994	0.9974	1'861'339
Sikem	PacBio HiFi + Hi-C	Chr5	377	663'288	663'006	0.9996	0.9944	1'426'537
Sikem	PacBio HiFi + Hi-C	Chr6	274	816'528	816'204	0.9996	0.9974	1'736'030
Sikem	PacBio HiFi + Hi-C	Chr7	422	1'028'587	1'028'063	0.9995	0.9966	1'749'442
Sikem	PacBio HiFi + Hi-C	ALL	2'570	6'740'492	6'737'272	0.9995	0.9967	1'851'222
Sikem	ONT + Hi-C	Chr1	5	810'169	809'042	0.9986	1.0000	103'853'777
Sikem	ONT + Hi-C	Chr2	3	1'040'635	1'039'444	0.9989	1.0000	192'822'645
Sikem	ONT + Hi-C	Chr3	20	1'113'926	1'112'365	0.9986	0.9997	98'895'866
Sikem	ONT + Hi-C	Chr4	2	1'267'361	1'265'529	0.9986	1.0000	297'711'388
Sikem	ONT + Hi-C	Chr5	8	663'307	662'540	0.9988	0.9999	96'592'919
Sikem	ONT + Hi-C	Chr6	4	816'583	815'616	0.9988	0.9999	85'147'584
Sikem	ONT + Hi-C	Chr7	11	1'028'585	1'027'004	0.9985	0.9999	59'802'266
Sikem	ONT + Hi-C	ALL	53	6'740'566	6'731'540	0.9987	0.9999	103'853'777

Sikem phase block information

Sample	Phasing data combination	Chromosome (Chr)	Phase block	Start	End	SNPs (#)	Block length (bp)
Sikem	PacBio HiFi + Hi-C	Chr4	Chromosome-level	798	427'801'028	1'263'300	427'800'230
Sikem	PacBio HiFi + Hi-C	Chr3	Chromosome-level	2'119'162	390'243'253	1'108'836	388'124'091
Sikem	PacBio HiFi + Hi-C	Chr7	Chromosome-level	21'182	364'880'171	1'024'553	364'858'989
Sikem	PacBio HiFi + Hi-C	Chr2	Chromosome-level	597	311'584'369	1'037'957	311'583'772
Sikem	PacBio HiFi + Hi-C	Chr1	Chromosome-level	145'600	273'125'834	807'192	272'980'234
Sikem	PacBio HiFi + Hi-C	Chr5	Chromosome-level	19'247	257'459'018	659'302	257'439'771
Sikem	PacBio HiFi + Hi-C	Chr6	Chromosome-level	122	254'597'595	814'106	254'597'473
Sikem	PacBio HiFi + Hi-C	Chr4	Small	3'259'988	3'435'864	72	175'876
Sikem	PacBio HiFi + Hi-C	Chr5	Small	92'607'418	92'776'259	54	168'841
Sikem	PacBio HiFi + Hi-C	Chr2	Small	164'665'123	164'833'441	63	168'318
Sikem	PacBio HiFi + Hi-C	Chr5	Small	90'018'606	90'174'228	49	155'622
Sikem	PacBio HiFi + Hi-C	Chr7	Small	168'775'060	168'928'734	64	153'674
Sikem	PacBio HiFi + Hi-C	Chr6	Small	109'091'320	109'242'444	44	151'124
Sikem	PacBio HiFi + Hi-C	Chr2	Small	164'958'132	165'091'105	51	132'973
Sikem	PacBio HiFi + Hi-C	Chr2	Small	164'506'805	164'638'746	47	131'941
Sikem	PacBio HiFi + Hi-C	Chr6	Small	99'875'450	100'006'035	41	130'585
Sikem	PacBio HiFi + Hi-C	Chr5	Small	86'207'694	86'337'554	101	129'860
Sikem	PacBio HiFi + Hi-C	Chr7	Small	160'413'367	160'543'057	62	129'690
Sikem	PacBio HiFi + Hi-C	Chr5	Small	90'197'767	90'326'880	29	129'113
Sikem	PacBio HiFi + Hi-C	Chr1	Small	105'193'175	105'316'754	27	123'579
Sikem	PacBio HiFi + Hi-C	Chr3	Small	145'834'327	145'954'989	23	120'662
Sikem	PacBio HiFi + Hi-C	Chr1	Small	106'615'157	106'729'773	22	114'616
Sikem	PacBio HiFi + Hi-C	Chr6	Small	108'196'518	108'310'712	22	114'194
Sikem	PacBio HiFi + Hi-C	Chr3	Small	245'671'394	245'779'604	30	108'210
Sikem	PacBio HiFi + Hi-C	Chr3	Small	145'975'407	146'082'647	20	107'240
Sikem	PacBio HiFi + Hi-C	Chr3	Small	191'482'792	191'586'463	67	103'671
Sikem	PacBio HiFi + Hi-C	Chr5	Small	97'396'461	97'497'831	24	101'370
Sikem	PacBio HiFi + Hi-C	Chr7	Small	246'024'715	246'125'649	48	100'934
Sikem	PacBio HiFi + Hi-C	Chr2	Small	166'006'483	166'103'880	11	97'397
Sikem	PacBio HiFi + Hi-C	Chr1	Small	151'804'656	151'899'899	17	95'243
Sikem	PacBio HiFi + Hi-C	Chr7	Small	163'030'060	163'124'947	33	94'887
Sikem	PacBio HiFi + Hi-C	Chr5	Small	92'861'324	92'954'656	54	93'332
Sikem	PacBio HiFi + Hi-C	Chr7	Small	179'044'574	179'136'096	11	91'522
Sikem	PacBio HiFi + Hi-C	Chr5	Small	92'461'261	92'551'674	16	90'413
Sikem	PacBio HiFi + Hi-C	Chr4	Small	341'991'794	342'078'213	31	86'419
Sikem	PacBio HiFi + Hi-C	Chr6	Small	108'437'076	108'521'468	22	84'392
Sikem	PacBio HiFi + Hi-C	Chr5	Small	96'316'814	96'400'845	15	84'031
Sikem	PacBio HiFi + Hi-C	Chr2	Small	142'298'611	142'381'251	22	82'640
Sikem	PacBio HiFi + Hi-C	Chr3	Small	147'617'558	147'700'131	15	82'573
Sikem	PacBio HiFi + Hi-C	Chr6	Small	108'979'160	109'059'644	12	80'484
Sikem	PacBio HiFi + Hi-C	Chr5	Small	89'910'188	89'990'150	62	79'962
Sikem	PacBio HiFi + Hi-C	Chr3	Small	134'874'891	134'954'175	39	79'284
Sikem	PacBio HiFi + Hi-C	Chr2	Small	10'319'960	10'398'877	18	78'917
Sikem	PacBio HiFi + Hi-C	Chr3	Small	269'944'394	270'022'837	46	78'443
Sikem	PacBio HiFi + Hi-C	Chr3	Small	196'006'647	196'084'865	59	78'218
Sikem	PacBio HiFi + Hi-C	Chr6	Small	107'845'825	107'923'896	11	78'071
Sikem	PacBio HiFi + Hi-C	Chr6	Small	107'195'811	107'271'812	14	76'001
Sikem	PacBio HiFi + Hi-C	Chr5	Small	87'669'107	87'740'770	29	71'663
Sikem	PacBio HiFi + Hi-C	Chr3	Small	254'067'541	254'137'379	14	69'838
Sikem	PacBio HiFi + Hi-C	Chr2	Small	165'899'298	165'969'065	7	69'767
Sikem	PacBio HiFi + Hi-C	Chr2	Small	86'185'264	86'255'030	25	69'766
Sikem	PacBio HiFi + Hi-C	Chr3	Small	4'831'437	4'900'788	78	69'351
Sikem	PacBio HiFi + Hi-C	Chr6	Small	112'196'740	112'265'935	7	69'195
Sikem	PacBio HiFi + Hi-C	Chr5	Small	94'093'718	94'162'620	25	68'902
Sikem	PacBio HiFi + Hi-C	Chr1	Small	7'145'823	7'214'239	17	68'416
Sikem	PacBio HiFi + Hi-C	Chr5	Small	96'113'677	96'180'927	9	67'250
Sikem	PacBio HiFi + Hi-C	Chr4	Small	414'071'456	414'138'297	29	66'841
Sikem	PacBio HiFi + Hi-C	Chr4	Small	269'901'905	269'967'131	13	65'226
Sikem	PacBio HiFi + Hi-C	Chr7	Small	176'192'848	176'257'635	9	64'787
Sikem	PacBio HiFi + Hi-C	Chr3	Small	125'592'837	125'657'346	21	64'509
Sikem	PacBio HiFi + Hi-C	Chr1	Small	105'648'582	105'712'710	8	64'128
Sikem	PacBio HiFi + Hi-C	Chr2	Small	233'227'606	233'291'078	33	63'472
Sikem	PacBio HiFi + Hi-C	Chr1	Small	272'777'161	272'840'134	49	62'973
Sikem	PacBio HiFi + Hi-C	Chr4	Small	416'338'662	416'401'078	33	62'416
Sikem	PacBio HiFi + Hi-C	Chr3	Small	42'517'390	42'579'630	60	62'240
Sikem	PacBio HiFi + Hi-C	Chr1	Small	95'664'118	95'726'328	45	62'210
Sikem	PacBio HiFi + Hi-C	Chr2	Small	164'873'820	164'934'335	27	60'515
Sikem	PacBio HiFi + Hi-C	Chr7	Small	68'030'064	68'090'157	11	60'093
Sikem	PacBio HiFi + Hi-C	Chr3	Small	149'409'614	149'469'123	35	59'509

Sikem	PacBio HiFi + Hi-C	Chr3	Small	51'358'550	51'417'782	31	59'232
Sikem	PacBio HiFi + Hi-C	Chr2	Small	165'709'730	165'768'930	9	59'200
Sikem	PacBio HiFi + Hi-C	Chr4	Small	380'033'161	380'092'196	21	59'035
Sikem	PacBio HiFi + Hi-C	Chr5	Small	85'456'775	85'515'163	23	58'388
Sikem	PacBio HiFi + Hi-C	Chr1	Small	102'928'506	102'986'802	6	58'296
Sikem	PacBio HiFi + Hi-C	Chr3	Small	144'208'762	144'266'626	7	57'864
Sikem	PacBio HiFi + Hi-C	Chr7	Small	17'288'509	17'345'790	18	57'281
Sikem	PacBio HiFi + Hi-C	Chr1	Small	102'414'294	102'471'521	13	57'227
Sikem	PacBio HiFi + Hi-C	Chr2	Small	100'127'057	100'184'199	17	57'142
Sikem	PacBio HiFi + Hi-C	Chr1	Small	64'965'210	65'021'948	6	56'738
Sikem	PacBio HiFi + Hi-C	Chr5	Small	86'627'711	86'684'151	13	56'440
Sikem	PacBio HiFi + Hi-C	Chr1	Small	261'274'149	261'330'581	18	56'432
Sikem	PacBio HiFi + Hi-C	Chr5	Small	84'384'112	84'439'650	26	55'538
Sikem	PacBio HiFi + Hi-C	Chr1	Small	9'762'113	9'817'543	12	55'430
Sikem	PacBio HiFi + Hi-C	Chr3	Small	388'822'479	388'877'781	47	55'302
Sikem	PacBio HiFi + Hi-C	Chr3	Small	145'376'699	145'431'937	7	55'238
Sikem	PacBio HiFi + Hi-C	Chr1	Small	78'405'028	78'459'918	27	54'890
Sikem	PacBio HiFi + Hi-C	Chr5	Small	203'256'594	203'310'786	35	54'192
Sikem	PacBio HiFi + Hi-C	Chr5	Small	185'835'803	185'889'672	55	53'869
Sikem	PacBio HiFi + Hi-C	Chr1	Small	45'857'458	45'909'790	44	52'332
Sikem	PacBio HiFi + Hi-C	Chr5	Small	96'973'787	97'026'087	6	52'300
Sikem	PacBio HiFi + Hi-C	Chr7	Small	171'397'102	171'449'358	51	52'256
Sikem	PacBio HiFi + Hi-C	Chr5	Small	100'822'500	100'874'543	19	52'043
Sikem	PacBio HiFi + Hi-C	Chr5	Small	9'578'383	9'630'268	27	51'885
Sikem	PacBio HiFi + Hi-C	Chr6	Small	236'538'049	236'589'772	13	51'723
Sikem	PacBio HiFi + Hi-C	Chr6	Small	32'336'170	32'387'780	20	51'610
Sikem	PacBio HiFi + Hi-C	Chr7	Small	153'189'010	153'240'575	6	51'565
Sikem	PacBio HiFi + Hi-C	Chr1	Small	222'577'025	222'628'283	21	51'258
Sikem	PacBio HiFi + Hi-C	Chr3	Small	298'756'542	298'807'694	64	51'152
Sikem	PacBio HiFi + Hi-C	Chr5	Small	208'221'905	208'273'056	19	51'151
Sikem	PacBio HiFi + Hi-C	Chr5	Small	83'146'248	83'197'227	13	50'979
Sikem	PacBio HiFi + Hi-C	Chr5	Small	87'357'828	87'408'753	35	50'925
Sikem	PacBio HiFi + Hi-C	Chr5	Small	232'211'613	232'262'097	26	50'484
Sikem	PacBio HiFi + Hi-C	Chr6	Small	107'771'384	107'821'470	6	50'086
Sikem	PacBio HiFi + Hi-C	Chr7	Small	112'611'572	112'661'614	32	50'042
Sikem	PacBio HiFi + Hi-C	Chr7	Small	311'149'742	311'199'732	17	49'990
Sikem	PacBio HiFi + Hi-C	Chr2	Small	9'432'655	9'482'424	22	49'769
Sikem	PacBio HiFi + Hi-C	Chr3	Small	42'710'262	42'759'908	20	49'646
Sikem	PacBio HiFi + Hi-C	Chr4	Small	203'781'417	203'830'978	27	49'561
Sikem	PacBio HiFi + Hi-C	Chr2	Small	68'838'165	68'887'605	11	49'440
Sikem	PacBio HiFi + Hi-C	Chr3	Small	286'092'463	286'141'774	11	49'311
Sikem	PacBio HiFi + Hi-C	Chr4	Small	122'868'467	122'917'726	14	49'259
Sikem	PacBio HiFi + Hi-C	Chr5	Small	71'088'523	71'137'735	36	49'212
Sikem	PacBio HiFi + Hi-C	Chr3	Small	146'390'357	146'439'428	8	49'071
Sikem	PacBio HiFi + Hi-C	Chr7	Small	244'939'220	244'987'634	22	48'414
Sikem	PacBio HiFi + Hi-C	Chr6	Small	136'052'515	136'100'928	15	48'413
Sikem	PacBio HiFi + Hi-C	Chr1	Small	105'025'482	105'073'885	12	48'403
Sikem	PacBio HiFi + Hi-C	Chr3	Small	191'833'226	191'881'588	11	48'362
Sikem	PacBio HiFi + Hi-C	Chr4	Small	241'650'960	241'699'206	27	48'246
Sikem	PacBio HiFi + Hi-C	Chr5	Small	1'291'469	1'339'576	11	48'107
Sikem	PacBio HiFi + Hi-C	Chr6	Small	100'385'894	100'433'845	5	47'951
Sikem	PacBio HiFi + Hi-C	Chr7	Small	41'636'376	41'683'880	15	47'504
Sikem	PacBio HiFi + Hi-C	Chr3	Small	238'572'077	238'619'499	12	47'422
Sikem	PacBio HiFi + Hi-C	Chr7	Small	316'349'198	316'396'481	19	47'283
Sikem	PacBio HiFi + Hi-C	Chr5	Small	151'649'198	151'696'427	15	47'229
Sikem	PacBio HiFi + Hi-C	Chr6	Small	228'688'143	228'735'351	42	47'208
Sikem	PacBio HiFi + Hi-C	Chr4	Small	30'449'896	30'497'030	23	47'134
Sikem	PacBio HiFi + Hi-C	Chr3	Small	31'238'214	31'285'327	14	47'113
Sikem	PacBio HiFi + Hi-C	Chr3	Small	145'758'766	145'805'863	4	47'097
Sikem	PacBio HiFi + Hi-C	Chr3	Small	167'814'347	167'861'442	50	47'095
Sikem	PacBio HiFi + Hi-C	Chr5	Small	89'311'801	89'358'852	20	47'051
Sikem	PacBio HiFi + Hi-C	Chr1	Small	155'352'955	155'399'594	38	46'639
Sikem	PacBio HiFi + Hi-C	Chr5	Small	89'399'083	89'445'496	23	46'413
Sikem	PacBio HiFi + Hi-C	Chr6	Small	111'063'954	111'110'338	21	46'384
Sikem	PacBio HiFi + Hi-C	Chr2	Small	74'477'401	74'523'533	31	46'132
Sikem	PacBio HiFi + Hi-C	Chr3	Small	192'725'564	192'771'651	28	46'087
Sikem	PacBio HiFi + Hi-C	Chr5	Small	1'383'019	1'428'831	32	45'812
Sikem	PacBio HiFi + Hi-C	Chr1	Small	7'287'768	7'333'447	4	45'679
Sikem	PacBio HiFi + Hi-C	Chr2	Small	217'826'523	217'872'197	9	45'674
Sikem	PacBio HiFi + Hi-C	Chr7	Small	40'764'927	40'810'440	14	45'513
Sikem	PacBio HiFi + Hi-C	Chr7	Small	337'841'555	337'887'068	7	45'513

Sikem	PacBio HiFi + Hi-C	Chr5	Small	6'349'493	6'394'998	26	45'505
Sikem	PacBio HiFi + Hi-C	Chr6	Small	71'280'592	71'325'916	16	45'324
Sikem	PacBio HiFi + Hi-C	Chr7	Small	208'184'729	208'229'411	6	44'682
Sikem	PacBio HiFi + Hi-C	Chr7	Small	19'809'390	19'853'911	17	44'521
Sikem	PacBio HiFi + Hi-C	Chr1	Small	166'288'194	166'332'707	18	44'513
Sikem	PacBio HiFi + Hi-C	Chr7	Small	3'032'224	3'076'475	14	44'251
Sikem	PacBio HiFi + Hi-C	Chr6	Small	19'118'256	19'162'327	25	44'071
Sikem	PacBio HiFi + Hi-C	Chr2	Small	181'861'091	181'905'063	16	43'972
Sikem	PacBio HiFi + Hi-C	Chr4	Small	3'475'467	3'519'420	21	43'953
Sikem	PacBio HiFi + Hi-C	Chr3	Small	146'603'367	146'646'600	4	43'233
Sikem	PacBio HiFi + Hi-C	Chr7	Small	364'488'515	364'531'662	40	43'147
Sikem	PacBio HiFi + Hi-C	Chr2	Small	143'181'447	143'224'590	10	43'143
Sikem	PacBio HiFi + Hi-C	Chr2	Small	277'274'803	277'317'730	24	42'927
Sikem	PacBio HiFi + Hi-C	Chr4	Small	132'223'470	132'266'319	26	42'849
Sikem	PacBio HiFi + Hi-C	Chr1	Small	64'373'551	64'416'274	29	42'723
Sikem	PacBio HiFi + Hi-C	Chr3	Small	281'328'186	281'370'901	16	42'715
Sikem	PacBio HiFi + Hi-C	Chr7	Small	215'853'475	215'896'113	10	42'638
Sikem	PacBio HiFi + Hi-C	Chr1	Small	178'166'473	178'208'985	14	42'512
Sikem	PacBio HiFi + Hi-C	Chr2	Small	307'686'781	307'729'272	23	42'491
Sikem	PacBio HiFi + Hi-C	Chr1	Small	200'352'678	200'395'160	21	42'482
Sikem	PacBio HiFi + Hi-C	Chr4	Small	364'604'821	364'647'252	10	42'431
Sikem	PacBio HiFi + Hi-C	Chr4	Small	204'507'404	204'549'831	8	42'427
Sikem	PacBio HiFi + Hi-C	Chr5	Small	128'788'816	128'830'868	16	42'052
Sikem	PacBio HiFi + Hi-C	Chr1	Small	140'948'469	140'990'511	16	42'042
Sikem	PacBio HiFi + Hi-C	Chr2	Small	50'397'818	50'439'734	29	41'916
Sikem	PacBio HiFi + Hi-C	Chr3	Small	40'613'902	40'655'636	11	41'734
Sikem	PacBio HiFi + Hi-C	Chr7	Small	300'972'697	301'014'209	20	41'512
Sikem	PacBio HiFi + Hi-C	Chr5	Small	54'052'686	54'094'133	36	41'447
Sikem	PacBio HiFi + Hi-C	Chr7	Small	270'968'507	271'009'640	27	41'133
Sikem	PacBio HiFi + Hi-C	Chr3	Small	144'449'716	144'490'839	11	41'123
Sikem	PacBio HiFi + Hi-C	Chr2	Small	193'483'684	193'524'744	13	41'060
Sikem	PacBio HiFi + Hi-C	Chr7	Small	8'431'915	8'472'951	22	41'036
Sikem	PacBio HiFi + Hi-C	Chr5	Small	201'872'432	201'913'196	11	40'764
Sikem	PacBio HiFi + Hi-C	Chr3	Small	110'459'578	110'500'256	22	40'678
Sikem	PacBio HiFi + Hi-C	Chr1	Small	43'736'658	43'777'178	7	40'520
Sikem	PacBio HiFi + Hi-C	Chr1	Small	99'984'203	100'024'715	13	40'512
Sikem	PacBio HiFi + Hi-C	Chr5	Small	95'892'088	95'932'559	5	40'471
Sikem	PacBio HiFi + Hi-C	Chr7	Small	175'617'066	175'657'402	12	40'336
Sikem	PacBio HiFi + Hi-C	Chr3	Small	144'048'727	144'088'919	8	40'192
Sikem	PacBio HiFi + Hi-C	Chr3	Small	29'961'735	30'001'863	16	40'128
Sikem	PacBio HiFi + Hi-C	Chr7	Small	27'510'786	27'550'893	33	40'107
Sikem	PacBio HiFi + Hi-C	Chr4	Small	26'521'895	26'561'907	13	40'012
Sikem	PacBio HiFi + Hi-C	Chr1	Small	42'535'859	42'575'814	16	39'955
Sikem	PacBio HiFi + Hi-C	Chr1	Small	164'070'230	164'110'108	11	39'878
Sikem	PacBio HiFi + Hi-C	Chr2	Small	123'069'754	123'109'612	5	39'858
Sikem	PacBio HiFi + Hi-C	Chr4	Small	185'162'343	185'202'195	31	39'852
Sikem	PacBio HiFi + Hi-C	Chr3	Small	144'517'330	144'557'123	5	39'793
Sikem	PacBio HiFi + Hi-C	Chr3	Small	42'367'430	42'407'004	47	39'574
Sikem	PacBio HiFi + Hi-C	Chr5	Small	58'548'201	58'587'697	9	39'496
Sikem	PacBio HiFi + Hi-C	Chr6	Small	150'725'739	150'765'218	44	39'479
Sikem	PacBio HiFi + Hi-C	Chr1	Small	115'098'790	115'138'253	132	39'463
Sikem	PacBio HiFi + Hi-C	Chr4	Small	186'354'918	186'394'223	26	39'305
Sikem	PacBio HiFi + Hi-C	Chr6	Small	127'579'931	127'619'212	8	39'281
Sikem	PacBio HiFi + Hi-C	Chr2	Small	214'066'752	214'105'981	12	39'229
Sikem	PacBio HiFi + Hi-C	Chr2	Small	73'235'002	73'274'197	22	39'195
Sikem	PacBio HiFi + Hi-C	Chr4	Small	178'813'059	178'852'254	23	39'195
Sikem	PacBio HiFi + Hi-C	Chr6	Small	93'434'194	93'473'249	12	39'055
Sikem	PacBio HiFi + Hi-C	Chr3	Small	339'082'619	339'121'635	26	39'016
Sikem	PacBio HiFi + Hi-C	Chr3	Small	83'813'967	83'852'974	17	39'007
Sikem	PacBio HiFi + Hi-C	Chr2	Small	199'122'569	199'161'534	14	38'965
Sikem	PacBio HiFi + Hi-C	Chr5	Small	88'562'125	88'600'933	19	38'808
Sikem	PacBio HiFi + Hi-C	Chr5	Small	76'893'499	76'932'300	13	38'801
Sikem	PacBio HiFi + Hi-C	Chr3	Small	313'383'417	313'422'119	7	38'702
Sikem	PacBio HiFi + Hi-C	Chr3	Small	323'707'170	323'745'707	25	38'537
Sikem	PacBio HiFi + Hi-C	Chr7	Small	175'559'916	175'598'392	8	38'476
Sikem	PacBio HiFi + Hi-C	Chr2	Small	10'828'705	10'867'155	9	38'450
Sikem	PacBio HiFi + Hi-C	Chr5	Small	7'189'406	7'227'821	28	38'415
Sikem	PacBio HiFi + Hi-C	Chr7	Small	275'319'573	275'357'956	9	38'383
Sikem	PacBio HiFi + Hi-C	Chr5	Small	46'022'165	46'060'513	69	38'348
Sikem	PacBio HiFi + Hi-C	Chr7	Small	269'753'132	269'791'407	15	38'275
Sikem	PacBio HiFi + Hi-C	Chr3	Small	145'627'090	145'665'293	5	38'203

Sikem	PacBio HiFi + Hi-C	Chr5	Small	95'966'452	96'004'520	9	38'068
Sikem	PacBio HiFi + Hi-C	Chr3	Small	155'613'482	155'651'533	10	38'051
Sikem	PacBio HiFi + Hi-C	Chr1	Small	59'393'012	59'430'982	72	37'970
Sikem	PacBio HiFi + Hi-C	Chr5	Small	151'135'747	151'173'625	24	37'878
Sikem	PacBio HiFi + Hi-C	Chr5	Small	247'586'823	247'624'556	25	37'733
Sikem	PacBio HiFi + Hi-C	Chr7	Small	337'909'819	337'947'537	5	37'718
Sikem	PacBio HiFi + Hi-C	Chr6	Small	93'256'904	93'294'387	9	37'483
Sikem	PacBio HiFi + Hi-C	Chr3	Small	3'339'106	3'376'571	34	37'465
Sikem	PacBio HiFi + Hi-C	Chr7	Small	145'523'520	145'560'926	8	37'406
Sikem	PacBio HiFi + Hi-C	Chr1	Small	232'383'690	232'421'086	16	37'396
Sikem	PacBio HiFi + Hi-C	Chr1	Small	102'733'561	102'770'905	7	37'344
Sikem	PacBio HiFi + Hi-C	Chr5	Small	89'792'199	89'829'373	16	37'174
Sikem	PacBio HiFi + Hi-C	Chr3	Small	26'824'279	26'861'451	7	37'172
Sikem	PacBio HiFi + Hi-C	Chr5	Small	166'395'715	166'432'756	16	37'041
Sikem	PacBio HiFi + Hi-C	Chr3	Small	387'901'792	387'938'820	17	37'028
Sikem	PacBio HiFi + Hi-C	Chr4	Small	171'120'239	171'157'234	16	36'995
Sikem	PacBio HiFi + Hi-C	Chr7	Small	145'924'527	145'961'404	33	36'877
Sikem	PacBio HiFi + Hi-C	Chr2	Small	228'306'688	228'343'548	9	36'860
Sikem	PacBio HiFi + Hi-C	Chr6	Small	205'949'811	205'986'671	8	36'860
Sikem	PacBio HiFi + Hi-C	Chr3	Small	169'466'417	169'503'262	13	36'845
Sikem	PacBio HiFi + Hi-C	Chr3	Small	193'635'191	193'671'919	20	36'728
Sikem	PacBio HiFi + Hi-C	Chr2	Small	15'278'171	15'314'890	17	36'719
Sikem	PacBio HiFi + Hi-C	Chr3	Small	1'659'762	1'696'435	18	36'673
Sikem	PacBio HiFi + Hi-C	Chr6	Small	116'650'745	116'687'329	8	36'584
Sikem	PacBio HiFi + Hi-C	Chr1	Small	1'083'885	1'120'467	8	36'582
Sikem	PacBio HiFi + Hi-C	Chr5	Small	192'088'027	192'124'501	18	36'474
Sikem	PacBio HiFi + Hi-C	Chr7	Small	122'663'677	122'700'077	10	36'400
Sikem	PacBio HiFi + Hi-C	Chr3	Small	321'804'467	321'840'777	7	36'310
Sikem	PacBio HiFi + Hi-C	Chr5	Small	88'045'327	88'081'626	8	36'299
Sikem	PacBio HiFi + Hi-C	Chr1	Small	71'281'348	71'317'617	9	36'269
Sikem	PacBio HiFi + Hi-C	Chr1	Small	75'881'326	75'917'594	17	36'268
Sikem	PacBio HiFi + Hi-C	Chr1	Small	7'006'457	7'042'654	8	36'197
Sikem	PacBio HiFi + Hi-C	Chr5	Small	209'079'884	209'116'044	14	36'160
Sikem	PacBio HiFi + Hi-C	Chr5	Small	121'601'631	121'637'558	11	35'927
Sikem	PacBio HiFi + Hi-C	Chr3	Small	321'864'354	321'900'244	27	35'890
Sikem	PacBio HiFi + Hi-C	Chr4	Small	314'248'089	314'283'949	17	35'860
Sikem	PacBio HiFi + Hi-C	Chr4	Small	253'806'840	253'842'571	6	35'731
Sikem	PacBio HiFi + Hi-C	Chr7	Small	345'523'535	345'559'223	13	35'688
Sikem	PacBio HiFi + Hi-C	Chr2	Small	54'921'878	54'957'534	9	35'656
Sikem	PacBio HiFi + Hi-C	Chr4	Small	13'367'916	13'403'443	11	35'527
Sikem	PacBio HiFi + Hi-C	Chr2	Small	165'832'523	165'867'994	5	35'471
Sikem	PacBio HiFi + Hi-C	Chr7	Small	58'787'845	58'823'271	14	35'426
Sikem	PacBio HiFi + Hi-C	Chr5	Small	87'607'453	87'642'850	16	35'397
Sikem	PacBio HiFi + Hi-C	Chr5	Small	104'811'835	104'847'166	9	35'331
Sikem	PacBio HiFi + Hi-C	Chr5	Small	162'953'731	162'988'975	6	35'244
Sikem	PacBio HiFi + Hi-C	Chr3	Small	127'521'579	127'556'642	4	35'063
Sikem	PacBio HiFi + Hi-C	Chr5	Small	198'919'580	198'954'609	19	35'029
Sikem	PacBio HiFi + Hi-C	Chr4	Small	365'780'471	365'815'467	7	34'996
Sikem	PacBio HiFi + Hi-C	Chr2	Small	273'312'549	273'347'192	20	34'643
Sikem	PacBio HiFi + Hi-C	Chr4	Small	356'472'030	356'506'532	10	34'502
Sikem	PacBio HiFi + Hi-C	Chr5	Small	91'462'787	91'497'260	25	34'473
Sikem	PacBio HiFi + Hi-C	Chr5	Small	94'034'634	94'069'086	5	34'452
Sikem	PacBio HiFi + Hi-C	Chr5	Small	192'206'885	192'241'263	11	34'378
Sikem	PacBio HiFi + Hi-C	Chr7	Small	116'975'324	117'009'674	9	34'350
Sikem	PacBio HiFi + Hi-C	Chr5	Small	89'103'218	89'137'441	10	34'223
Sikem	PacBio HiFi + Hi-C	Chr7	Small	260'225'760	260'259'794	16	34'034
Sikem	PacBio HiFi + Hi-C	Chr6	Small	145'215'975	145'249'984	6	34'009
Sikem	PacBio HiFi + Hi-C	Chr3	Small	13'982'773	14'016'723	27	33'950
Sikem	PacBio HiFi + Hi-C	Chr2	Small	89'146'160	89'179'964	9	33'804
Sikem	PacBio HiFi + Hi-C	Chr2	Small	71'891'128	71'924'776	13	33'648
Sikem	PacBio HiFi + Hi-C	Chr4	Small	237'432'974	237'466'571	9	33'597
Sikem	PacBio HiFi + Hi-C	Chr4	Small	202'775'224	202'808'800	6	33'576
Sikem	PacBio HiFi + Hi-C	Chr1	Small	219'815'185	219'848'732	37	33'547
Sikem	PacBio HiFi + Hi-C	Chr7	Small	278'078'650	278'112'070	22	33'420
Sikem	PacBio HiFi + Hi-C	Chr5	Small	1'048'820	1'082'057	38	33'237
Sikem	PacBio HiFi + Hi-C	Chr5	Small	88'160'173	88'193'364	11	33'191
Sikem	PacBio HiFi + Hi-C	Chr1	Small	48'337'001	48'370'190	43	33'189
Sikem	PacBio HiFi + Hi-C	Chr6	Small	146'021'775	146'054'778	44	33'003
Sikem	PacBio HiFi + Hi-C	Chr7	Small	194'946'786	194'979'705	19	32'919
Sikem	PacBio HiFi + Hi-C	Chr4	Small	173'816'900	173'849'817	10	32'917
Sikem	PacBio HiFi + Hi-C	Chr7	Small	150'811'175	150'844'091	42	32'916

Sikem	PacBio HiFi + Hi-C	Chr1	Small	216'732'162	216'765'047	42	32'885
Sikem	PacBio HiFi + Hi-C	Chr5	Small	92'292'575	92'325'407	14	32'832
Sikem	PacBio HiFi + Hi-C	Chr4	Small	426'352'023	426'384'772	22	32'749
Sikem	PacBio HiFi + Hi-C	Chr7	Small	264'369'965	264'402'524	8	32'559
Sikem	PacBio HiFi + Hi-C	Chr3	Small	271'398'548	271'431'091	4	32'543
Sikem	PacBio HiFi + Hi-C	Chr3	Small	212'847'944	212'880'126	20	32'182
Sikem	PacBio HiFi + Hi-C	Chr5	Small	94'224'505	94'256'682	11	32'177
Sikem	PacBio HiFi + Hi-C	Chr2	Small	226'915'168	226'947'211	9	32'043
Sikem	PacBio HiFi + Hi-C	Chr3	Small	145'509'209	145'541'245	5	32'036
Sikem	PacBio HiFi + Hi-C	Chr4	Small	236'096'499	236'128'535	11	32'036
Sikem	PacBio HiFi + Hi-C	Chr3	Small	143'636'684	143'668'704	17	32'020
Sikem	PacBio HiFi + Hi-C	Chr1	Small	116'404'167	116'436'133	13	31'966
Sikem	PacBio HiFi + Hi-C	Chr4	Small	421'161'503	421'193'442	7	31'939
Sikem	PacBio HiFi + Hi-C	Chr2	Small	206'981'800	207'013'678	14	31'878
Sikem	PacBio HiFi + Hi-C	Chr3	Small	125'536'627	125'568'488	7	31'861
Sikem	PacBio HiFi + Hi-C	Chr5	Small	77'279'195	77'311'013	4	31'818
Sikem	PacBio HiFi + Hi-C	Chr4	Small	171'747'163	171'778'955	12	31'792
Sikem	PacBio HiFi + Hi-C	Chr5	Small	69'358'989	69'390'686	10	31'697
Sikem	PacBio HiFi + Hi-C	Chr3	Small	318'057'704	318'089'259	5	31'555
Sikem	PacBio HiFi + Hi-C	Chr7	Small	363'740'493	363'771'910	11	31'417
Sikem	PacBio HiFi + Hi-C	Chr1	Small	106'497'107	106'528'518	15	31'411
Sikem	PacBio HiFi + Hi-C	Chr5	Small	89'590'592	89'621'988	14	31'396
Sikem	PacBio HiFi + Hi-C	Chr2	Small	89'524'497	89'555'824	9	31'327
Sikem	PacBio HiFi + Hi-C	Chr3	Small	383'083'502	383'114'808	10	31'306
Sikem	PacBio HiFi + Hi-C	Chr3	Small	83'176'425	83'207'508	6	31'083
Sikem	PacBio HiFi + Hi-C	Chr6	Small	43'715'849	43'746'804	14	30'955
Sikem	PacBio HiFi + Hi-C	Chr7	Small	3'145'452	3'176'329	24	30'877
Sikem	PacBio HiFi + Hi-C	Chr4	Small	38'273'704	38'304'507	21	30'803
Sikem	PacBio HiFi + Hi-C	Chr6	Small	40'166'604	40'197'352	6	30'748
Sikem	PacBio HiFi + Hi-C	Chr2	Small	210'404'520	210'435'123	7	30'603
Sikem	PacBio HiFi + Hi-C	Chr3	Small	191'150'183	191'180'777	21	30'594
Sikem	PacBio HiFi + Hi-C	Chr3	Small	75'845'227	75'875'787	9	30'560
Sikem	PacBio HiFi + Hi-C	Chr7	Small	163'481'288	163'511'776	7	30'488
Sikem	PacBio HiFi + Hi-C	Chr7	Small	81'566'515	81'596'990	7	30'475
Sikem	PacBio HiFi + Hi-C	Chr7	Small	214'779'749	214'810'135	11	30'386
Sikem	PacBio HiFi + Hi-C	Chr7	Small	34'120'229	34'150'588	34	30'359
Sikem	PacBio HiFi + Hi-C	Chr4	Small	236'206'504	236'236'825	6	30'321
Sikem	PacBio HiFi + Hi-C	Chr4	Small	128'157'384	128'187'666	12	30'282
Sikem	PacBio HiFi + Hi-C	Chr3	Small	2'693'313	2'723'585	11	30'272
Sikem	PacBio HiFi + Hi-C	Chr4	Small	3'545'543	3'575'757	18	30'214
Sikem	PacBio HiFi + Hi-C	Chr7	Small	146'028'439	146'058'531	18	30'092
Sikem	PacBio HiFi + Hi-C	Chr4	Small	349'057'829	349'087'861	3	30'032
Sikem	PacBio HiFi + Hi-C	Chr7	Small	153'494'652	153'524'577	17	29'925
Sikem	PacBio HiFi + Hi-C	Chr2	Small	251'220'993	251'250'878	11	29'885
Sikem	PacBio HiFi + Hi-C	Chr5	Small	63'418'141	63'448'022	3	29'881
Sikem	PacBio HiFi + Hi-C	Chr4	Small	297'520'340	297'550'148	26	29'808
Sikem	PacBio HiFi + Hi-C	Chr1	Small	105'915'953	105'945'752	11	29'799
Sikem	PacBio HiFi + Hi-C	Chr4	Small	191'344'282	191'374'052	15	29'770
Sikem	PacBio HiFi + Hi-C	Chr1	Small	49'998'197	50'027'953	13	29'756
Sikem	PacBio HiFi + Hi-C	Chr5	Small	27'662'410	27'692'119	13	29'709
Sikem	PacBio HiFi + Hi-C	Chr3	Small	198'228'568	198'258'201	10	29'633
Sikem	PacBio HiFi + Hi-C	Chr6	Small	112'498'718	112'528'302	8	29'584
Sikem	PacBio HiFi + Hi-C	Chr4	Small	158'842'589	158'872'117	7	29'528
Sikem	PacBio HiFi + Hi-C	Chr6	Small	106'275'330	106'304'846	18	29'516
Sikem	PacBio HiFi + Hi-C	Chr3	Small	147'211'654	147'241'109	6	29'455
Sikem	PacBio HiFi + Hi-C	Chr5	Small	255'874'413	255'903'858	20	29'445
Sikem	PacBio HiFi + Hi-C	Chr4	Small	127'322'368	127'351'729	9	29'361
Sikem	PacBio HiFi + Hi-C	Chr7	Small	361'056'770	361'086'077	14	29'307
Sikem	PacBio HiFi + Hi-C	Chr3	Small	388'174'794	388'204'023	21	29'229
Sikem	PacBio HiFi + Hi-C	Chr7	Small	137'926'154	137'955'371	7	29'217
Sikem	PacBio HiFi + Hi-C	Chr1	Small	231'593'973	231'623'133	6	29'160
Sikem	PacBio HiFi + Hi-C	Chr3	Small	124'960'932	124'990'030	14	29'098
Sikem	PacBio HiFi + Hi-C	Chr4	Small	147'848'814	147'877'821	14	29'007
Sikem	PacBio HiFi + Hi-C	Chr2	Small	195'538'908	195'567'832	12	28'924
Sikem	PacBio HiFi + Hi-C	Chr3	Small	88'645'537	88'674'447	7	28'910
Sikem	PacBio HiFi + Hi-C	Chr2	Small	76'901'562	76'930'428	29	28'866
Sikem	PacBio HiFi + Hi-C	Chr1	Small	7'493'187	7'522'033	8	28'846
Sikem	PacBio HiFi + Hi-C	Chr1	Small	103'201'044	103'229'857	8	28'813
Sikem	PacBio HiFi + Hi-C	Chr1	Small	2'272'927	2'301'538	11	28'611
Sikem	PacBio HiFi + Hi-C	Chr1	Small	135'102'869	135'131'480	18	28'611
Sikem	PacBio HiFi + Hi-C	Chr5	Small	151'566'659	151'595'064	11	28'405

Sikem	PacBio HiFi + Hi-C	Chr5	Small	136'960'074	136'988'349	5	28'275
Sikem	PacBio HiFi + Hi-C	Chr5	Small	108'146'365	108'174'621	26	28'256
Sikem	PacBio HiFi + Hi-C	Chr6	Small	21'264'334	21'292'509	17	28'175
Sikem	PacBio HiFi + Hi-C	Chr6	Small	96'327'153	96'355'284	4	28'131
Sikem	PacBio HiFi + Hi-C	Chr5	Small	161'989'780	162'017'785	7	28'005
Sikem	PacBio HiFi + Hi-C	Chr1	Small	105'734'576	105'762'518	5	27'942
Sikem	PacBio HiFi + Hi-C	Chr4	Small	225'420'213	225'448'035	4	27'822
Sikem	PacBio HiFi + Hi-C	Chr5	Small	113'667'058	113'694'849	7	27'791
Sikem	PacBio HiFi + Hi-C	Chr7	Small	345'078'506	345'106'277	25	27'771
Sikem	PacBio HiFi + Hi-C	Chr7	Small	185'340'737	185'368'374	9	27'637
Sikem	PacBio HiFi + Hi-C	Chr6	Small	14'012'460	14'040'095	3	27'635
Sikem	PacBio HiFi + Hi-C	Chr5	Small	98'111'923	98'139'555	3	27'632
Sikem	PacBio HiFi + Hi-C	Chr4	Small	328'865'202	328'892'832	12	27'630
Sikem	PacBio HiFi + Hi-C	Chr2	Small	142'408'068	142'435'562	14	27'494
Sikem	PacBio HiFi + Hi-C	Chr1	Small	251'576'865	251'604'330	28	27'465
Sikem	PacBio HiFi + Hi-C	Chr3	Small	51'056'033	51'083'497	15	27'464
Sikem	PacBio HiFi + Hi-C	Chr4	Small	184'702'971	184'730'411	11	27'440
Sikem	PacBio HiFi + Hi-C	Chr2	Small	101'476'653	101'504'044	24	27'391
Sikem	PacBio HiFi + Hi-C	Chr1	Small	216'634'994	216'662'372	6	27'378
Sikem	PacBio HiFi + Hi-C	Chr5	Small	122'423'506	122'450'881	3	27'375
Sikem	PacBio HiFi + Hi-C	Chr6	Small	228'549'360	228'576'573	11	27'213
Sikem	PacBio HiFi + Hi-C	Chr4	Small	29'397'174	29'424'363	6	27'189
Sikem	PacBio HiFi + Hi-C	Chr3	Small	40'561'224	40'588'388	10	27'164
Sikem	PacBio HiFi + Hi-C	Chr5	Small	45'451'349	45'478'502	14	27'153
Sikem	PacBio HiFi + Hi-C	Chr6	Small	88'520'255	88'547'379	3	27'124
Sikem	PacBio HiFi + Hi-C	Chr1	Small	104'935'461	104'962'552	7	27'091
Sikem	PacBio HiFi + Hi-C	Chr5	Small	65'758'056	65'785'104	19	27'048
Sikem	PacBio HiFi + Hi-C	Chr3	Small	14'145'391	14'172'430	18	27'039
Sikem	PacBio HiFi + Hi-C	Chr4	Small	426'880'811	426'907'827	9	27'016
Sikem	PacBio HiFi + Hi-C	Chr4	Small	126'010'233	126'037'234	17	27'001
Sikem	PacBio HiFi + Hi-C	Chr5	Small	118'144'610	118'171'561	28	26'951
Sikem	PacBio HiFi + Hi-C	Chr1	Small	81'278'690	81'305'353	4	26'663
Sikem	PacBio HiFi + Hi-C	Chr5	Small	228'934'508	228'961'169	7	26'661
Sikem	PacBio HiFi + Hi-C	Chr2	Small	85'244'037	85'270'654	7	26'617
Sikem	PacBio HiFi + Hi-C	Chr2	Small	15'615'090	15'641'635	8	26'545
Sikem	PacBio HiFi + Hi-C	Chr2	Small	55'976'374	56'002'801	12	26'427
Sikem	PacBio HiFi + Hi-C	Chr5	Small	85'132'318	85'158'737	10	26'419
Sikem	PacBio HiFi + Hi-C	Chr3	Small	129'573'971	129'600'350	23	26'379
Sikem	PacBio HiFi + Hi-C	Chr3	Small	18'123'975	18'150'322	12	26'347
Sikem	PacBio HiFi + Hi-C	Chr5	Small	58'378'370	58'404'691	18	26'321
Sikem	PacBio HiFi + Hi-C	Chr4	Small	195'515'431	195'541'713	8	26'282
Sikem	PacBio HiFi + Hi-C	Chr1	Small	57'844'532	57'870'809	6	26'277
Sikem	PacBio HiFi + Hi-C	Chr4	Small	80'169'643	80'195'920	10	26'277
Sikem	PacBio HiFi + Hi-C	Chr3	Small	76'714'060	76'740'328	7	26'268
Sikem	PacBio HiFi + Hi-C	Chr6	Small	43'074'858	43'101'023	12	26'165
Sikem	PacBio HiFi + Hi-C	Chr1	Small	191'375'693	191'401'784	8	26'091
Sikem	PacBio HiFi + Hi-C	Chr7	Small	263'408'815	263'434'815	3	26'000
Sikem	PacBio HiFi + Hi-C	Chr7	Small	174'685'926	174'711'880	5	25'954
Sikem	PacBio HiFi + Hi-C	Chr6	Small	223'455'803	223'481'743	20	25'940
Sikem	PacBio HiFi + Hi-C	Chr7	Small	173'692'375	173'718'303	11	25'928
Sikem	PacBio HiFi + Hi-C	Chr2	Small	177'371'335	177'397'196	15	25'861
Sikem	PacBio HiFi + Hi-C	Chr3	Small	310'644'441	310'670'258	4	25'817
Sikem	PacBio HiFi + Hi-C	Chr1	Small	272'711'451	272'737'248	25	25'797
Sikem	PacBio HiFi + Hi-C	Chr2	Small	198'851'574	198'877'329	10	25'755
Sikem	PacBio HiFi + Hi-C	Chr3	Small	212'929'113	212'954'852	4	25'739
Sikem	PacBio HiFi + Hi-C	Chr5	Small	127'332'033	127'357'768	13	25'735
Sikem	PacBio HiFi + Hi-C	Chr1	Small	218'912'508	218'938'234	7	25'726
Sikem	PacBio HiFi + Hi-C	Chr7	Small	148'154'863	148'180'527	4	25'664
Sikem	PacBio HiFi + Hi-C	Chr6	Small	24'274'128	24'299'787	14	25'659
Sikem	PacBio HiFi + Hi-C	Chr3	Small	24'418'467	24'444'015	36	25'548
Sikem	PacBio HiFi + Hi-C	Chr4	Small	46'850'141	46'875'668	7	25'527
Sikem	PacBio HiFi + Hi-C	Chr5	Small	89'859'744	89'885'266	8	25'522
Sikem	PacBio HiFi + Hi-C	Chr2	Small	277'336'195	277'361'709	4	25'514
Sikem	PacBio HiFi + Hi-C	Chr5	Small	211'464'379	211'489'853	15	25'474
Sikem	PacBio HiFi + Hi-C	Chr3	Small	252'573'751	252'599'166	15	25'415
Sikem	PacBio HiFi + Hi-C	Chr5	Small	97'186'658	97'211'900	3	25'242
Sikem	PacBio HiFi + Hi-C	Chr6	Small	21'544'631	21'569'872	28	25'241
Sikem	PacBio HiFi + Hi-C	Chr4	Small	200'705'013	200'730'228	10	25'215
Sikem	PacBio HiFi + Hi-C	Chr7	Small	239'003'572	239'028'767	5	25'195
Sikem	PacBio HiFi + Hi-C	Chr1	Small	255'496'101	255'521'254	6	25'153
Sikem	PacBio HiFi + Hi-C	Chr1	Small	81'972'622	81'997'774	7	25'152

Sikem	PacBio HiFi + Hi-C	Chr5	Small	6'287'757	6'312'866	35	25'109
Sikem	PacBio HiFi + Hi-C	Chr2	Small	166'333'471	166'358'552	4	25'081
Sikem	PacBio HiFi + Hi-C	Chr4	Small	2'492'392	2'517'348	18	24'956
Sikem	PacBio HiFi + Hi-C	Chr4	Small	217'597'249	217'622'168	13	24'919
Sikem	PacBio HiFi + Hi-C	Chr7	Small	86'940'965	86'965'875	4	24'910
Sikem	PacBio HiFi + Hi-C	Chr2	Small	32'792'449	32'817'326	17	24'877
Sikem	PacBio HiFi + Hi-C	Chr3	Small	188'756'389	188'781'242	76	24'853
Sikem	PacBio HiFi + Hi-C	Chr2	Small	181'732'020	181'756'819	2	24'799
Sikem	PacBio HiFi + Hi-C	Chr6	Small	237'456'464	237'481'226	14	24'762
Sikem	PacBio HiFi + Hi-C	Chr1	Small	34'528'408	34'553'163	9	24'755
Sikem	PacBio HiFi + Hi-C	Chr3	Small	15'607'663	15'632'281	21	24'618
Sikem	PacBio HiFi + Hi-C	Chr1	Small	119'241'066	119'265'683	6	24'617
Sikem	PacBio HiFi + Hi-C	Chr4	Small	338'765'337	338'789'895	12	24'558
Sikem	PacBio HiFi + Hi-C	Chr7	Small	43'552'150	43'576'653	15	24'503
Sikem	PacBio HiFi + Hi-C	Chr5	Small	24'919'869	24'944'346	7	24'477
Sikem	PacBio HiFi + Hi-C	Chr3	Small	6'072'310	6'096'711	14	24'401
Sikem	PacBio HiFi + Hi-C	Chr6	Small	45'110'495	45'134'855	4	24'360
Sikem	PacBio HiFi + Hi-C	Chr2	Small	32'126'365	32'150'686	9	24'321
Sikem	PacBio HiFi + Hi-C	Chr4	Small	20'888'598	20'912'897	12	24'299
Sikem	PacBio HiFi + Hi-C	Chr7	Small	71'990'408	72'014'696	8	24'288
Sikem	PacBio HiFi + Hi-C	Chr6	Small	6'940'588	6'964'805	17	24'217
Sikem	PacBio HiFi + Hi-C	Chr7	Small	228'053'993	228'078'122	7	24'129
Sikem	PacBio HiFi + Hi-C	Chr7	Small	16'964'915	16'988'993	12	24'078
Sikem	PacBio HiFi + Hi-C	Chr3	Small	14'070'054	14'094'128	10	24'074
Sikem	PacBio HiFi + Hi-C	Chr6	Small	222'625'860	222'649'893	4	24'033
Sikem	PacBio HiFi + Hi-C	Chr3	Small	362'915'786	362'939'767	7	23'981
Sikem	PacBio HiFi + Hi-C	Chr5	Small	201'803'326	201'827'275	8	23'949
Sikem	PacBio HiFi + Hi-C	Chr7	Small	262'841'309	262'865'237	29	23'928
Sikem	PacBio HiFi + Hi-C	Chr1	Small	105'143'959	105'167'827	6	23'868
Sikem	PacBio HiFi + Hi-C	Chr2	Small	187'776'797	187'800'651	3	23'854
Sikem	PacBio HiFi + Hi-C	Chr2	Small	83'773'094	83'796'882	3	23'788
Sikem	PacBio HiFi + Hi-C	Chr2	Small	8'130'560	8'154'318	22	23'758
Sikem	PacBio HiFi + Hi-C	Chr6	Small	107'382'176	107'405'822	8	23'646
Sikem	PacBio HiFi + Hi-C	Chr2	Small	181'451'355	181'474'979	14	23'624
Sikem	PacBio HiFi + Hi-C	Chr7	Small	146'224'859	146'248'371	4	23'512
Sikem	PacBio HiFi + Hi-C	Chr4	Small	130'493'991	130'517'417	12	23'426
Sikem	PacBio HiFi + Hi-C	Chr4	Small	371'616'823	371'640'197	37	23'374
Sikem	PacBio HiFi + Hi-C	Chr4	Small	403'648'937	403'672'287	2	23'350
Sikem	PacBio HiFi + Hi-C	Chr4	Small	335'329'898	335'353'239	15	23'341
Sikem	PacBio HiFi + Hi-C	Chr4	Small	262'617'976	262'641'310	3	23'334
Sikem	PacBio HiFi + Hi-C	Chr4	Small	265'583'981	265'607'294	5	23'313
Sikem	PacBio HiFi + Hi-C	Chr4	Small	33'538'267	33'561'572	6	23'305
Sikem	PacBio HiFi + Hi-C	Chr7	Small	212'551'269	212'574'495	7	23'226
Sikem	PacBio HiFi + Hi-C	Chr5	Small	20'779'293	20'802'488	19	23'195
Sikem	PacBio HiFi + Hi-C	Chr4	Small	193'567'970	193'591'024	6	23'054
Sikem	PacBio HiFi + Hi-C	Chr6	Small	113'614'580	113'637'620	6	23'040
Sikem	PacBio HiFi + Hi-C	Chr6	Small	102'213'589	102'236'569	2	22'980
Sikem	PacBio HiFi + Hi-C	Chr3	Small	285'810'557	285'833'524	4	22'967
Sikem	PacBio HiFi + Hi-C	Chr5	Small	189'202'934	189'225'887	4	22'953
Sikem	PacBio HiFi + Hi-C	Chr4	Small	157'912'478	157'935'369	18	22'891
Sikem	PacBio HiFi + Hi-C	Chr1	Small	67'177'023	67'199'909	10	22'886
Sikem	PacBio HiFi + Hi-C	Chr4	Small	73'389'942	73'412'784	11	22'842
Sikem	PacBio HiFi + Hi-C	Chr2	Small	111'225'556	111'248'349	15	22'793
Sikem	PacBio HiFi + Hi-C	Chr2	Small	225'779'278	225'802'062	9	22'784
Sikem	PacBio HiFi + Hi-C	Chr5	Small	112'582'570	112'605'329	11	22'759
Sikem	PacBio HiFi + Hi-C	Chr4	Small	178'747'160	178'769'909	5	22'749
Sikem	PacBio HiFi + Hi-C	Chr1	Small	238'932'987	238'955'717	6	22'730
Sikem	PacBio HiFi + Hi-C	Chr4	Small	423'505'082	423'527'763	18	22'681
Sikem	PacBio HiFi + Hi-C	Chr5	Small	245'267'024	245'289'695	23	22'671
Sikem	PacBio HiFi + Hi-C	Chr4	Small	53'526'695	53'549'346	7	22'651
Sikem	PacBio HiFi + Hi-C	Chr7	Small	234'563'049	234'585'644	5	22'595
Sikem	PacBio HiFi + Hi-C	Chr3	Small	29'563'587	29'586'175	11	22'588
Sikem	PacBio HiFi + Hi-C	Chr2	Small	135'446'419	135'468'920	4	22'501
Sikem	PacBio HiFi + Hi-C	Chr2	Small	181'687'832	181'710'286	7	22'454
Sikem	PacBio HiFi + Hi-C	Chr2	Small	85'336'143	85'358'547	4	22'404
Sikem	PacBio HiFi + Hi-C	Chr6	Small	20'812'939	20'835'327	11	22'388
Sikem	PacBio HiFi + Hi-C	Chr5	Small	95'024'416	95'046'793	14	22'377
Sikem	PacBio HiFi + Hi-C	Chr7	Small	322'929'594	322'951'914	2	22'320
Sikem	PacBio HiFi + Hi-C	Chr5	Small	60'970'667	60'992'974	9	22'307
Sikem	PacBio HiFi + Hi-C	Chr1	Small	27'873'986	27'896'268	7	22'282
Sikem	PacBio HiFi + Hi-C	Chr4	Small	365'467'115	365'489'364	11	22'249

Sikem	PacBio HiFi + Hi-C	Chr4	Small	273'955'600	273'977'819	10	22'219
Sikem	PacBio HiFi + Hi-C	Chr3	Small	380'520'134	380'542'330	7	22'196
Sikem	PacBio HiFi + Hi-C	Chr4	Small	422'789'570	422'811'754	2	22'184
Sikem	PacBio HiFi + Hi-C	Chr2	Small	65'358'740	65'380'920	23	22'180
Sikem	PacBio HiFi + Hi-C	Chr7	Small	181'294'741	181'316'904	3	22'163
Sikem	PacBio HiFi + Hi-C	Chr1	Small	164'187'260	164'209'421	15	22'161
Sikem	PacBio HiFi + Hi-C	Chr4	Small	296'174'777	296'196'923	5	22'146
Sikem	PacBio HiFi + Hi-C	Chr3	Small	100'462'465	100'484'601	38	22'136
Sikem	PacBio HiFi + Hi-C	Chr6	Small	121'565'861	121'587'988	5	22'127
Sikem	PacBio HiFi + Hi-C	Chr3	Small	16'061'355	16'083'474	8	22'119
Sikem	PacBio HiFi + Hi-C	Chr5	Small	45'921'134	45'943'226	8	22'092
Sikem	PacBio HiFi + Hi-C	Chr4	Small	296'541'372	296'563'456	23	22'084
Sikem	PacBio HiFi + Hi-C	Chr5	Small	57'870'642	57'892'719	5	22'077
Sikem	PacBio HiFi + Hi-C	Chr3	Small	175'176'022	175'198'073	5	22'051
Sikem	PacBio HiFi + Hi-C	Chr3	Small	310'752'630	310'774'637	5	22'007
Sikem	PacBio HiFi + Hi-C	Chr4	Small	124'191'745	124'213'678	9	21'933
Sikem	PacBio HiFi + Hi-C	Chr3	Small	88'466'319	88'488'213	8	21'894
Sikem	PacBio HiFi + Hi-C	Chr7	Small	317'067'999	317'089'887	9	21'888
Sikem	PacBio HiFi + Hi-C	Chr2	Small	202'482'598	202'504'479	4	21'881
Sikem	PacBio HiFi + Hi-C	Chr2	Small	165'651'923	165'673'654	2	21'731
Sikem	PacBio HiFi + Hi-C	Chr4	Small	363'568'481	363'590'160	12	21'679
Sikem	PacBio HiFi + Hi-C	Chr1	Small	239'454'257	239'475'914	7	21'657
Sikem	PacBio HiFi + Hi-C	Chr5	Small	162'046'246	162'067'880	9	21'634
Sikem	PacBio HiFi + Hi-C	Chr4	Small	420'520'698	420'542'330	11	21'632
Sikem	PacBio HiFi + Hi-C	Chr7	Small	195'020'589	195'042'195	46	21'606
Sikem	PacBio HiFi + Hi-C	Chr3	Small	112'898'725	112'920'325	10	21'600
Sikem	PacBio HiFi + Hi-C	Chr2	Small	77'977'805	77'999'392	6	21'587
Sikem	PacBio HiFi + Hi-C	Chr4	Small	230'393'778	230'415'348	28	21'570
Sikem	PacBio HiFi + Hi-C	Chr2	Small	237'326'721	237'348'256	7	21'535
Sikem	PacBio HiFi + Hi-C	Chr5	Small	110'209'136	110'230'661	21	21'525
Sikem	PacBio HiFi + Hi-C	Chr1	Small	25'224'517	25'246'032	13	21'515
Sikem	PacBio HiFi + Hi-C	Chr1	Small	157'255'905	157'277'417	3	21'512
Sikem	PacBio HiFi + Hi-C	Chr4	Small	297'452'297	297'473'757	6	21'460
Sikem	PacBio HiFi + Hi-C	Chr3	Small	166'743'193	166'764'647	3	21'454
Sikem	PacBio HiFi + Hi-C	Chr2	Small	171'864'579	171'886'023	3	21'444
Sikem	PacBio HiFi + Hi-C	Chr7	Small	145'862'980	145'884'375	10	21'395
Sikem	PacBio HiFi + Hi-C	Chr1	Small	249'213'561	249'234'910	3	21'349
Sikem	PacBio HiFi + Hi-C	Chr7	Small	254'195'931	254'217'266	5	21'335
Sikem	PacBio HiFi + Hi-C	Chr5	Small	94'705'429	94'726'742	8	21'313
Sikem	PacBio HiFi + Hi-C	Chr5	Small	191'514'787	191'536'091	5	21'304
Sikem	PacBio HiFi + Hi-C	Chr5	Small	86'415'153	86'436'454	17	21'301
Sikem	PacBio HiFi + Hi-C	Chr3	Small	213'009'530	213'030'791	18	21'261
Sikem	PacBio HiFi + Hi-C	Chr2	Small	56'289'481	56'310'719	11	21'238
Sikem	PacBio HiFi + Hi-C	Chr2	Small	185'261'731	185'282'952	14	21'221
Sikem	PacBio HiFi + Hi-C	Chr4	Small	317'080'298	317'101'479	20	21'181
Sikem	PacBio HiFi + Hi-C	Chr3	Small	333'699'570	333'720'732	10	21'162
Sikem	PacBio HiFi + Hi-C	Chr3	Small	111'619'523	111'640'680	4	21'157
Sikem	PacBio HiFi + Hi-C	Chr6	Small	194'530'079	194'551'230	20	21'151
Sikem	PacBio HiFi + Hi-C	Chr7	Small	170'814'872	170'835'998	28	21'126
Sikem	PacBio HiFi + Hi-C	Chr4	Small	306'404'212	306'425'281	7	21'069
Sikem	PacBio HiFi + Hi-C	Chr5	Small	35'235'485	35'256'546	24	21'061
Sikem	PacBio HiFi + Hi-C	Chr1	Small	44'885'391	44'906'443	5	21'052
Sikem	PacBio HiFi + Hi-C	Chr7	Small	150'648'401	150'669'453	59	21'052
Sikem	PacBio HiFi + Hi-C	Chr7	Small	56'651'304	56'672'349	16	21'045
Sikem	PacBio HiFi + Hi-C	Chr6	Small	254'524'986	254'546'017	11	21'031
Sikem	PacBio HiFi + Hi-C	Chr4	Small	218'451'695	218'472'688	2	20'993
Sikem	PacBio HiFi + Hi-C	Chr4	Small	358'788'769	358'809'683	2	20'914
Sikem	PacBio HiFi + Hi-C	Chr3	Small	368'329'722	368'350'582	34	20'860
Sikem	PacBio HiFi + Hi-C	Chr5	Small	198'135'424	198'156'277	10	20'853
Sikem	PacBio HiFi + Hi-C	Chr6	Small	16'747'037	16'767'864	28	20'827
Sikem	PacBio HiFi + Hi-C	Chr6	Small	20'929'254	20'950'061	6	20'807
Sikem	PacBio HiFi + Hi-C	Chr4	Small	202'600'966	202'621'740	6	20'774
Sikem	PacBio HiFi + Hi-C	Chr7	Small	149'734'436	149'755'209	9	20'773
Sikem	PacBio HiFi + Hi-C	Chr7	Small	81'758'845	81'779'605	24	20'760
Sikem	PacBio HiFi + Hi-C	Chr5	Small	94'830'384	94'851'015	12	20'631
Sikem	PacBio HiFi + Hi-C	Chr3	Small	93'436'738	93'457'345	2	20'607
Sikem	PacBio HiFi + Hi-C	Chr5	Small	94'521'982	94'542'523	13	20'541
Sikem	PacBio HiFi + Hi-C	Chr3	Small	331'548'395	331'568'931	11	20'536
Sikem	PacBio HiFi + Hi-C	Chr5	Small	68'366'912	68'387'390	2	20'478
Sikem	PacBio HiFi + Hi-C	Chr5	Small	96'860'839	96'881'206	2	20'367
Sikem	PacBio HiFi + Hi-C	Chr4	Small	168'307'009	168'327'363	54	20'354

Sikem	PacBio HiFi + Hi-C	Chr3	Small	146'933'667	146'953'999	9	20'332
Sikem	PacBio HiFi + Hi-C	Chr5	Small	104'273'418	104'293'730	7	20'312
Sikem	PacBio HiFi + Hi-C	Chr6	Small	109'377'058	109'397'351	7	20'293
Sikem	PacBio HiFi + Hi-C	Chr2	Small	166'599'240	166'619'516	2	20'276
Sikem	PacBio HiFi + Hi-C	Chr3	Small	167'231'474	167'251'688	24	20'214
Sikem	PacBio HiFi + Hi-C	Chr2	Small	165'326'201	165'346'401	3	20'200
Sikem	PacBio HiFi + Hi-C	Chr4	Small	177'542'590	177'562'770	42	20'180
Sikem	PacBio HiFi + Hi-C	Chr3	Small	129'214'403	129'234'571	8	20'168
Sikem	PacBio HiFi + Hi-C	Chr6	Small	108'707'481	108'727'623	5	20'142
Sikem	PacBio HiFi + Hi-C	Chr7	Small	216'131'883	216'152'018	13	20'135
Sikem	PacBio HiFi + Hi-C	Chr3	Small	240'126'636	240'146'666	16	20'030
Sikem	PacBio HiFi + Hi-C	Chr3	Small	129'340'367	129'360'302	13	19'935
Sikem	PacBio HiFi + Hi-C	Chr4	Small	171'190'978	171'210'909	4	19'931
Sikem	PacBio HiFi + Hi-C	Chr3	Small	233'104'813	233'124'738	5	19'925
Sikem	PacBio HiFi + Hi-C	Chr1	Small	139'834'540	139'854'458	5	19'918
Sikem	PacBio HiFi + Hi-C	Chr7	Small	254'092'944	254'112'861	25	19'917
Sikem	PacBio HiFi + Hi-C	Chr4	Small	351'898'373	351'918'284	24	19'911
Sikem	PacBio HiFi + Hi-C	Chr4	Small	69'692'034	69'711'921	8	19'887
Sikem	PacBio HiFi + Hi-C	Chr3	Small	144'137'303	144'157'142	4	19'839
Sikem	PacBio HiFi + Hi-C	Chr4	Small	38'335'446	38'355'262	12	19'816
Sikem	PacBio HiFi + Hi-C	Chr7	Small	244'415'061	244'434'869	15	19'808
Sikem	PacBio HiFi + Hi-C	Chr3	Small	6'536'994	6'556'798	8	19'804
Sikem	PacBio HiFi + Hi-C	Chr6	Small	214'492'749	214'512'518	11	19'769
Sikem	PacBio HiFi + Hi-C	Chr4	Small	165'699'249	165'719'012	9	19'763
Sikem	PacBio HiFi + Hi-C	Chr4	Small	46'271'307	46'291'015	3	19'708
Sikem	PacBio HiFi + Hi-C	Chr2	Small	177'753'786	177'773'454	9	19'668
Sikem	PacBio HiFi + Hi-C	Chr5	Small	46'780'140	46'799'770	4	19'630
Sikem	PacBio HiFi + Hi-C	Chr7	Small	311'216'939	311'236'560	5	19'621
Sikem	PacBio HiFi + Hi-C	Chr3	Small	146'178'955	146'198'562	2	19'607
Sikem	PacBio HiFi + Hi-C	Chr3	Small	44'490'284	44'509'868	6	19'584
Sikem	PacBio HiFi + Hi-C	Chr6	Small	108'357'949	108'377'530	10	19'581
Sikem	PacBio HiFi + Hi-C	Chr6	Small	120'649'249	120'668'824	15	19'575
Sikem	PacBio HiFi + Hi-C	Chr1	Small	105'987'256	106'006'825	2	19'569
Sikem	PacBio HiFi + Hi-C	Chr4	Small	1'674'604	1'694'135	9	19'531
Sikem	PacBio HiFi + Hi-C	Chr2	Small	76'627'378	76'646'732	14	19'354
Sikem	PacBio HiFi + Hi-C	Chr1	Small	15'667'978	15'687'318	9	19'340
Sikem	PacBio HiFi + Hi-C	Chr2	Small	160'535'062	160'554'394	8	19'332
Sikem	PacBio HiFi + Hi-C	Chr7	Small	286'505'995	286'525'285	8	19'290
Sikem	PacBio HiFi + Hi-C	Chr6	Small	20'643'700	20'662'988	3	19'288
Sikem	PacBio HiFi + Hi-C	Chr3	Small	47'322'940	47'342'189	6	19'249
Sikem	PacBio HiFi + Hi-C	Chr3	Small	170'603'038	170'622'280	7	19'242
Sikem	PacBio HiFi + Hi-C	Chr7	Small	202'651'475	202'670'575	9	19'100
Sikem	PacBio HiFi + Hi-C	Chr2	Small	63'576'819	63'595'911	2	19'092
Sikem	PacBio HiFi + Hi-C	Chr2	Small	188'577'557	188'596'645	2	19'088
Sikem	PacBio HiFi + Hi-C	Chr5	Small	37'910'458	37'929'523	12	19'065
Sikem	PacBio HiFi + Hi-C	Chr4	Small	314'372'502	314'391'560	12	19'058
Sikem	PacBio HiFi + Hi-C	Chr7	Small	249'988'915	250'007'966	4	19'051
Sikem	PacBio HiFi + Hi-C	Chr4	Small	236'038'612	236'057'632	4	19'020
Sikem	PacBio HiFi + Hi-C	Chr1	Small	15'532'816	15'551'779	21	18'963
Sikem	PacBio HiFi + Hi-C	Chr7	Small	39'180'751	39'199'692	5	18'941
Sikem	PacBio HiFi + Hi-C	Chr1	Small	43'436'203	43'455'067	3	18'864
Sikem	PacBio HiFi + Hi-C	Chr6	Small	108'593'331	108'612'129	5	18'798
Sikem	PacBio HiFi + Hi-C	Chr2	Small	71'974'425	71'993'178	7	18'753
Sikem	PacBio HiFi + Hi-C	Chr3	Small	373'320'460	373'339'210	7	18'750
Sikem	PacBio HiFi + Hi-C	Chr7	Small	214'595'440	214'614'174	34	18'734
Sikem	PacBio HiFi + Hi-C	Chr7	Small	223'371'306	223'390'040	12	18'734
Sikem	PacBio HiFi + Hi-C	Chr7	Small	12'450'612	12'469'331	5	18'719
Sikem	PacBio HiFi + Hi-C	Chr1	Small	37'950'441	37'969'144	7	18'703
Sikem	PacBio HiFi + Hi-C	Chr4	Small	115'269'831	115'288'480	19	18'649
Sikem	PacBio HiFi + Hi-C	Chr5	Small	91'557'528	91'576'171	10	18'643
Sikem	PacBio HiFi + Hi-C	Chr3	Small	251'850'477	251'869'042	3	18'565
Sikem	PacBio HiFi + Hi-C	Chr5	Small	186'455'130	186'473'666	10	18'536
Sikem	PacBio HiFi + Hi-C	Chr4	Small	74'808'719	74'827'227	3	18'508
Sikem	PacBio HiFi + Hi-C	Chr7	Small	233'309'701	233'328'148	4	18'447
Sikem	PacBio HiFi + Hi-C	Chr3	Small	172'726'969	172'745'409	4	18'440
Sikem	PacBio HiFi + Hi-C	Chr4	Small	156'098'065	156'116'477	30	18'412
Sikem	PacBio HiFi + Hi-C	Chr1	Small	144'576'837	144'595'229	8	18'392
Sikem	PacBio HiFi + Hi-C	Chr7	Small	168'669'369	168'687'732	5	18'363
Sikem	PacBio HiFi + Hi-C	Chr4	Small	297'368'159	297'386'520	5	18'361
Sikem	PacBio HiFi + Hi-C	Chr1	Small	216'460'194	216'478'544	6	18'350
Sikem	PacBio HiFi + Hi-C	Chr2	Small	256'122'674	256'141'023	7	18'349

Sikem	PacBio HiFi + Hi-C	Chr4	Small	328'929'492	328'947'824	4	18'332
Sikem	PacBio HiFi + Hi-C	Chr3	Small	130'397'300	130'415'623	23	18'323
Sikem	PacBio HiFi + Hi-C	Chr2	Small	181'778'802	181'797'122	2	18'320
Sikem	PacBio HiFi + Hi-C	Chr7	Small	251'549'982	251'568'298	5	18'316
Sikem	PacBio HiFi + Hi-C	Chr5	Small	88'107'539	88'125'825	4	18'286
Sikem	PacBio HiFi + Hi-C	Chr4	Small	160'371'726	160'390'004	2	18'278
Sikem	PacBio HiFi + Hi-C	Chr7	Small	350'091'413	350'109'690	10	18'277
Sikem	PacBio HiFi + Hi-C	Chr4	Small	363'120'327	363'138'534	9	18'207
Sikem	PacBio HiFi + Hi-C	Chr3	Small	13'511'557	13'529'750	7	18'193
Sikem	PacBio HiFi + Hi-C	Chr3	Small	155'316'338	155'334'515	5	18'177
Sikem	PacBio HiFi + Hi-C	Chr5	Small	50'010'685	50'028'861	15	18'176
Sikem	PacBio HiFi + Hi-C	Chr4	Small	202'730'815	202'748'970	4	18'155
Sikem	PacBio HiFi + Hi-C	Chr3	Small	40'145'302	40'163'427	7	18'125
Sikem	PacBio HiFi + Hi-C	Chr5	Small	147'055'128	147'073'249	6	18'121
Sikem	PacBio HiFi + Hi-C	Chr1	Small	147'808'411	147'826'468	2	18'057
Sikem	PacBio HiFi + Hi-C	Chr1	Small	168'860'114	168'878'150	2	18'036
Sikem	PacBio HiFi + Hi-C	Chr3	Small	30'182'994	30'201'029	5	18'035
Sikem	PacBio HiFi + Hi-C	Chr3	Small	145'592'307	145'610'327	3	18'020
Sikem	PacBio HiFi + Hi-C	Chr4	Small	348'696'879	348'714'885	4	18'006
Sikem	PacBio HiFi + Hi-C	Chr4	Small	127'108'162	127'126'159	2	17'997
Sikem	PacBio HiFi + Hi-C	Chr5	Small	49'526'711	49'544'690	3	17'979
Sikem	PacBio HiFi + Hi-C	Chr2	Small	81'161'630	81'179'572	3	17'942
Sikem	PacBio HiFi + Hi-C	Chr6	Small	56'350'558	56'368'471	72	17'913
Sikem	PacBio HiFi + Hi-C	Chr7	Small	150'092'547	150'110'429	19	17'882
Sikem	PacBio HiFi + Hi-C	Chr1	Small	51'868'181	51'886'052	3	17'871
Sikem	PacBio HiFi + Hi-C	Chr5	Small	1'006'338	1'024'184	9	17'846
Sikem	PacBio HiFi + Hi-C	Chr5	Small	45'875'181	45'892'980	7	17'799
Sikem	PacBio HiFi + Hi-C	Chr7	Small	146'689'431	146'707'198	6	17'767
Sikem	PacBio HiFi + Hi-C	Chr7	Small	181'886'482	181'904'205	7	17'723
Sikem	PacBio HiFi + Hi-C	Chr6	Small	162'514'857	162'532'572	3	17'715
Sikem	PacBio HiFi + Hi-C	Chr3	Small	375'008'488	375'026'202	9	17'714
Sikem	PacBio HiFi + Hi-C	Chr7	Small	120'907'293	120'925'005	13	17'712
Sikem	PacBio HiFi + Hi-C	Chr7	Small	147'201'810	147'219'502	5	17'692
Sikem	PacBio HiFi + Hi-C	Chr7	Small	130'633'548	130'651'233	3	17'685
Sikem	PacBio HiFi + Hi-C	Chr1	Small	134'040'597	134'058'227	12	17'630
Sikem	PacBio HiFi + Hi-C	Chr4	Small	27'200'985	27'218'610	5	17'625
Sikem	PacBio HiFi + Hi-C	Chr3	Small	2'532'681	2'550'300	12	17'619
Sikem	PacBio HiFi + Hi-C	Chr2	Small	307'571'103	307'588'709	3	17'606
Sikem	PacBio HiFi + Hi-C	Chr2	Small	245'356'425	245'373'803	4	17'378
Sikem	PacBio HiFi + Hi-C	Chr5	Small	62'902'099	62'919'465	12	17'366
Sikem	PacBio HiFi + Hi-C	Chr5	Small	97'272'893	97'290'169	2	17'276
Sikem	PacBio HiFi + Hi-C	Chr6	Small	147'997'525	148'014'770	8	17'245
Sikem	PacBio HiFi + Hi-C	Chr6	Small	128'089'832	128'107'076	12	17'244
Sikem	PacBio HiFi + Hi-C	Chr6	Small	81'151'493	81'168'678	3	17'185
Sikem	PacBio HiFi + Hi-C	Chr2	Small	9'383'411	9'400'585	16	17'174
Sikem	PacBio HiFi + Hi-C	Chr2	Small	183'507'852	183'525'015	2	17'163
Sikem	PacBio HiFi + Hi-C	Chr4	Small	225'681'846	225'698'997	17	17'151
Sikem	PacBio HiFi + Hi-C	Chr4	Small	287'908'993	287'926'119	46	17'126
Sikem	PacBio HiFi + Hi-C	Chr3	Small	167'383'351	167'400'467	3	17'116
Sikem	PacBio HiFi + Hi-C	Chr6	Small	107'656'244	107'673'344	7	17'100
Sikem	PacBio HiFi + Hi-C	Chr4	Small	15'530'402	15'547'501	8	17'099
Sikem	PacBio HiFi + Hi-C	Chr7	Small	333'011'380	333'028'449	11	17'069
Sikem	PacBio HiFi + Hi-C	Chr3	Small	41'713'880	41'730'945	2	17'065
Sikem	PacBio HiFi + Hi-C	Chr6	Small	89'135'416	89'152'436	4	17'020
Sikem	PacBio HiFi + Hi-C	Chr7	Small	212'905'707	212'922'660	3	16'953
Sikem	PacBio HiFi + Hi-C	Chr7	Small	226'921'435	226'938'300	13	16'865
Sikem	PacBio HiFi + Hi-C	Chr5	Small	98'343'785	98'360'597	2	16'812
Sikem	PacBio HiFi + Hi-C	Chr4	Small	23'033'245	23'050'055	9	16'810
Sikem	PacBio HiFi + Hi-C	Chr2	Small	119'377'367	119'394'171	3	16'804
Sikem	PacBio HiFi + Hi-C	Chr3	Small	41'401'820	41'418'547	5	16'727
Sikem	PacBio HiFi + Hi-C	Chr7	Small	236'742'939	236'759'606	16	16'667
Sikem	PacBio HiFi + Hi-C	Chr5	Small	57'565'311	57'581'951	12	16'640
Sikem	PacBio HiFi + Hi-C	Chr7	Small	194'392'988	194'409'583	6	16'595
Sikem	PacBio HiFi + Hi-C	Chr1	Small	18'793'731	18'810'322	2	16'591
Sikem	PacBio HiFi + Hi-C	Chr4	Small	225'642'167	225'658'735	37	16'568
Sikem	PacBio HiFi + Hi-C	Chr1	Small	219'865'284	219'881'850	5	16'566
Sikem	PacBio HiFi + Hi-C	Chr7	Small	147'126'464	147'143'008	7	16'544
Sikem	PacBio HiFi + Hi-C	Chr5	Small	62'746'853	62'763'390	3	16'537
Sikem	PacBio HiFi + Hi-C	Chr4	Small	161'983'397	161'999'927	17	16'530
Sikem	PacBio HiFi + Hi-C	Chr6	Small	223'730'452	223'746'982	5	16'530
Sikem	PacBio HiFi + Hi-C	Chr3	Small	323'120'241	323'136'769	23	16'528

Sikem	PacBio HiFi + Hi-C	Chr2	Small	108'262'525	108'279'040	11	16'515
Sikem	PacBio HiFi + Hi-C	Chr1	Small	219'720'894	219'737'395	4	16'501
Sikem	PacBio HiFi + Hi-C	Chr5	Small	121'353'628	121'370'126	12	16'498
Sikem	PacBio HiFi + Hi-C	Chr4	Small	48'517'665	48'534'122	7	16'457
Sikem	PacBio HiFi + Hi-C	Chr2	Small	115'436'302	115'452'745	9	16'443
Sikem	PacBio HiFi + Hi-C	Chr1	Small	99'904'732	99'921'133	4	16'401
Sikem	PacBio HiFi + Hi-C	Chr7	Small	122'328'207	122'344'587	25	16'380
Sikem	PacBio HiFi + Hi-C	Chr3	Small	389'643'584	389'659'922	7	16'338
Sikem	PacBio HiFi + Hi-C	Chr5	Small	234'680'720	234'697'042	8	16'322
Sikem	PacBio HiFi + Hi-C	Chr1	Small	103'425'169	103'441'488	2	16'319
Sikem	PacBio HiFi + Hi-C	Chr6	Small	128'392'522	128'408'839	2	16'317
Sikem	PacBio HiFi + Hi-C	Chr7	Small	251'022'439	251'038'707	5	16'268
Sikem	PacBio HiFi + Hi-C	Chr6	Small	100'840'916	100'857'181	4	16'265
Sikem	PacBio HiFi + Hi-C	Chr1	Small	82'475'128	82'491'388	2	16'260
Sikem	PacBio HiFi + Hi-C	Chr4	Small	176'795'217	176'811'475	8	16'258
Sikem	PacBio HiFi + Hi-C	Chr3	Small	53'438'480	53'454'732	26	16'252
Sikem	PacBio HiFi + Hi-C	Chr2	Small	259'314'020	259'330'258	4	16'238
Sikem	PacBio HiFi + Hi-C	Chr1	Small	211'624'411	211'640'644	6	16'233
Sikem	PacBio HiFi + Hi-C	Chr7	Small	256'291'698	256'307'917	6	16'219
Sikem	PacBio HiFi + Hi-C	Chr1	Small	256'180'981	256'197'178	33	16'197
Sikem	PacBio HiFi + Hi-C	Chr4	Small	367'178'399	367'194'592	2	16'193
Sikem	PacBio HiFi + Hi-C	Chr2	Small	199'810'595	199'826'780	4	16'185
Sikem	PacBio HiFi + Hi-C	Chr7	Small	78'287'252	78'303'343	3	16'091
Sikem	PacBio HiFi + Hi-C	Chr6	Small	220'228'481	220'244'542	6	16'061
Sikem	PacBio HiFi + Hi-C	Chr5	Small	69'848'201	69'864'252	4	16'051
Sikem	PacBio HiFi + Hi-C	Chr5	Small	52'760'650	52'776'695	9	16'045
Sikem	PacBio HiFi + Hi-C	Chr7	Small	228'189'119	228'205'151	6	16'032
Sikem	PacBio HiFi + Hi-C	Chr7	Small	139'530'891	139'546'899	5	16'008
Sikem	PacBio HiFi + Hi-C	Chr5	Small	36'816'392	36'832'391	7	15'999
Sikem	PacBio HiFi + Hi-C	Chr7	Small	94'456'998	94'472'951	12	15'953
Sikem	PacBio HiFi + Hi-C	Chr5	Small	88'882'356	88'898'290	11	15'934
Sikem	PacBio HiFi + Hi-C	Chr3	Small	196'790'332	196'806'253	70	15'921
Sikem	PacBio HiFi + Hi-C	Chr4	Small	183'354'298	183'370'196	8	15'898
Sikem	PacBio HiFi + Hi-C	Chr1	Small	161'470'009	161'485'894	23	15'885
Sikem	PacBio HiFi + Hi-C	Chr6	Small	165'823'992	165'839'854	4	15'862
Sikem	PacBio HiFi + Hi-C	Chr4	Small	116'830'989	116'846'847	3	15'858
Sikem	PacBio HiFi + Hi-C	Chr7	Small	72'108'484	72'124'336	7	15'852
Sikem	PacBio HiFi + Hi-C	Chr3	Small	338'335'781	338'351'596	8	15'815
Sikem	PacBio HiFi + Hi-C	Chr2	Small	161'841'648	161'857'453	3	15'805
Sikem	PacBio HiFi + Hi-C	Chr2	Small	138'819'332	138'835'129	11	15'797
Sikem	PacBio HiFi + Hi-C	Chr4	Small	166'882'309	166'898'089	5	15'780
Sikem	PacBio HiFi + Hi-C	Chr3	Small	96'667'445	96'683'157	5	15'712
Sikem	PacBio HiFi + Hi-C	Chr7	Small	260'911'119	260'926'826	4	15'707
Sikem	PacBio HiFi + Hi-C	Chr4	Small	170'476'834	170'492'529	3	15'695
Sikem	PacBio HiFi + Hi-C	Chr2	Small	115'173'942	115'189'635	3	15'693
Sikem	PacBio HiFi + Hi-C	Chr7	Small	263'143'108	263'158'785	14	15'677
Sikem	PacBio HiFi + Hi-C	Chr4	Small	151'572'570	151'588'217	5	15'647
Sikem	PacBio HiFi + Hi-C	Chr4	Small	73'578'729	73'594'373	7	15'644
Sikem	PacBio HiFi + Hi-C	Chr3	Small	145'688'595	145'704'226	3	15'631
Sikem	PacBio HiFi + Hi-C	Chr4	Small	418'480'900	418'496'529	2	15'629
Sikem	PacBio HiFi + Hi-C	Chr7	Small	151'394'422	151'410'049	6	15'627
Sikem	PacBio HiFi + Hi-C	Chr2	Small	127'363'883	127'379'508	7	15'625
Sikem	PacBio HiFi + Hi-C	Chr4	Small	274'364'484	274'380'103	15	15'619
Sikem	PacBio HiFi + Hi-C	Chr7	Small	172'841'265	172'856'831	8	15'566
Sikem	PacBio HiFi + Hi-C	Chr2	Small	201'259'909	201'275'433	19	15'524
Sikem	PacBio HiFi + Hi-C	Chr4	Small	386'280'696	386'296'207	17	15'511
Sikem	PacBio HiFi + Hi-C	Chr1	Small	103'851'081	103'866'588	7	15'507
Sikem	PacBio HiFi + Hi-C	Chr5	Small	192'266'687	192'282'158	23	15'471
Sikem	PacBio HiFi + Hi-C	Chr2	Small	191'307'211	191'322'674	6	15'463
Sikem	PacBio HiFi + Hi-C	Chr3	Small	41'071'755	41'087'156	3	15'401
Sikem	PacBio HiFi + Hi-C	Chr3	Small	120'969'266	120'984'646	7	15'380
Sikem	PacBio HiFi + Hi-C	Chr7	Small	318'280'377	318'295'748	10	15'371
Sikem	PacBio HiFi + Hi-C	Chr2	Small	15'037'517	15'052'865	16	15'348
Sikem	PacBio HiFi + Hi-C	Chr6	Small	159'570'553	159'585'883	23	15'330
Sikem	PacBio HiFi + Hi-C	Chr7	Small	192'121'273	192'136'583	4	15'310
Sikem	PacBio HiFi + Hi-C	Chr4	Small	375'065'529	375'080'823	5	15'294
Sikem	PacBio HiFi + Hi-C	Chr7	Small	295'250'297	295'265'549	6	15'252
Sikem	PacBio HiFi + Hi-C	Chr1	Small	21'691'311	21'706'556	13	15'245
Sikem	PacBio HiFi + Hi-C	Chr2	Small	165'791'901	165'807'145	3	15'244
Sikem	PacBio HiFi + Hi-C	Chr2	Small	51'807'013	51'822'247	4	15'234
Sikem	PacBio HiFi + Hi-C	Chr5	Small	96'771'913	96'787'114	5	15'201

Sikem	PacBio HiFi + Hi-C	Chr3	Small	61'359'165	61'374'355	26	15'190
Sikem	PacBio HiFi + Hi-C	Chr5	Small	86'718'346	86'733'536	13	15'190
Sikem	PacBio HiFi + Hi-C	Chr7	Small	14'668'078	14'683'266	4	15'188
Sikem	PacBio HiFi + Hi-C	Chr2	Small	113'866'430	113'881'613	4	15'183
Sikem	PacBio HiFi + Hi-C	Chr3	Small	29'285'680	29'300'853	14	15'173
Sikem	PacBio HiFi + Hi-C	Chr3	Small	1'089'078	1'104'236	5	15'158
Sikem	PacBio HiFi + Hi-C	Chr5	Small	203'406'474	203'421'624	4	15'150
Sikem	PacBio HiFi + Hi-C	Chr4	Small	373'536'266	373'551'397	18	15'131
Sikem	PacBio HiFi + Hi-C	Chr1	Small	102'846'048	102'861'151	2	15'103
Sikem	PacBio HiFi + Hi-C	Chr6	Small	146'214'441	146'229'509	3	15'068
Sikem	PacBio HiFi + Hi-C	Chr4	Small	272'615'843	272'630'850	9	15'007
Sikem	PacBio HiFi + Hi-C	Chr1	Small	180'627'509	180'642'478	2	14'969
Sikem	PacBio HiFi + Hi-C	Chr4	Small	89'772'275	89'787'238	3	14'963
Sikem	PacBio HiFi + Hi-C	Chr7	Small	299'709'121	299'724'084	9	14'963
Sikem	PacBio HiFi + Hi-C	Chr7	Small	293'146'069	293'161'031	2	14'962
Sikem	PacBio HiFi + Hi-C	Chr2	Small	58'278'403	58'293'364	14	14'961
Sikem	PacBio HiFi + Hi-C	Chr2	Small	295'872'017	295'886'973	10	14'956
Sikem	PacBio HiFi + Hi-C	Chr2	Small	63'199'417	63'214'324	3	14'907
Sikem	PacBio HiFi + Hi-C	Chr6	Small	30'083'563	30'098'464	5	14'901
Sikem	PacBio HiFi + Hi-C	Chr4	Small	380'643'214	380'658'074	4	14'860
Sikem	PacBio HiFi + Hi-C	Chr7	Small	146'974'566	146'989'378	5	14'812
Sikem	PacBio HiFi + Hi-C	Chr1	Small	106'430'993	106'445'783	11	14'790
Sikem	PacBio HiFi + Hi-C	Chr7	Small	256'616'824	256'631'607	21	14'783
Sikem	PacBio HiFi + Hi-C	Chr7	Small	281'059'096	281'073'871	6	14'775
Sikem	PacBio HiFi + Hi-C	Chr4	Small	48'174'231	48'189'005	13	14'774
Sikem	PacBio HiFi + Hi-C	Chr3	Small	58'927'050	58'941'763	5	14'713
Sikem	PacBio HiFi + Hi-C	Chr6	Small	100'029'832	100'044'527	2	14'695
Sikem	PacBio HiFi + Hi-C	Chr3	Small	30'527'685	30'542'349	5	14'664
Sikem	PacBio HiFi + Hi-C	Chr7	Small	321'975'499	321'990'138	8	14'639
Sikem	PacBio HiFi + Hi-C	Chr4	Small	292'287'986	292'302'613	2	14'627
Sikem	PacBio HiFi + Hi-C	Chr6	Small	159'043'021	159'057'648	7	14'627
Sikem	PacBio HiFi + Hi-C	Chr1	Small	144'505'807	144'520'430	2	14'623
Sikem	PacBio HiFi + Hi-C	Chr2	Small	228'428'062	228'442'667	2	14'605
Sikem	PacBio HiFi + Hi-C	Chr5	Small	88'492'331	88'506'913	8	14'582
Sikem	PacBio HiFi + Hi-C	Chr5	Small	87'490'304	87'504'877	8	14'573
Sikem	PacBio HiFi + Hi-C	Chr4	Small	424'097'842	424'112'384	2	14'542
Sikem	PacBio HiFi + Hi-C	Chr7	Small	62'481'352	62'495'864	4	14'512
Sikem	PacBio HiFi + Hi-C	Chr3	Small	372'646'741	372'661'207	2	14'466
Sikem	PacBio HiFi + Hi-C	Chr3	Small	378'818'407	378'832'864	3	14'457
Sikem	PacBio HiFi + Hi-C	Chr3	Small	42'607'441	42'621'894	6	14'453
Sikem	PacBio HiFi + Hi-C	Chr7	Small	241'184'350	241'198'793	2	14'443
Sikem	PacBio HiFi + Hi-C	Chr5	Small	207'714'696	207'729'134	8	14'438
Sikem	PacBio HiFi + Hi-C	Chr5	Small	68'990'170	69'004'588	34	14'418
Sikem	PacBio HiFi + Hi-C	Chr5	Small	4'851'971	4'866'372	3	14'401
Sikem	PacBio HiFi + Hi-C	Chr3	Small	148'776'424	148'790'749	8	14'325
Sikem	PacBio HiFi + Hi-C	Chr5	Small	187'907'182	187'921'476	6	14'294
Sikem	PacBio HiFi + Hi-C	Chr2	Small	37'717'624	37'731'905	10	14'281
Sikem	PacBio HiFi + Hi-C	Chr6	Small	124'969'225	124'983'488	3	14'263
Sikem	PacBio HiFi + Hi-C	Chr7	Small	355'833'968	355'848'229	10	14'261
Sikem	PacBio HiFi + Hi-C	Chr7	Small	89'349'597	89'363'838	6	14'241
Sikem	PacBio HiFi + Hi-C	Chr3	Small	151'561'331	151'575'548	6	14'217
Sikem	PacBio HiFi + Hi-C	Chr4	Small	418'981'321	418'995'509	32	14'188
Sikem	PacBio HiFi + Hi-C	Chr5	Small	86'030'093	86'044'276	14	14'183
Sikem	PacBio HiFi + Hi-C	Chr4	Small	29'278'169	29'292'344	6	14'175
Sikem	PacBio HiFi + Hi-C	Chr7	Small	90'180'433	90'194'598	3	14'165
Sikem	PacBio HiFi + Hi-C	Chr1	Small	115'370'548	115'384'707	2	14'159
Sikem	PacBio HiFi + Hi-C	Chr3	Small	127'488'947	127'503'088	5	14'141
Sikem	PacBio HiFi + Hi-C	Chr5	Small	105'313'277	105'327'405	15	14'128
Sikem	PacBio HiFi + Hi-C	Chr2	Small	296'870'746	296'884'836	3	14'090
Sikem	PacBio HiFi + Hi-C	Chr7	Small	57'897'129	57'911'164	3	14'035
Sikem	PacBio HiFi + Hi-C	Chr4	Small	258'212'265	258'226'252	5	13'987
Sikem	PacBio HiFi + Hi-C	Chr4	Small	11'511'516	11'525'502	2	13'986
Sikem	PacBio HiFi + Hi-C	Chr1	Small	125'197'275	125'211'202	9	13'927
Sikem	PacBio HiFi + Hi-C	Chr6	Small	74'447'795	74'461'679	3	13'884
Sikem	PacBio HiFi + Hi-C	Chr3	Small	94'514'968	94'528'832	5	13'864
Sikem	PacBio HiFi + Hi-C	Chr2	Small	72'084'701	72'098'552	26	13'851
Sikem	PacBio HiFi + Hi-C	Chr3	Small	56'156'188	56'170'038	20	13'850
Sikem	PacBio HiFi + Hi-C	Chr1	Small	220'391'035	220'404'882	7	13'847
Sikem	PacBio HiFi + Hi-C	Chr3	Small	92'413'999	92'427'826	4	13'827
Sikem	PacBio HiFi + Hi-C	Chr6	Small	41'640'327	41'654'137	7	13'810
Sikem	PacBio HiFi + Hi-C	Chr3	Small	272'526'510	272'540'279	2	13'769

Sikem	PacBio HiFi + Hi-C	Chr7	Small	71'617'608	71'631'359	35	13'751
Sikem	PacBio HiFi + Hi-C	Chr3	Small	330'331'224	330'344'938	3	13'714
Sikem	PacBio HiFi + Hi-C	Chr4	Small	290'326'038	290'339'726	2	13'688
Sikem	PacBio HiFi + Hi-C	Chr5	Small	151'919'094	151'932'762	3	13'668
Sikem	PacBio HiFi + Hi-C	Chr3	Small	160'986'143	160'999'762	5	13'619
Sikem	PacBio HiFi + Hi-C	Chr1	Small	254'896'500	254'910'061	4	13'561
Sikem	PacBio HiFi + Hi-C	Chr3	Small	314'384'627	314'398'118	4	13'491
Sikem	PacBio HiFi + Hi-C	Chr2	Small	64'177'406	64'190'892	3	13'486
Sikem	PacBio HiFi + Hi-C	Chr2	Small	165'381'825	165'395'255	2	13'430
Sikem	PacBio HiFi + Hi-C	Chr4	Small	353'502'910	353'516'330	3	13'420
Sikem	PacBio HiFi + Hi-C	Chr4	Small	143'578'896	143'592'282	17	13'386
Sikem	PacBio HiFi + Hi-C	Chr6	Small	142'234'469	142'247'853	16	13'384
Sikem	PacBio HiFi + Hi-C	Chr5	Small	142'472'549	142'485'869	19	13'320
Sikem	PacBio HiFi + Hi-C	Chr5	Small	96'075'799	96'089'110	4	13'311
Sikem	PacBio HiFi + Hi-C	Chr4	Small	420'589'547	420'602'841	6	13'294
Sikem	PacBio HiFi + Hi-C	Chr4	Small	186'832'945	186'846'201	12	13'256
Sikem	PacBio HiFi + Hi-C	Chr5	Small	8'430'751	8'444'002	21	13'251
Sikem	PacBio HiFi + Hi-C	Chr1	Small	7'554'648	7'567'898	9	13'250
Sikem	PacBio HiFi + Hi-C	Chr5	Small	54'381'195	54'394'418	2	13'223
Sikem	PacBio HiFi + Hi-C	Chr5	Small	83'098'272	83'111'460	3	13'188
Sikem	PacBio HiFi + Hi-C	Chr7	Small	170'557'056	170'570'219	7	13'163
Sikem	PacBio HiFi + Hi-C	Chr6	Small	122'149'631	122'162'714	8	13'083
Sikem	PacBio HiFi + Hi-C	Chr6	Small	158'007'154	158'020'201	4	13'047
Sikem	PacBio HiFi + Hi-C	Chr1	Small	172'011'245	172'024'269	3	13'024
Sikem	PacBio HiFi + Hi-C	Chr6	Small	17'411'464	17'424'485	33	13'021
Sikem	PacBio HiFi + Hi-C	Chr3	Small	357'106'731	357'119'745	2	13'014
Sikem	PacBio HiFi + Hi-C	Chr2	Small	77'829'592	77'842'603	9	13'011
Sikem	PacBio HiFi + Hi-C	Chr4	Small	375'116'435	375'129'435	35	13'000
Sikem	PacBio HiFi + Hi-C	Chr5	Small	68'166'204	68'179'195	31	12'991
Sikem	PacBio HiFi + Hi-C	Chr5	Small	105'368'532	105'381'514	3	12'982
Sikem	PacBio HiFi + Hi-C	Chr4	Small	13'539'251	13'552'222	7	12'971
Sikem	PacBio HiFi + Hi-C	Chr6	Small	146'177'774	146'190'735	8	12'961
Sikem	PacBio HiFi + Hi-C	Chr1	Small	155'295'739	155'308'694	18	12'955
Sikem	PacBio HiFi + Hi-C	Chr1	Small	250'971'941	250'984'875	5	12'934
Sikem	PacBio HiFi + Hi-C	Chr7	Small	23'004'779	23'017'701	3	12'922
Sikem	PacBio HiFi + Hi-C	Chr3	Small	40'681'285	40'694'204	12	12'919
Sikem	PacBio HiFi + Hi-C	Chr1	Small	142'633'468	142'646'346	73	12'878
Sikem	PacBio HiFi + Hi-C	Chr3	Small	119'550'547	119'563'425	18	12'878
Sikem	PacBio HiFi + Hi-C	Chr1	Small	166'057'727	166'070'602	3	12'875
Sikem	PacBio HiFi + Hi-C	Chr4	Small	408'052'129	408'065'002	4	12'873
Sikem	PacBio HiFi + Hi-C	Chr1	Small	78'294'633	78'307'469	9	12'836
Sikem	PacBio HiFi + Hi-C	Chr3	Small	1'826'016	1'838'842	37	12'826
Sikem	PacBio HiFi + Hi-C	Chr5	Small	136'921'732	136'934'544	6	12'812
Sikem	PacBio HiFi + Hi-C	Chr4	Small	281'526'604	281'539'406	11	12'802
Sikem	PacBio HiFi + Hi-C	Chr2	Small	164'439'108	164'451'909	5	12'801
Sikem	PacBio HiFi + Hi-C	Chr3	Small	196'531'058	196'543'852	9	12'794
Sikem	PacBio HiFi + Hi-C	Chr5	Small	165'230'598	165'243'390	2	12'792
Sikem	PacBio HiFi + Hi-C	Chr3	Small	85'585'143	85'597'925	12	12'782
Sikem	PacBio HiFi + Hi-C	Chr1	Small	42'496'628	42'509'387	6	12'759
Sikem	PacBio HiFi + Hi-C	Chr3	Small	245'363'973	245'376'726	15	12'753
Sikem	PacBio HiFi + Hi-C	Chr4	Small	98'179'480	98'192'232	5	12'752
Sikem	PacBio HiFi + Hi-C	Chr5	Small	40'523'467	40'536'218	4	12'751
Sikem	PacBio HiFi + Hi-C	Chr7	Small	265'669'787	265'682'485	4	12'698
Sikem	PacBio HiFi + Hi-C	Chr1	Small	218'311'287	218'323'978	4	12'691
Sikem	PacBio HiFi + Hi-C	Chr7	Small	107'226'862	107'239'553	5	12'691
Sikem	PacBio HiFi + Hi-C	Chr5	Small	58'925'152	58'937'826	5	12'674
Sikem	PacBio HiFi + Hi-C	Chr6	Small	27'208'073	27'220'739	14	12'666
Sikem	PacBio HiFi + Hi-C	Chr7	Small	265'503'021	265'515'681	28	12'660
Sikem	PacBio HiFi + Hi-C	Chr3	Small	146'819'982	146'832'575	5	12'593
Sikem	PacBio HiFi + Hi-C	Chr4	Small	134'115'831	134'128'401	7	12'570
Sikem	PacBio HiFi + Hi-C	Chr3	Small	132'515'967	132'528'534	2	12'567
Sikem	PacBio HiFi + Hi-C	Chr7	Small	192'543'773	192'556'298	3	12'525
Sikem	PacBio HiFi + Hi-C	Chr2	Small	149'315'866	149'328'386	4	12'520
Sikem	PacBio HiFi + Hi-C	Chr2	Small	201'543'958	201'556'432	4	12'474
Sikem	PacBio HiFi + Hi-C	Chr3	Small	100'820'507	100'832'972	9	12'465
Sikem	PacBio HiFi + Hi-C	Chr3	Small	150'018'339	150'030'788	48	12'449
Sikem	PacBio HiFi + Hi-C	Chr7	Small	327'429'108	327'441'552	7	12'444
Sikem	PacBio HiFi + Hi-C	Chr7	Small	224'004'039	224'016'479	25	12'440
Sikem	PacBio HiFi + Hi-C	Chr5	Small	51'585'228	51'597'661	7	12'433
Sikem	PacBio HiFi + Hi-C	Chr6	Small	127'756'439	127'768'854	7	12'415
Sikem	PacBio HiFi + Hi-C	Chr5	Small	189'349'849	189'362'240	10	12'391

Sikem	PacBio HiFi + Hi-C	Chr5	Small	12'370'737	12'383'127	5	12'390
Sikem	PacBio HiFi + Hi-C	Chr7	Small	333'529'020	333'541'377	3	12'357
Sikem	PacBio HiFi + Hi-C	Chr7	Small	56'519'107	56'531'432	12	12'325
Sikem	PacBio HiFi + Hi-C	Chr5	Small	94'194'402	94'206'673	2	12'271
Sikem	PacBio HiFi + Hi-C	Chr1	Small	119'323'793	119'336'032	6	12'239
Sikem	PacBio HiFi + Hi-C	Chr7	Small	157'328'298	157'340'408	8	12'110
Sikem	PacBio HiFi + Hi-C	Chr5	Small	46'084'732	46'096'839	60	12'107
Sikem	PacBio HiFi + Hi-C	Chr4	Small	186'146'717	186'158'819	4	12'102
Sikem	PacBio HiFi + Hi-C	Chr6	Small	169'101'008	169'113'103	8	12'095
Sikem	PacBio HiFi + Hi-C	Chr7	Small	81'321'801	81'333'895	16	12'094
Sikem	PacBio HiFi + Hi-C	Chr5	Small	49'969'808	49'981'901	2	12'093
Sikem	PacBio HiFi + Hi-C	Chr6	Small	236'620'477	236'632'551	4	12'074
Sikem	PacBio HiFi + Hi-C	Chr4	Small	279'739'605	279'751'673	4	12'068
Sikem	PacBio HiFi + Hi-C	Chr5	Small	62'284'619	62'296'675	3	12'056
Sikem	PacBio HiFi + Hi-C	Chr2	Small	110'549'544	110'561'585	5	12'041
Sikem	PacBio HiFi + Hi-C	Chr6	Small	32'181'788	32'193'819	6	12'031
Sikem	PacBio HiFi + Hi-C	Chr5	Small	62'865'551	62'877'562	2	12'011
Sikem	PacBio HiFi + Hi-C	Chr2	Small	182'041'099	182'053'091	4	11'992
Sikem	PacBio HiFi + Hi-C	Chr5	Small	168'518'124	168'530'064	6	11'940
Sikem	PacBio HiFi + Hi-C	Chr7	Small	101'276'172	101'288'089	30	11'917
Sikem	PacBio HiFi + Hi-C	Chr2	Small	98'906'940	98'918'844	26	11'904
Sikem	PacBio HiFi + Hi-C	Chr5	Small	88'629'115	88'641'018	2	11'903
Sikem	PacBio HiFi + Hi-C	Chr5	Small	65'843'997	65'855'891	4	11'894
Sikem	PacBio HiFi + Hi-C	Chr6	Small	20'858'647	20'870'539	4	11'892
Sikem	PacBio HiFi + Hi-C	Chr6	Small	214'792'105	214'803'988	10	11'883
Sikem	PacBio HiFi + Hi-C	Chr1	Small	260'814'186	260'825'982	23	11'796
Sikem	PacBio HiFi + Hi-C	Chr5	Small	56'427'693	56'439'471	13	11'778
Sikem	PacBio HiFi + Hi-C	Chr5	Small	106'607'996	106'619'742	10	11'746
Sikem	PacBio HiFi + Hi-C	Chr1	Small	80'668'547	80'680'268	2	11'721
Sikem	PacBio HiFi + Hi-C	Chr2	Small	234'247'251	234'258'956	5	11'705
Sikem	PacBio HiFi + Hi-C	Chr4	Small	17'830'168	17'841'861	13	11'693
Sikem	PacBio HiFi + Hi-C	Chr6	Small	161'328'838	161'340'520	7	11'682
Sikem	PacBio HiFi + Hi-C	Chr3	Small	192'242'818	192'254'490	31	11'672
Sikem	PacBio HiFi + Hi-C	Chr3	Small	356'375'715	356'387'360	6	11'645
Sikem	PacBio HiFi + Hi-C	Chr3	Small	91'147'137	91'158'754	3	11'617
Sikem	PacBio HiFi + Hi-C	Chr3	Small	390'317'244	390'328'855	8	11'611
Sikem	PacBio HiFi + Hi-C	Chr4	Small	150'597'818	150'609'423	4	11'605
Sikem	PacBio HiFi + Hi-C	Chr1	Small	131'620'184	131'631'785	28	11'601
Sikem	PacBio HiFi + Hi-C	Chr1	Small	220'569'119	220'580'712	22	11'593
Sikem	PacBio HiFi + Hi-C	Chr7	Small	136'704'692	136'716'282	8	11'590
Sikem	PacBio HiFi + Hi-C	Chr3	Small	389'563'574	389'575'157	8	11'583
Sikem	PacBio HiFi + Hi-C	Chr3	Small	52'992'669	53'004'227	19	11'558
Sikem	PacBio HiFi + Hi-C	Chr3	Small	28'260'014	28'271'553	7	11'539
Sikem	PacBio HiFi + Hi-C	Chr5	Small	119'840'741	119'852'260	4	11'519
Sikem	PacBio HiFi + Hi-C	Chr4	Small	337'062'410	337'073'926	6	11'516
Sikem	PacBio HiFi + Hi-C	Chr7	Small	263'811'043	263'822'553	10	11'510
Sikem	PacBio HiFi + Hi-C	Chr7	Small	187'621'870	187'633'352	3	11'482
Sikem	PacBio HiFi + Hi-C	Chr4	Small	426'601'603	426'613'036	2	11'433
Sikem	PacBio HiFi + Hi-C	Chr3	Small	286'893'253	286'904'677	5	11'424
Sikem	PacBio HiFi + Hi-C	Chr5	Small	96'935'222	96'946'644	2	11'422
Sikem	PacBio HiFi + Hi-C	Chr4	Small	270'157'757	270'169'155	6	11'398
Sikem	PacBio HiFi + Hi-C	Chr5	Small	24'297'629	24'309'021	2	11'392
Sikem	PacBio HiFi + Hi-C	Chr4	Small	322'893'824	322'905'195	2	11'371
Sikem	PacBio HiFi + Hi-C	Chr2	Small	117'564'675	117'576'036	5	11'361
Sikem	PacBio HiFi + Hi-C	Chr6	Small	64'533'517	64'544'876	5	11'359
Sikem	PacBio HiFi + Hi-C	Chr1	Small	172'538'230	172'549'558	4	11'328
Sikem	PacBio HiFi + Hi-C	Chr7	Small	111'432'662	111'443'978	9	11'316
Sikem	PacBio HiFi + Hi-C	Chr7	Small	211'031'047	211'042'361	2	11'314
Sikem	PacBio HiFi + Hi-C	Chr5	Small	142'865'306	142'876'586	17	11'280
Sikem	PacBio HiFi + Hi-C	Chr4	Small	391'330'474	391'341'752	8	11'278
Sikem	PacBio HiFi + Hi-C	Chr6	Small	205'739'687	205'750'964	5	11'277
Sikem	PacBio HiFi + Hi-C	Chr3	Small	133'860'735	133'872'003	6	11'268
Sikem	PacBio HiFi + Hi-C	Chr7	Small	72'860'535	72'871'781	5	11'246
Sikem	PacBio HiFi + Hi-C	Chr7	Small	229'014'433	229'025'662	3	11'229
Sikem	PacBio HiFi + Hi-C	Chr7	Small	338'867'668	338'878'897	2	11'229
Sikem	PacBio HiFi + Hi-C	Chr5	Small	94'309'320	94'320'514	3	11'194
Sikem	PacBio HiFi + Hi-C	Chr5	Small	96'444'628	96'455'801	2	11'173
Sikem	PacBio HiFi + Hi-C	Chr7	Small	268'990'297	269'001'465	10	11'168
Sikem	PacBio HiFi + Hi-C	Chr1	Small	144'020'600	144'031'743	5	11'143
Sikem	PacBio HiFi + Hi-C	Chr3	Small	5'845'548	5'856'677	9	11'129
Sikem	PacBio HiFi + Hi-C	Chr4	Small	203'304'643	203'315'760	4	11'117

Sikem	PacBio HiFi + Hi-C	Chr3	Small	199'732'507	199'743'615	3	11'108
Sikem	PacBio HiFi + Hi-C	Chr6	Small	131'095'279	131'106'386	6	11'107
Sikem	PacBio HiFi + Hi-C	Chr7	Small	3'108'056	3'119'157	7	11'101
Sikem	PacBio HiFi + Hi-C	Chr5	Small	109'420'523	109'431'600	13	11'077
Sikem	PacBio HiFi + Hi-C	Chr4	Small	210'550'035	210'561'093	10	11'058
Sikem	PacBio HiFi + Hi-C	Chr3	Small	148'836'966	148'848'014	2	11'048
Sikem	PacBio HiFi + Hi-C	Chr3	Small	257'228'587	257'239'630	3	11'043
Sikem	PacBio HiFi + Hi-C	Chr4	Small	91'284'020	91'295'048	4	11'028
Sikem	PacBio HiFi + Hi-C	Chr7	Small	112'384'765	112'395'776	5	11'011
Sikem	PacBio HiFi + Hi-C	Chr6	Small	15'827'275	15'838'263	9	10'988
Sikem	PacBio HiFi + Hi-C	Chr2	Small	165'120'971	165'131'948	5	10'977
Sikem	PacBio HiFi + Hi-C	Chr6	Small	146'079'176	146'090'144	7	10'968
Sikem	PacBio HiFi + Hi-C	Chr5	Small	193'249'192	193'260'142	10	10'950
Sikem	PacBio HiFi + Hi-C	Chr7	Small	89'514'580	89'525'529	17	10'949
Sikem	PacBio HiFi + Hi-C	Chr1	Small	25'324'488	25'335'404	13	10'916
Sikem	PacBio HiFi + Hi-C	Chr5	Small	77'452'103	77'463'016	8	10'913
Sikem	PacBio HiFi + Hi-C	Chr7	Small	351'656'405	351'667'295	15	10'890
Sikem	PacBio HiFi + Hi-C	Chr6	Small	145'277'569	145'288'431	8	10'862
Sikem	PacBio HiFi + Hi-C	Chr7	Small	121'852'940	121'863'802	14	10'862
Sikem	PacBio HiFi + Hi-C	Chr7	Small	171'897'561	171'908'403	5	10'842
Sikem	PacBio HiFi + Hi-C	Chr1	Small	31'426'188	31'437'021	18	10'833
Sikem	PacBio HiFi + Hi-C	Chr3	Small	4'311'267	4'322'086	7	10'819
Sikem	PacBio HiFi + Hi-C	Chr3	Small	1'624'045	1'634'849	9	10'804
Sikem	PacBio HiFi + Hi-C	Chr7	Small	265'951'821	265'962'616	7	10'795
Sikem	PacBio HiFi + Hi-C	Chr4	Small	36'928'049	36'938'837	4	10'788
Sikem	PacBio HiFi + Hi-C	Chr3	Small	130'667'700	130'678'485	7	10'785
Sikem	PacBio HiFi + Hi-C	Chr6	Small	30'647'418	30'658'201	7	10'783
Sikem	PacBio HiFi + Hi-C	Chr6	Small	237'814'498	237'825'253	13	10'755
Sikem	PacBio HiFi + Hi-C	Chr4	Small	54'049'794	54'060'512	2	10'718
Sikem	PacBio HiFi + Hi-C	Chr6	Small	116'903'058	116'913'776	6	10'718
Sikem	PacBio HiFi + Hi-C	Chr5	Small	67'033'211	67'043'928	2	10'717
Sikem	PacBio HiFi + Hi-C	Chr2	Small	159'330'227	159'340'939	5	10'712
Sikem	PacBio HiFi + Hi-C	Chr5	Small	33'911'815	33'922'521	6	10'706
Sikem	PacBio HiFi + Hi-C	Chr5	Small	2'774'206	2'784'904	2	10'698
Sikem	PacBio HiFi + Hi-C	Chr5	Small	105'048'554	105'059'233	5	10'679
Sikem	PacBio HiFi + Hi-C	Chr2	Small	64'874'407	64'885'084	8	10'677
Sikem	PacBio HiFi + Hi-C	Chr3	Small	90'168'427	90'179'082	8	10'655
Sikem	PacBio HiFi + Hi-C	Chr5	Small	152'818'568	152'829'213	7	10'645
Sikem	PacBio HiFi + Hi-C	Chr4	Small	185'241'063	185'251'673	14	10'610
Sikem	PacBio HiFi + Hi-C	Chr3	Small	216'423'538	216'434'141	6	10'603
Sikem	PacBio HiFi + Hi-C	Chr3	Small	333'649'679	333'660'250	2	10'571
Sikem	PacBio HiFi + Hi-C	Chr7	Small	273'937'164	273'947'735	18	10'571
Sikem	PacBio HiFi + Hi-C	Chr1	Small	103'355'912	103'366'480	4	10'568
Sikem	PacBio HiFi + Hi-C	Chr3	Small	130'580'186	130'590'753	3	10'567
Sikem	PacBio HiFi + Hi-C	Chr2	Small	89'387'773	89'398'306	5	10'533
Sikem	PacBio HiFi + Hi-C	Chr5	Small	73'814'431	73'824'931	5	10'500
Sikem	PacBio HiFi + Hi-C	Chr3	Small	35'921'346	35'931'839	18	10'493
Sikem	PacBio HiFi + Hi-C	Chr4	Small	17'926'938	17'937'394	19	10'456
Sikem	PacBio HiFi + Hi-C	Chr3	Small	128'091'183	128'101'638	12	10'455
Sikem	PacBio HiFi + Hi-C	Chr4	Small	241'616'233	241'626'660	11	10'427
Sikem	PacBio HiFi + Hi-C	Chr4	Small	181'564'668	181'575'080	7	10'412
Sikem	PacBio HiFi + Hi-C	Chr2	Small	79'994'323	80'004'731	5	10'408
Sikem	PacBio HiFi + Hi-C	Chr4	Small	35'686'033	35'696'427	3	10'394
Sikem	PacBio HiFi + Hi-C	Chr2	Small	10'448'928	10'459'299	5	10'371
Sikem	PacBio HiFi + Hi-C	Chr2	Small	285'201'502	285'211'870	5	10'368
Sikem	PacBio HiFi + Hi-C	Chr4	Small	109'556'239	109'566'593	2	10'354
Sikem	PacBio HiFi + Hi-C	Chr3	Small	146'120'682	146'131'001	2	10'319
Sikem	PacBio HiFi + Hi-C	Chr2	Small	95'657'545	95'667'848	5	10'303
Sikem	PacBio HiFi + Hi-C	Chr5	Small	9'042'519	9'052'813	27	10'294
Sikem	PacBio HiFi + Hi-C	Chr4	Small	307'553'623	307'563'877	5	10'254
Sikem	PacBio HiFi + Hi-C	Chr6	Small	254'293'892	254'304'129	20	10'237
Sikem	PacBio HiFi + Hi-C	Chr6	Small	61'223'370	61'233'598	26	10'228
Sikem	PacBio HiFi + Hi-C	Chr7	Small	178'416'282	178'426'443	4	10'161
Sikem	PacBio HiFi + Hi-C	Chr2	Small	113'732'927	113'743'082	13	10'155
Sikem	PacBio HiFi + Hi-C	Chr4	Small	220'503'395	220'513'471	3	10'076
Sikem	PacBio HiFi + Hi-C	Chr4	Small	276'652'888	276'662'942	2	10'054
Sikem	PacBio HiFi + Hi-C	Chr3	Small	239'614'727	239'624'754	3	10'027
Sikem	PacBio HiFi + Hi-C	Chr6	Small	123'061'423	123'071'407	7	9'984
Sikem	PacBio HiFi + Hi-C	Chr5	Small	68'415'954	68'425'932	3	9'978
Sikem	PacBio HiFi + Hi-C	Chr6	Small	129'327'495	129'337'470	6	9'975
Sikem	PacBio HiFi + Hi-C	Chr1	Small	7'077'087	7'086'994	3	9'907

Sikem	PacBio HiFi + Hi-C	Chr4	Small	208'031'225	208'041'121	3	9'896
Sikem	PacBio HiFi + Hi-C	Chr6	Small	87'792'688	87'802'541	19	9'853
Sikem	PacBio HiFi + Hi-C	Chr3	Small	25'254'275	25'264'119	6	9'844
Sikem	PacBio HiFi + Hi-C	Chr2	Small	145'442'764	145'452'557	2	9'793
Sikem	PacBio HiFi + Hi-C	Chr4	Small	326'444'100	326'453'880	3	9'780
Sikem	PacBio HiFi + Hi-C	Chr4	Small	237'678'322	237'688'096	2	9'774
Sikem	PacBio HiFi + Hi-C	Chr4	Small	261'080'940	261'090'695	9	9'755
Sikem	PacBio HiFi + Hi-C	Chr2	Small	174'701'745	174'711'476	22	9'731
Sikem	PacBio HiFi + Hi-C	Chr6	Small	119'055'665	119'065'374	6	9'709
Sikem	PacBio HiFi + Hi-C	Chr5	Small	88'841'042	88'850'746	17	9'704
Sikem	PacBio HiFi + Hi-C	Chr5	Small	235'464'587	235'474'274	28	9'687
Sikem	PacBio HiFi + Hi-C	Chr6	Small	230'682'985	230'692'653	10	9'668
Sikem	PacBio HiFi + Hi-C	Chr1	Small	63'957'181	63'966'842	2	9'661
Sikem	PacBio HiFi + Hi-C	Chr3	Small	18'970'569	18'980'209	7	9'640
Sikem	PacBio HiFi + Hi-C	Chr5	Small	70'224'645	70'234'281	11	9'636
Sikem	PacBio HiFi + Hi-C	Chr3	Small	65'051'651	65'061'277	29	9'626
Sikem	PacBio HiFi + Hi-C	Chr4	Small	260'916'013	260'925'592	6	9'579
Sikem	PacBio HiFi + Hi-C	Chr7	Small	122'766'449	122'775'970	3	9'521
Sikem	PacBio HiFi + Hi-C	Chr7	Small	41'990'685	42'000'189	4	9'504
Sikem	PacBio HiFi + Hi-C	Chr6	Small	91'376'722	91'386'196	3	9'474
Sikem	PacBio HiFi + Hi-C	Chr4	Small	235'802'625	235'812'037	8	9'412
Sikem	PacBio HiFi + Hi-C	Chr3	Small	24'910'829	24'920'130	10	9'301
Sikem	PacBio HiFi + Hi-C	Chr1	Small	249'895'326	249'904'600	3	9'274
Sikem	PacBio HiFi + Hi-C	Chr3	Small	43'608'054	43'617'320	12	9'266
Sikem	PacBio HiFi + Hi-C	Chr2	Small	65'422'416	65'431'634	5	9'218
Sikem	PacBio HiFi + Hi-C	Chr6	Small	46'420'971	46'430'187	6	9'216
Sikem	PacBio HiFi + Hi-C	Chr3	Small	140'565'361	140'574'568	2	9'207
Sikem	PacBio HiFi + Hi-C	Chr4	Small	413'987'734	413'996'898	3	9'164
Sikem	PacBio HiFi + Hi-C	Chr7	Small	297'017'002	297'026'135	3	9'133
Sikem	PacBio HiFi + Hi-C	Chr7	Small	42'730'445	42'739'545	19	9'100
Sikem	PacBio HiFi + Hi-C	Chr1	Small	18'985'385	18'994'458	7	9'073
Sikem	PacBio HiFi + Hi-C	Chr4	Small	17'073'263	17'082'304	11	9'041
Sikem	PacBio HiFi + Hi-C	Chr1	Small	157'313'355	157'322'347	2	8'992
Sikem	PacBio HiFi + Hi-C	Chr1	Small	219'169'270	219'178'236	15	8'966
Sikem	PacBio HiFi + Hi-C	Chr1	Small	42'601'052	42'609'973	23	8'921
Sikem	PacBio HiFi + Hi-C	Chr3	Small	327'850'317	327'859'237	2	8'920
Sikem	PacBio HiFi + Hi-C	Chr2	Small	301'563'702	301'572'587	9	8'885
Sikem	PacBio HiFi + Hi-C	Chr3	Small	172'486	181'359	17	8'873
Sikem	PacBio HiFi + Hi-C	Chr7	Small	138'004'797	138'013'670	13	8'873
Sikem	PacBio HiFi + Hi-C	Chr4	Small	411'388'847	411'397'706	6	8'859
Sikem	PacBio HiFi + Hi-C	Chr5	Small	51'628'774	51'637'632	9	8'858
Sikem	PacBio HiFi + Hi-C	Chr7	Small	152'636'404	152'645'259	4	8'855
Sikem	PacBio HiFi + Hi-C	Chr4	Small	83'518'547	83'527'394	2	8'847
Sikem	PacBio HiFi + Hi-C	Chr5	Small	160'812'018	160'820'850	14	8'832
Sikem	PacBio HiFi + Hi-C	Chr7	Small	22'325'900	22'334'693	6	8'793
Sikem	PacBio HiFi + Hi-C	Chr3	Small	99'971'199	99'979'973	20	8'774
Sikem	PacBio HiFi + Hi-C	Chr4	Small	296'076'764	296'085'519	9	8'755
Sikem	PacBio HiFi + Hi-C	Chr4	Small	31'283'504	31'292'239	2	8'735
Sikem	PacBio HiFi + Hi-C	Chr4	Small	105'907'361	105'916'081	2	8'720
Sikem	PacBio HiFi + Hi-C	Chr6	Small	155'120'427	155'129'078	6	8'651
Sikem	PacBio HiFi + Hi-C	Chr4	Small	107'220'383	107'229'031	3	8'648
Sikem	PacBio HiFi + Hi-C	Chr2	Small	119'416'461	119'425'104	4	8'643
Sikem	PacBio HiFi + Hi-C	Chr7	Small	330'428'614	330'437'245	3	8'631
Sikem	PacBio HiFi + Hi-C	Chr3	Small	190'053'401	190'062'019	3	8'618
Sikem	PacBio HiFi + Hi-C	Chr7	Small	112'892'178	112'900'792	7	8'614
Sikem	PacBio HiFi + Hi-C	Chr7	Small	282'619'800	282'628'391	36	8'591
Sikem	PacBio HiFi + Hi-C	Chr6	Small	125'007'025	125'015'567	4	8'542
Sikem	PacBio HiFi + Hi-C	Chr1	Small	105'496'035	105'504'555	4	8'520
Sikem	PacBio HiFi + Hi-C	Chr4	Small	418'450'247	418'458'760	5	8'513
Sikem	PacBio HiFi + Hi-C	Chr4	Small	253'705'661	253'714'159	6	8'498
Sikem	PacBio HiFi + Hi-C	Chr3	Small	119'442'954	119'451'423	3	8'469
Sikem	PacBio HiFi + Hi-C	Chr4	Small	338'864'069	338'872'533	8	8'464
Sikem	PacBio HiFi + Hi-C	Chr7	Small	288'729'720	288'738'164	10	8'444
Sikem	PacBio HiFi + Hi-C	Chr5	Small	37'858'958	37'867'386	7	8'428
Sikem	PacBio HiFi + Hi-C	Chr3	Small	233'170'932	233'179'349	2	8'417
Sikem	PacBio HiFi + Hi-C	Chr4	Small	59'009'149	59'017'557	3	8'408
Sikem	PacBio HiFi + Hi-C	Chr5	Small	184'531'094	184'539'498	4	8'404
Sikem	PacBio HiFi + Hi-C	Chr6	Small	130'654'935	130'663'336	3	8'401
Sikem	PacBio HiFi + Hi-C	Chr1	Small	220'724'773	220'733'168	14	8'395
Sikem	PacBio HiFi + Hi-C	Chr3	Small	41'481'457	41'489'841	129	8'384
Sikem	PacBio HiFi + Hi-C	Chr4	Small	27'262'016	27'270'393	5	8'377

Sikem	PacBio HiFi + Hi-C	Chr7	Small	244'915'599	244'923'947	3	8'348
Sikem	PacBio HiFi + Hi-C	Chr2	Small	228'040'005	228'048'342	20	8'337
Sikem	PacBio HiFi + Hi-C	Chr7	Small	58'401'067	58'409'399	2	8'332
Sikem	PacBio HiFi + Hi-C	Chr1	Small	217'234'764	217'243'087	33	8'323
Sikem	PacBio HiFi + Hi-C	Chr3	Small	175'507'247	175'515'570	5	8'323
Sikem	PacBio HiFi + Hi-C	Chr4	Small	321'986'201	321'994'491	7	8'290
Sikem	PacBio HiFi + Hi-C	Chr7	Small	123'552'276	123'560'548	2	8'272
Sikem	PacBio HiFi + Hi-C	Chr7	Small	349'955'243	349'963'507	11	8'264
Sikem	PacBio HiFi + Hi-C	Chr1	Small	149'101'306	149'109'563	3	8'257
Sikem	PacBio HiFi + Hi-C	Chr2	Small	211'728'680	211'736'934	21	8'254
Sikem	PacBio HiFi + Hi-C	Chr1	Small	165'534'491	165'542'739	3	8'248
Sikem	PacBio HiFi + Hi-C	Chr3	Small	364'761'028	364'769'267	26	8'239
Sikem	PacBio HiFi + Hi-C	Chr3	Small	4'484'730	4'492'953	12	8'223
Sikem	PacBio HiFi + Hi-C	Chr1	Small	248'227'355	248'235'547	2	8'192
Sikem	PacBio HiFi + Hi-C	Chr2	Small	163'894'457	163'902'611	9	8'154
Sikem	PacBio HiFi + Hi-C	Chr1	Small	32'566'958	32'575'072	7	8'114
Sikem	PacBio HiFi + Hi-C	Chr6	Small	84'965'812	84'973'924	3	8'112
Sikem	PacBio HiFi + Hi-C	Chr4	Small	86'054'198	86'062'296	4	8'098
Sikem	PacBio HiFi + Hi-C	Chr7	Small	235'073'757	235'081'851	14	8'094
Sikem	PacBio HiFi + Hi-C	Chr3	Small	24'009'266	24'017'326	22	8'060
Sikem	PacBio HiFi + Hi-C	Chr1	Small	156'380'365	156'388'410	11	8'045
Sikem	PacBio HiFi + Hi-C	Chr4	Small	427'689'666	427'697'688	2	8'022
Sikem	PacBio HiFi + Hi-C	Chr1	Small	224'129'673	224'137'692	14	8'019
Sikem	PacBio HiFi + Hi-C	Chr5	Small	95'824'334	95'832'353	2	8'019
Sikem	PacBio HiFi + Hi-C	Chr3	Small	36'081'732	36'089'741	29	8'009
Sikem	PacBio HiFi + Hi-C	Chr4	Small	197'322'934	197'330'929	9	7'995
Sikem	PacBio HiFi + Hi-C	Chr2	Small	137'577'033	137'585'006	2	7'973
Sikem	PacBio HiFi + Hi-C	Chr3	Small	85'713'196	85'721'169	2	7'973
Sikem	PacBio HiFi + Hi-C	Chr6	Small	19'604'084	19'612'025	6	7'941
Sikem	PacBio HiFi + Hi-C	Chr7	Small	59'281'945	59'289'877	9	7'932
Sikem	PacBio HiFi + Hi-C	Chr7	Small	364'334'240	364'342'167	10	7'927
Sikem	PacBio HiFi + Hi-C	Chr5	Small	156'247'647	156'255'570	5	7'923
Sikem	PacBio HiFi + Hi-C	Chr3	Small	339'818'883	339'826'753	5	7'870
Sikem	PacBio HiFi + Hi-C	Chr4	Small	205'019'037	205'026'883	16	7'846
Sikem	PacBio HiFi + Hi-C	Chr1	Small	79'192'595	79'200'417	15	7'822
Sikem	PacBio HiFi + Hi-C	Chr1	Small	262'674'370	262'682'184	5	7'814
Sikem	PacBio HiFi + Hi-C	Chr3	Small	373'844'606	373'852'407	14	7'801
Sikem	PacBio HiFi + Hi-C	Chr6	Small	119'224'593	119'232'392	8	7'799
Sikem	PacBio HiFi + Hi-C	Chr5	Small	81'752'149	81'759'929	2	7'780
Sikem	PacBio HiFi + Hi-C	Chr3	Small	331'102'554	331'110'318	23	7'764
Sikem	PacBio HiFi + Hi-C	Chr6	Small	22'676'859	22'684'618	8	7'759
Sikem	PacBio HiFi + Hi-C	Chr6	Small	177'443'924	177'451'679	2	7'755
Sikem	PacBio HiFi + Hi-C	Chr3	Small	4'284'685	4'292'424	5	7'739
Sikem	PacBio HiFi + Hi-C	Chr7	Small	151'811'392	151'819'131	10	7'739
Sikem	PacBio HiFi + Hi-C	Chr2	Small	183'547'659	183'555'394	17	7'735
Sikem	PacBio HiFi + Hi-C	Chr2	Small	171'782'115	171'789'843	4	7'728
Sikem	PacBio HiFi + Hi-C	Chr1	Small	191'334'664	191'342'390	4	7'726
Sikem	PacBio HiFi + Hi-C	Chr6	Small	210'499'246	210'506'947	2	7'701
Sikem	PacBio HiFi + Hi-C	Chr7	Small	117'518'018	117'525'676	12	7'658
Sikem	PacBio HiFi + Hi-C	Chr3	Small	88'908'870	88'916'517	8	7'647
Sikem	PacBio HiFi + Hi-C	Chr7	Small	145'114'605	145'122'251	7	7'646
Sikem	PacBio HiFi + Hi-C	Chr2	Small	182'561'527	182'569'165	6	7'638
Sikem	PacBio HiFi + Hi-C	Chr7	Small	268'775'596	268'783'211	3	7'615
Sikem	PacBio HiFi + Hi-C	Chr2	Small	242'699'455	242'707'057	4	7'602
Sikem	PacBio HiFi + Hi-C	Chr5	Small	65'908'109	65'915'707	12	7'598
Sikem	PacBio HiFi + Hi-C	Chr7	Small	171'480'429	171'488'016	12	7'587
Sikem	PacBio HiFi + Hi-C	Chr1	Small	106'837'847	106'845'427	3	7'580
Sikem	PacBio HiFi + Hi-C	Chr1	Small	247'948'587	247'956'154	2	7'567
Sikem	PacBio HiFi + Hi-C	Chr3	Small	153'077'303	153'084'808	9	7'505
Sikem	PacBio HiFi + Hi-C	Chr1	Small	105'112'666	105'120'167	3	7'501
Sikem	PacBio HiFi + Hi-C	Chr5	Small	4'808'654	4'816'142	3	7'488
Sikem	PacBio HiFi + Hi-C	Chr3	Small	321'774'457	321'781'931	13	7'474
Sikem	PacBio HiFi + Hi-C	Chr5	Small	48'442'471	48'449'941	11	7'470
Sikem	PacBio HiFi + Hi-C	Chr5	Small	940'200	947'666	5	7'466
Sikem	PacBio HiFi + Hi-C	Chr3	Small	41'991'098	41'998'523	2	7'425
Sikem	PacBio HiFi + Hi-C	Chr4	Small	163'220'838	163'228'261	2	7'423
Sikem	PacBio HiFi + Hi-C	Chr6	Small	145'107'371	145'114'791	4	7'420
Sikem	PacBio HiFi + Hi-C	Chr7	Small	198'968'641	198'976'060	12	7'419
Sikem	PacBio HiFi + Hi-C	Chr7	Small	302'106'130	302'113'537	3	7'407
Sikem	PacBio HiFi + Hi-C	Chr3	Small	88'532'244	88'539'619	5	7'375
Sikem	PacBio HiFi + Hi-C	Chr1	Small	164'445'316	164'452'666	9	7'350

Sikem	PacBio HiFi + Hi-C	Chr5	Small	83'850'288	83'857'617	2	7'329
Sikem	PacBio HiFi + Hi-C	Chr2	Small	177'795'543	177'802'865	23	7'322
Sikem	PacBio HiFi + Hi-C	Chr4	Small	266'193'782	266'201'102	2	7'320
Sikem	PacBio HiFi + Hi-C	Chr4	Small	401'425'443	401'432'761	7	7'318
Sikem	PacBio HiFi + Hi-C	Chr1	Small	123'068'979	123'076'262	5	7'283
Sikem	PacBio HiFi + Hi-C	Chr5	Small	141'642'525	141'649'801	7	7'276
Sikem	PacBio HiFi + Hi-C	Chr2	Small	45'128'856	45'136'130	12	7'274
Sikem	PacBio HiFi + Hi-C	Chr3	Small	166'428'140	166'435'404	2	7'264
Sikem	PacBio HiFi + Hi-C	Chr1	Small	263'101'837	263'109'068	2	7'231
Sikem	PacBio HiFi + Hi-C	Chr5	Small	5'163'922	5'171'125	5	7'203
Sikem	PacBio HiFi + Hi-C	Chr3	Small	252'654'232	252'661'421	3	7'189
Sikem	PacBio HiFi + Hi-C	Chr3	Small	51'958'979	51'966'135	3	7'156
Sikem	PacBio HiFi + Hi-C	Chr3	Small	40'409'606	40'416'758	10	7'152
Sikem	PacBio HiFi + Hi-C	Chr7	Small	62'087'131	62'094'282	7	7'151
Sikem	PacBio HiFi + Hi-C	Chr5	Small	160'333'342	160'340'472	4	7'130
Sikem	PacBio HiFi + Hi-C	Chr3	Small	226'718'526	226'725'590	2	7'064
Sikem	PacBio HiFi + Hi-C	Chr5	Small	86'155'928	86'162'984	12	7'056
Sikem	PacBio HiFi + Hi-C	Chr1	Small	104'130'326	104'137'372	4	7'046
Sikem	PacBio HiFi + Hi-C	Chr2	Small	182'716'102	182'723'145	13	7'043
Sikem	PacBio HiFi + Hi-C	Chr5	Small	38'173'298	38'180'331	5	7'033
Sikem	PacBio HiFi + Hi-C	Chr3	Small	194'840'456	194'847'439	4	6'983
Sikem	PacBio HiFi + Hi-C	Chr4	Small	200'899'025	200'906'003	6	6'978
Sikem	PacBio HiFi + Hi-C	Chr6	Small	250'043'599	250'050'560	10	6'961
Sikem	PacBio HiFi + Hi-C	Chr4	Small	98'697'302	98'704'261	13	6'959
Sikem	PacBio HiFi + Hi-C	Chr3	Small	13'561'815	13'568'767	4	6'952
Sikem	PacBio HiFi + Hi-C	Chr1	Small	75'227'446	75'234'369	2	6'923
Sikem	PacBio HiFi + Hi-C	Chr7	Small	151'487'357	151'494'277	8	6'920
Sikem	PacBio HiFi + Hi-C	Chr2	Small	101'793'378	101'800'286	3	6'908
Sikem	PacBio HiFi + Hi-C	Chr7	Small	145'060'105	145'067'007	7	6'902
Sikem	PacBio HiFi + Hi-C	Chr2	Small	301'040'073	301'046'933	5	6'860
Sikem	PacBio HiFi + Hi-C	Chr3	Small	43'348'012	43'354'856	2	6'844
Sikem	PacBio HiFi + Hi-C	Chr3	Small	161'405'952	161'412'792	18	6'840
Sikem	PacBio HiFi + Hi-C	Chr3	Small	303'342'350	303'349'182	15	6'832
Sikem	PacBio HiFi + Hi-C	Chr5	Small	235'644'271	235'651'101	9	6'830
Sikem	PacBio HiFi + Hi-C	Chr2	Small	171'437'826	171'444'643	2	6'817
Sikem	PacBio HiFi + Hi-C	Chr5	Small	140'128'459	140'135'270	11	6'811
Sikem	PacBio HiFi + Hi-C	Chr1	Small	123'266'127	123'272'936	5	6'809
Sikem	PacBio HiFi + Hi-C	Chr3	Small	122'414'117	122'420'922	4	6'805
Sikem	PacBio HiFi + Hi-C	Chr4	Small	169'178'397	169'185'198	4	6'801
Sikem	PacBio HiFi + Hi-C	Chr6	Small	24'490'556	24'497'342	6	6'786
Sikem	PacBio HiFi + Hi-C	Chr5	Small	57'498'738	57'505'517	5	6'779
Sikem	PacBio HiFi + Hi-C	Chr7	Small	232'238'700	232'245'458	5	6'758
Sikem	PacBio HiFi + Hi-C	Chr2	Small	73'314'558	73'321'292	2	6'734
Sikem	PacBio HiFi + Hi-C	Chr6	Small	128'130'928	128'137'650	34	6'722
Sikem	PacBio HiFi + Hi-C	Chr7	Small	150'215'519	150'222'226	8	6'707
Sikem	PacBio HiFi + Hi-C	Chr7	Small	24'038'856	24'045'506	3	6'650
Sikem	PacBio HiFi + Hi-C	Chr4	Small	121'776'054	121'782'695	11	6'641
Sikem	PacBio HiFi + Hi-C	Chr7	Small	178'465'085	178'471'726	3	6'641
Sikem	PacBio HiFi + Hi-C	Chr5	Small	17'326'216	17'332'846	26	6'630
Sikem	PacBio HiFi + Hi-C	Chr2	Small	104'756'265	104'762'880	10	6'615
Sikem	PacBio HiFi + Hi-C	Chr5	Small	97'609'213	97'615'808	2	6'595
Sikem	PacBio HiFi + Hi-C	Chr7	Small	22'403'101	22'409'678	4	6'577
Sikem	PacBio HiFi + Hi-C	Chr5	Small	63'689'117	63'695'688	2	6'571
Sikem	PacBio HiFi + Hi-C	Chr4	Small	42'352'093	42'358'660	4	6'567
Sikem	PacBio HiFi + Hi-C	Chr3	Small	103'572'648	103'579'198	3	6'550
Sikem	PacBio HiFi + Hi-C	Chr3	Small	146'851'898	146'858'442	4	6'544
Sikem	PacBio HiFi + Hi-C	Chr4	Small	351'573'127	351'579'665	2	6'538
Sikem	PacBio HiFi + Hi-C	Chr4	Small	362'091'255	362'097'764	2	6'509
Sikem	PacBio HiFi + Hi-C	Chr4	Small	127'780'512	127'787'008	9	6'496
Sikem	PacBio HiFi + Hi-C	Chr7	Small	280'533'933	280'540'423	3	6'490
Sikem	PacBio HiFi + Hi-C	Chr7	Small	282'933'855	282'940'343	5	6'488
Sikem	PacBio HiFi + Hi-C	Chr4	Small	419'133'803	419'140'258	8	6'455
Sikem	PacBio HiFi + Hi-C	Chr7	Small	203'944'037	203'950'485	8	6'448
Sikem	PacBio HiFi + Hi-C	Chr7	Small	130'531'779	130'538'206	15	6'427
Sikem	PacBio HiFi + Hi-C	Chr7	Small	211'304'137	211'310'563	3	6'426
Sikem	PacBio HiFi + Hi-C	Chr1	Small	61'542'705	61'549'106	2	6'401
Sikem	PacBio HiFi + Hi-C	Chr4	Small	348'739'540	348'745'933	5	6'393
Sikem	PacBio HiFi + Hi-C	Chr1	Small	134'593'913	134'600'303	5	6'390
Sikem	PacBio HiFi + Hi-C	Chr2	Small	174'173'538	174'179'900	15	6'362
Sikem	PacBio HiFi + Hi-C	Chr5	Small	250'677'106	250'683'448	15	6'342
Sikem	PacBio HiFi + Hi-C	Chr4	Small	187'734'158	187'740'475	4	6'317

Sikem	PacBio HiFi + Hi-C	Chr2	Small	165'260'485	165'266'794	2	6'309
Sikem	PacBio HiFi + Hi-C	Chr5	Small	104'977'583	104'983'892	2	6'309
Sikem	PacBio HiFi + Hi-C	Chr3	Small	7'671'792	7'678'092	22	6'300
Sikem	PacBio HiFi + Hi-C	Chr1	Small	235'754'463	235'760'751	17	6'288
Sikem	PacBio HiFi + Hi-C	Chr4	Small	180'159'910	180'166'160	7	6'250
Sikem	PacBio HiFi + Hi-C	Chr5	Small	100'316'687	100'322'924	5	6'237
Sikem	PacBio HiFi + Hi-C	Chr5	Small	153'723'141	153'729'376	6	6'235
Sikem	PacBio HiFi + Hi-C	Chr1	Small	220'539'393	220'545'624	6	6'231
Sikem	PacBio HiFi + Hi-C	Chr4	Small	367'142'527	367'148'736	6	6'209
Sikem	PacBio HiFi + Hi-C	Chr1	Small	247'895'645	247'901'834	2	6'189
Sikem	PacBio HiFi + Hi-C	Chr1	Small	40'774	46'958	14	6'184
Sikem	PacBio HiFi + Hi-C	Chr1	Small	105'570'558	105'576'741	2	6'183
Sikem	PacBio HiFi + Hi-C	Chr2	Small	147'104'894	147'111'076	3	6'182
Sikem	PacBio HiFi + Hi-C	Chr3	Small	41'894'489	41'900'667	6	6'178
Sikem	PacBio HiFi + Hi-C	Chr3	Small	332'345'270	332'351'442	4	6'172
Sikem	PacBio HiFi + Hi-C	Chr2	Small	35'177'117	35'183'283	3	6'166
Sikem	PacBio HiFi + Hi-C	Chr2	Small	151'991'224	151'997'364	5	6'140
Sikem	PacBio HiFi + Hi-C	Chr7	Small	22'292'901	22'299'037	10	6'136
Sikem	PacBio HiFi + Hi-C	Chr4	Small	286'578'864	286'584'991	13	6'127
Sikem	PacBio HiFi + Hi-C	Chr1	Small	134'914'114	134'920'209	11	6'095
Sikem	PacBio HiFi + Hi-C	Chr1	Small	192'002'198	192'008'223	2	6'025
Sikem	PacBio HiFi + Hi-C	Chr5	Small	173'592'968	173'598'992	4	6'024
Sikem	PacBio HiFi + Hi-C	Chr7	Small	108'301'469	108'307'490	11	6'021
Sikem	PacBio HiFi + Hi-C	Chr5	Small	122'347'404	122'353'422	2	6'018
Sikem	PacBio HiFi + Hi-C	Chr6	Small	81'537'963	81'543'981	2	6'018
Sikem	PacBio HiFi + Hi-C	Chr5	Small	86'911'880	86'917'879	11	5'999
Sikem	PacBio HiFi + Hi-C	Chr4	Small	127'198'688	127'204'664	2	5'976
Sikem	PacBio HiFi + Hi-C	Chr7	Small	151'184'790	151'190'753	7	5'963
Sikem	PacBio HiFi + Hi-C	Chr4	Small	318'532'703	318'538'647	2	5'944
Sikem	PacBio HiFi + Hi-C	Chr3	Small	226'455'551	226'461'469	2	5'918
Sikem	PacBio HiFi + Hi-C	Chr6	Small	155'778'447	155'784'337	20	5'890
Sikem	PacBio HiFi + Hi-C	Chr2	Small	193'051'137	193'057'025	2	5'888
Sikem	PacBio HiFi + Hi-C	Chr5	Small	116'406'238	116'412'112	58	5'874
Sikem	PacBio HiFi + Hi-C	Chr7	Small	68'638'723	68'644'585	12	5'862
Sikem	PacBio HiFi + Hi-C	Chr2	Small	80'022'108	80'027'949	5	5'841
Sikem	PacBio HiFi + Hi-C	Chr7	Small	360'437'824	360'443'615	7	5'791
Sikem	PacBio HiFi + Hi-C	Chr4	Small	420'229'306	420'235'093	6	5'787
Sikem	PacBio HiFi + Hi-C	Chr2	Small	185'132'387	185'138'173	3	5'786
Sikem	PacBio HiFi + Hi-C	Chr7	Small	36'321'125	36'326'890	7	5'765
Sikem	PacBio HiFi + Hi-C	Chr7	Small	1'956'001	1'961'759	3	5'758
Sikem	PacBio HiFi + Hi-C	Chr4	Small	32'713'286	32'719'028	4	5'742
Sikem	PacBio HiFi + Hi-C	Chr7	Small	4'249'254	4'254'982	7	5'728
Sikem	PacBio HiFi + Hi-C	Chr5	Small	92'363'092	92'368'797	7	5'705
Sikem	PacBio HiFi + Hi-C	Chr6	Small	93'493'229	93'498'923	15	5'694
Sikem	PacBio HiFi + Hi-C	Chr7	Small	4'785'468	4'791'157	4	5'689
Sikem	PacBio HiFi + Hi-C	Chr6	Small	139'727'806	139'733'480	7	5'674
Sikem	PacBio HiFi + Hi-C	Chr5	Small	160'008'727	160'014'381	3	5'654
Sikem	PacBio HiFi + Hi-C	Chr1	Small	219'632'083	219'637'719	2	5'636
Sikem	PacBio HiFi + Hi-C	Chr3	Small	189'016'410	189'022'009	11	5'599
Sikem	PacBio HiFi + Hi-C	Chr4	Small	426'413'930	426'419'527	13	5'597
Sikem	PacBio HiFi + Hi-C	Chr4	Small	219'790'403	219'795'965	3	5'562
Sikem	PacBio HiFi + Hi-C	Chr4	Small	411'234'644	411'240'198	7	5'554
Sikem	PacBio HiFi + Hi-C	Chr4	Small	412'925'195	412'930'736	17	5'541
Sikem	PacBio HiFi + Hi-C	Chr2	Small	126'667'025	126'672'556	4	5'531
Sikem	PacBio HiFi + Hi-C	Chr3	Small	209'080'136	209'085'667	17	5'531
Sikem	PacBio HiFi + Hi-C	Chr1	Small	85'316'920	85'322'387	29	5'467
Sikem	PacBio HiFi + Hi-C	Chr7	Small	34'290'733	34'296'188	11	5'455
Sikem	PacBio HiFi + Hi-C	Chr6	Small	109'531'067	109'536'512	2	5'445
Sikem	PacBio HiFi + Hi-C	Chr2	Small	192'329'385	192'334'817	5	5'432
Sikem	PacBio HiFi + Hi-C	Chr4	Small	401'527'249	401'532'674	2	5'425
Sikem	PacBio HiFi + Hi-C	Chr5	Small	160'087'062	160'092'472	2	5'410
Sikem	PacBio HiFi + Hi-C	Chr5	Small	238'158'336	238'163'744	7	5'408
Sikem	PacBio HiFi + Hi-C	Chr4	Small	222'189'589	222'194'996	6	5'407
Sikem	PacBio HiFi + Hi-C	Chr6	Small	17'533'844	17'539'241	12	5'397
Sikem	PacBio HiFi + Hi-C	Chr7	Small	84'268'316	84'273'701	9	5'385
Sikem	PacBio HiFi + Hi-C	Chr4	Small	74'962'794	74'968'159	22	5'365
Sikem	PacBio HiFi + Hi-C	Chr7	Small	56'567'805	56'573'162	6	5'357
Sikem	PacBio HiFi + Hi-C	Chr5	Small	74'731'257	74'736'602	4	5'345
Sikem	PacBio HiFi + Hi-C	Chr6	Small	34'084'064	34'089'409	2	5'345
Sikem	PacBio HiFi + Hi-C	Chr1	Small	86'387'687	86'393'017	3	5'330
Sikem	PacBio HiFi + Hi-C	Chr3	Small	105'385'450	105'390'780	5	5'330

Sikem	PacBio HiFi + Hi-C	Chr4	Small	191'496'185	191'501'481	2	5'296
Sikem	PacBio HiFi + Hi-C	Chr6	Small	161'391'213	161'396'503	15	5'290
Sikem	PacBio HiFi + Hi-C	Chr2	Small	299'720'883	299'726'131	4	5'248
Sikem	PacBio HiFi + Hi-C	Chr4	Small	321'191'428	321'196'653	5	5'225
Sikem	PacBio HiFi + Hi-C	Chr3	Small	192'044'184	192'049'405	5	5'221
Sikem	PacBio HiFi + Hi-C	Chr5	Small	112'084'558	112'089'776	4	5'218
Sikem	PacBio HiFi + Hi-C	Chr7	Small	110'022'778	110'027'995	14	5'217
Sikem	PacBio HiFi + Hi-C	Chr1	Small	12'811	18'008	3	5'197
Sikem	PacBio HiFi + Hi-C	Chr1	Small	248'765'929	248'771'115	3	5'186
Sikem	PacBio HiFi + Hi-C	Chr3	Small	285'916'914	285'922'095	8	5'181
Sikem	PacBio HiFi + Hi-C	Chr2	Small	256'564'256	256'569'430	4	5'174
Sikem	PacBio HiFi + Hi-C	Chr3	Small	353'850'297	353'855'442	7	5'145
Sikem	PacBio HiFi + Hi-C	Chr3	Small	152'816'543	152'821'677	5	5'134
Sikem	PacBio HiFi + Hi-C	Chr6	Small	194'222'072	194'227'205	2	5'133
Sikem	PacBio HiFi + Hi-C	Chr6	Small	35'517'728	35'522'853	3	5'125
Sikem	PacBio HiFi + Hi-C	Chr6	Small	166'371'046	166'376'170	4	5'124
Sikem	PacBio HiFi + Hi-C	Chr4	Small	351'466'312	351'471'428	15	5'116
Sikem	PacBio HiFi + Hi-C	Chr1	Small	9'845'629	9'850'738	2	5'109
Sikem	PacBio HiFi + Hi-C	Chr4	Small	351'499'676	351'504'779	5	5'103
Sikem	PacBio HiFi + Hi-C	Chr3	Small	359'759'618	359'764'719	4	5'101
Sikem	PacBio HiFi + Hi-C	Chr3	Small	13'635'611	13'640'697	14	5'086
Sikem	PacBio HiFi + Hi-C	Chr4	Small	13'332'380	13'337'450	11	5'070
Sikem	PacBio HiFi + Hi-C	Chr7	Small	104'723'951	104'729'012	16	5'061
Sikem	PacBio HiFi + Hi-C	Chr4	Small	425'169'211	425'174'263	9	5'052
Sikem	PacBio HiFi + Hi-C	Chr6	Small	21'416'768	21'421'789	8	5'021
Sikem	PacBio HiFi + Hi-C	Chr7	Small	48'142'194	48'147'214	2	5'020
Sikem	PacBio HiFi + Hi-C	Chr7	Small	250'580'140	250'585'152	3	5'012
Sikem	PacBio HiFi + Hi-C	Chr7	Small	123'525'043	123'530'027	5	4'984
Sikem	PacBio HiFi + Hi-C	Chr3	Small	167'663'407	167'668'361	2	4'954
Sikem	PacBio HiFi + Hi-C	Chr4	Small	73'715'059	73'720'004	5	4'945
Sikem	PacBio HiFi + Hi-C	Chr6	Small	96'496'717	96'501'654	6	4'937
Sikem	PacBio HiFi + Hi-C	Chr7	Small	83'189'118	83'194'055	2	4'937
Sikem	PacBio HiFi + Hi-C	Chr5	Small	54'753'059	54'757'988	7	4'929
Sikem	PacBio HiFi + Hi-C	Chr6	Small	95'164'448	95'169'374	7	4'926
Sikem	PacBio HiFi + Hi-C	Chr1	Small	239'495'435	239'500'349	8	4'914
Sikem	PacBio HiFi + Hi-C	Chr3	Small	42'032'813	42'037'720	9	4'907
Sikem	PacBio HiFi + Hi-C	Chr3	Small	374'226'710	374'231'607	4	4'897
Sikem	PacBio HiFi + Hi-C	Chr2	Small	188'963'287	188'968'181	5	4'894
Sikem	PacBio HiFi + Hi-C	Chr3	Small	83'302'062	83'306'934	3	4'872
Sikem	PacBio HiFi + Hi-C	Chr5	Small	96'736'202	96'741'067	3	4'865
Sikem	PacBio HiFi + Hi-C	Chr2	Small	101'603'999	101'608'857	6	4'858
Sikem	PacBio HiFi + Hi-C	Chr4	Small	420'255'346	420'260'180	21	4'834
Sikem	PacBio HiFi + Hi-C	Chr4	Small	173'454'383	173'459'201	17	4'818
Sikem	PacBio HiFi + Hi-C	Chr5	Small	63'267'784	63'272'583	2	4'799
Sikem	PacBio HiFi + Hi-C	Chr4	Small	271'112'080	271'116'874	5	4'794
Sikem	PacBio HiFi + Hi-C	Chr7	Small	151'969'672	151'974'463	14	4'791
Sikem	PacBio HiFi + Hi-C	Chr3	Small	129'536'352	129'541'127	2	4'775
Sikem	PacBio HiFi + Hi-C	Chr5	Small	104'762'633	104'767'405	5	4'772
Sikem	PacBio HiFi + Hi-C	Chr3	Small	171'270'502	171'275'253	3	4'751
Sikem	PacBio HiFi + Hi-C	Chr3	Small	284'920'061	284'924'799	3	4'738
Sikem	PacBio HiFi + Hi-C	Chr3	Small	5'811'943	5'816'653	6	4'710
Sikem	PacBio HiFi + Hi-C	Chr4	Small	69'877'475	69'882'159	24	4'684
Sikem	PacBio HiFi + Hi-C	Chr3	Small	138'152'978	138'157'648	22	4'670
Sikem	PacBio HiFi + Hi-C	Chr3	Small	237'966'168	237'970'837	4	4'669
Sikem	PacBio HiFi + Hi-C	Chr3	Small	249'391'577	249'396'240	2	4'663
Sikem	PacBio HiFi + Hi-C	Chr1	Small	104'884'915	104'889'543	2	4'628
Sikem	PacBio HiFi + Hi-C	Chr7	Small	26'638'719	26'643'344	4	4'625
Sikem	PacBio HiFi + Hi-C	Chr1	Small	60'613'416	60'618'032	8	4'616
Sikem	PacBio HiFi + Hi-C	Chr1	Small	263'189'161	263'193'759	2	4'598
Sikem	PacBio HiFi + Hi-C	Chr6	Small	78'409'142	78'413'735	2	4'593
Sikem	PacBio HiFi + Hi-C	Chr6	Small	223'499'198	223'503'781	3	4'583
Sikem	PacBio HiFi + Hi-C	Chr5	Small	69'735'591	69'740'171	8	4'580
Sikem	PacBio HiFi + Hi-C	Chr3	Small	348'005'154	348'009'723	13	4'569
Sikem	PacBio HiFi + Hi-C	Chr5	Small	112'720'131	112'724'700	2	4'569
Sikem	PacBio HiFi + Hi-C	Chr3	Small	327'338'960	327'343'521	2	4'561
Sikem	PacBio HiFi + Hi-C	Chr6	Small	97'681'423	97'685'955	4	4'532
Sikem	PacBio HiFi + Hi-C	Chr4	Small	322'832'671	322'837'150	12	4'479
Sikem	PacBio HiFi + Hi-C	Chr5	Small	24'896'292	24'900'755	3	4'463
Sikem	PacBio HiFi + Hi-C	Chr5	Small	158'629'466	158'633'927	3	4'461
Sikem	PacBio HiFi + Hi-C	Chr2	Small	183'232'647	183'237'094	2	4'447
Sikem	PacBio HiFi + Hi-C	Chr4	Small	296'518'288	296'522'731	19	4'443

Sikem	PacBio HiFi + Hi-C	Chr6	Small	247'319'571	247'324'011	5	4'440
Sikem	PacBio HiFi + Hi-C	Chr3	Small	62'126'510	62'130'925	8	4'415
Sikem	PacBio HiFi + Hi-C	Chr4	Small	311'704'410	311'708'825	9	4'415
Sikem	PacBio HiFi + Hi-C	Chr3	Small	112'433'933	112'438'333	2	4'400
Sikem	PacBio HiFi + Hi-C	Chr7	Small	767'678	772'063	5	4'385
Sikem	PacBio HiFi + Hi-C	Chr4	Small	301'170'792	301'175'176	7	4'384
Sikem	PacBio HiFi + Hi-C	Chr7	Small	263'967'565	263'971'918	5	4'353
Sikem	PacBio HiFi + Hi-C	Chr4	Small	408'943'022	408'947'346	2	4'324
Sikem	PacBio HiFi + Hi-C	Chr6	Small	47'374'178	47'378'482	5	4'304
Sikem	PacBio HiFi + Hi-C	Chr5	Small	77'416'279	77'420'573	3	4'294
Sikem	PacBio HiFi + Hi-C	Chr7	Small	53'659'126	53'663'411	4	4'285
Sikem	PacBio HiFi + Hi-C	Chr6	Small	141'687'368	141'691'644	9	4'276
Sikem	PacBio HiFi + Hi-C	Chr1	Small	49'966'907	49'971'160	2	4'253
Sikem	PacBio HiFi + Hi-C	Chr6	Small	61'151'401	61'155'653	2	4'252
Sikem	PacBio HiFi + Hi-C	Chr5	Small	157'894'276	157'898'523	6	4'247
Sikem	PacBio HiFi + Hi-C	Chr6	Small	140'610'736	140'614'941	5	4'205
Sikem	PacBio HiFi + Hi-C	Chr1	Small	216'789'529	216'793'731	8	4'202
Sikem	PacBio HiFi + Hi-C	Chr1	Small	229'182'236	229'186'434	7	4'198
Sikem	PacBio HiFi + Hi-C	Chr4	Small	425'117'403	425'121'590	17	4'187
Sikem	PacBio HiFi + Hi-C	Chr3	Small	316'921'513	316'925'699	5	4'186
Sikem	PacBio HiFi + Hi-C	Chr7	Small	78'498'550	78'502'709	2	4'159
Sikem	PacBio HiFi + Hi-C	Chr3	Small	168'594'666	168'596'818	12	4'152
Sikem	PacBio HiFi + Hi-C	Chr6	Small	63'942'732	63'946'879	4	4'147
Sikem	PacBio HiFi + Hi-C	Chr4	Small	411'414'166	411'418'295	5	4'129
Sikem	PacBio HiFi + Hi-C	Chr4	Small	300'294'482	300'298'587	18	4'105
Sikem	PacBio HiFi + Hi-C	Chr4	Small	48'123'873	48'127'959	3	4'086
Sikem	PacBio HiFi + Hi-C	Chr7	Small	164'807'555	164'811'589	7	4'034
Sikem	PacBio HiFi + Hi-C	Chr3	Small	190'089'880	190'093'910	7	4'030
Sikem	PacBio HiFi + Hi-C	Chr4	Small	329'621'196	329'625'199	4	4'003
Sikem	PacBio HiFi + Hi-C	Chr4	Small	160'983'033	160'987'032	3	3'999
Sikem	PacBio HiFi + Hi-C	Chr3	Small	131'373'716	131'377'698	6	3'982
Sikem	PacBio HiFi + Hi-C	Chr3	Small	373'388'528	373'392'501	5	3'973
Sikem	PacBio HiFi + Hi-C	Chr6	Small	95'246'554	95'250'473	8	3'919
Sikem	PacBio HiFi + Hi-C	Chr4	Small	329'589'694	329'593'603	3	3'909
Sikem	PacBio HiFi + Hi-C	Chr5	Small	63'754'369	63'758'273	15	3'904
Sikem	PacBio HiFi + Hi-C	Chr4	Small	280'973'002	280'976'894	5	3'892
Sikem	PacBio HiFi + Hi-C	Chr5	Small	96'257'028	96'260'919	2	3'891
Sikem	PacBio HiFi + Hi-C	Chr6	Small	68'635'024	68'638'891	3	3'867
Sikem	PacBio HiFi + Hi-C	Chr2	Small	65'000'697	65'004'535	5	3'838
Sikem	PacBio HiFi + Hi-C	Chr1	Small	1'721'889	1'725'724	6	3'835
Sikem	PacBio HiFi + Hi-C	Chr7	Small	125'813'028	125'816'835	3	3'807
Sikem	PacBio HiFi + Hi-C	Chr5	Small	189'269'847	189'273'640	10	3'793
Sikem	PacBio HiFi + Hi-C	Chr7	Small	84'207'209	84'210'994	6	3'785
Sikem	PacBio HiFi + Hi-C	Chr3	Small	262'724'790	262'728'545	2	3'755
Sikem	PacBio HiFi + Hi-C	Chr4	Small	198'371'657	198'375'396	2	3'739
Sikem	PacBio HiFi + Hi-C	Chr2	Small	242'641'506	242'645'223	8	3'717
Sikem	PacBio HiFi + Hi-C	Chr7	Small	51'059'952	51'063'656	8	3'704
Sikem	PacBio HiFi + Hi-C	Chr3	Small	387'791'209	387'794'899	13	3'690
Sikem	PacBio HiFi + Hi-C	Chr3	Small	144'008'884	144'012'528	2	3'644
Sikem	PacBio HiFi + Hi-C	Chr5	Small	123'503'052	123'506'682	5	3'630
Sikem	PacBio HiFi + Hi-C	Chr2	Small	225'973'187	225'976'814	5	3'627
Sikem	PacBio HiFi + Hi-C	Chr2	Small	49'203'755	49'207'380	3	3'625
Sikem	PacBio HiFi + Hi-C	Chr3	Small	40'741'129	40'744'726	2	3'597
Sikem	PacBio HiFi + Hi-C	Chr7	Small	302'694'945	302'698'527	3	3'582
Sikem	PacBio HiFi + Hi-C	Chr4	Small	168'415'709	168'419'271	3	3'562
Sikem	PacBio HiFi + Hi-C	Chr4	Small	185'275'951	185'279'506	6	3'555
Sikem	PacBio HiFi + Hi-C	Chr5	Small	77'054'812	77'058'343	4	3'531
Sikem	PacBio HiFi + Hi-C	Chr1	Small	164'155'962	164'159'492	4	3'530
Sikem	PacBio HiFi + Hi-C	Chr4	Small	288'613'639	288'617'168	4	3'529
Sikem	PacBio HiFi + Hi-C	Chr7	Small	244'885'173	244'888'698	9	3'525
Sikem	PacBio HiFi + Hi-C	Chr2	Small	227'901'965	227'905'474	3	3'509
Sikem	PacBio HiFi + Hi-C	Chr2	Small	15'494'521	15'498'028	6	3'507
Sikem	PacBio HiFi + Hi-C	Chr7	Small	242'154'139	242'157'646	5	3'507
Sikem	PacBio HiFi + Hi-C	Chr3	Small	232'279'388	232'282'888	2	3'500
Sikem	PacBio HiFi + Hi-C	Chr6	Small	87'285'277	87'288'774	11	3'497
Sikem	PacBio HiFi + Hi-C	Chr1	Small	256'460'665	256'464'160	8	3'495
Sikem	PacBio HiFi + Hi-C	Chr3	Small	117'080'675	117'084'168	2	3'493
Sikem	PacBio HiFi + Hi-C	Chr2	Small	148'482'337	148'485'816	28	3'479
Sikem	PacBio HiFi + Hi-C	Chr4	Small	77'714'455	77'717'926	6	3'471
Sikem	PacBio HiFi + Hi-C	Chr5	Small	92'437'872	92'441'343	6	3'471
Sikem	PacBio HiFi + Hi-C	Chr5	Small	199'464'113	199'467'575	4	3'462

Sikem	PacBio HiFi + Hi-C	Chr3	Small	224'435'197	224'438'650	3	3'453
Sikem	PacBio HiFi + Hi-C	Chr4	Small	91'321'800	91'325'252	3	3'452
Sikem	PacBio HiFi + Hi-C	Chr4	Small	187'140'856	187'144'292	2	3'436
Sikem	PacBio HiFi + Hi-C	Chr2	Small	16'500'530	16'503'960	11	3'430
Sikem	PacBio HiFi + Hi-C	Chr6	Small	128'292'344	128'295'769	4	3'425
Sikem	PacBio HiFi + Hi-C	Chr2	Small	300'184'723	300'188'141	15	3'418
Sikem	PacBio HiFi + Hi-C	Chr5	Small	229'286'564	229'289'940	3	3'376
Sikem	PacBio HiFi + Hi-C	Chr1	Small	207'581'534	207'584'903	6	3'369
Sikem	PacBio HiFi + Hi-C	Chr3	Small	155'135'870	155'139'215	2	3'345
Sikem	PacBio HiFi + Hi-C	Chr5	Small	39'585'799	39'589'135	13	3'336
Sikem	PacBio HiFi + Hi-C	Chr7	Small	121'447'466	121'450'777	2	3'311
Sikem	PacBio HiFi + Hi-C	Chr4	Small	304'855'676	304'858'986	11	3'310
Sikem	PacBio HiFi + Hi-C	Chr4	Small	74'779'672	74'782'981	3	3'309
Sikem	PacBio HiFi + Hi-C	Chr4	Small	426'509'590	426'512'898	5	3'308
Sikem	PacBio HiFi + Hi-C	Chr7	Small	221'043'474	221'046'781	2	3'307
Sikem	PacBio HiFi + Hi-C	Chr3	Small	149'940'061	149'943'356	8	3'295
Sikem	PacBio HiFi + Hi-C	Chr4	Small	300'269'443	300'272'733	6	3'290
Sikem	PacBio HiFi + Hi-C	Chr3	Small	144'787'563	144'790'844	2	3'281
Sikem	PacBio HiFi + Hi-C	Chr3	Small	388'386'551	388'389'830	2	3'279
Sikem	PacBio HiFi + Hi-C	Chr7	Small	217'531'264	217'534'539	4	3'275
Sikem	PacBio HiFi + Hi-C	Chr1	Small	6'470'957	6'474'221	2	3'264
Sikem	PacBio HiFi + Hi-C	Chr4	Small	46'780'791	46'784'055	13	3'264
Sikem	PacBio HiFi + Hi-C	Chr3	Small	22'759'748	22'763'009	13	3'261
Sikem	PacBio HiFi + Hi-C	Chr1	Small	6'128'880	6'132'133	4	3'253
Sikem	PacBio HiFi + Hi-C	Chr4	Small	82'133'391	82'136'641	5	3'250
Sikem	PacBio HiFi + Hi-C	Chr3	Small	42'493'255	42'496'493	12	3'238
Sikem	PacBio HiFi + Hi-C	Chr6	Small	21'468'507	21'471'739	20	3'232
Sikem	PacBio HiFi + Hi-C	Chr3	Small	26'034'189	26'037'420	34	3'231
Sikem	PacBio HiFi + Hi-C	Chr3	Small	13'926'694	13'929'917	6	3'223
Sikem	PacBio HiFi + Hi-C	Chr7	Small	349'481'184	349'484'405	27	3'221
Sikem	PacBio HiFi + Hi-C	Chr1	Small	60'320'447	60'323'665	5	3'218
Sikem	PacBio HiFi + Hi-C	Chr4	Small	122'847'750	122'850'944	3	3'194
Sikem	PacBio HiFi + Hi-C	Chr2	Small	167'489'799	167'492'966	4	3'167
Sikem	PacBio HiFi + Hi-C	Chr2	Small	175'576'184	175'579'344	5	3'160
Sikem	PacBio HiFi + Hi-C	Chr7	Small	217'281'633	217'284'765	6	3'132
Sikem	PacBio HiFi + Hi-C	Chr1	Small	201'200'635	201'203'762	10	3'127
Sikem	PacBio HiFi + Hi-C	Chr4	Small	165'817'141	165'820'258	5	3'117
Sikem	PacBio HiFi + Hi-C	Chr5	Small	86'465'260	86'468'363	5	3'103
Sikem	PacBio HiFi + Hi-C	Chr5	Small	68'202'700	68'205'801	3	3'101
Sikem	PacBio HiFi + Hi-C	Chr5	Small	49'473'574	49'476'673	6	3'099
Sikem	PacBio HiFi + Hi-C	Chr6	Small	108'163'443	108'166'542	3	3'099
Sikem	PacBio HiFi + Hi-C	Chr3	Small	42'252'637	42'255'732	6	3'095
Sikem	PacBio HiFi + Hi-C	Chr1	Small	256'909'771	256'912'865	5	3'094
Sikem	PacBio HiFi + Hi-C	Chr3	Small	104'794'903	104'797'997	9	3'094
Sikem	PacBio HiFi + Hi-C	Chr2	Small	73'685'927	73'689'013	2	3'086
Sikem	PacBio HiFi + Hi-C	Chr1	Small	2'405'197	2'408'272	4	3'075
Sikem	PacBio HiFi + Hi-C	Chr4	Small	135'468'356	135'471'431	9	3'075
Sikem	PacBio HiFi + Hi-C	Chr1	Small	255'460'411	255'463'452	5	3'041
Sikem	PacBio HiFi + Hi-C	Chr3	Small	84'528'722	84'531'756	4	3'034
Sikem	PacBio HiFi + Hi-C	Chr6	Small	100'723'918	100'726'952	8	3'034
Sikem	PacBio HiFi + Hi-C	Chr7	Small	149'824'269	149'827'295	2	3'026
Sikem	PacBio HiFi + Hi-C	Chr7	Small	3'011'144	3'014'164	7	3'020
Sikem	PacBio HiFi + Hi-C	Chr2	Small	249'405'732	249'408'740	2	3'008
Sikem	PacBio HiFi + Hi-C	Chr3	Small	142'757'535	142'760'532	18	2'997
Sikem	PacBio HiFi + Hi-C	Chr3	Small	353'013'125	353'016'110	7	2'985
Sikem	PacBio HiFi + Hi-C	Chr6	Small	106'220'841	106'223'798	11	2'957
Sikem	PacBio HiFi + Hi-C	Chr7	Small	113'432'066	113'435'009	4	2'943
Sikem	PacBio HiFi + Hi-C	Chr7	Small	293'195'328	293'198'269	4	2'941
Sikem	PacBio HiFi + Hi-C	Chr6	Small	64'921'522	64'924'442	4	2'920
Sikem	PacBio HiFi + Hi-C	Chr7	Small	245'990'230	245'993'149	14	2'919
Sikem	PacBio HiFi + Hi-C	Chr2	Small	85'594'270	85'597'184	5	2'914
Sikem	PacBio HiFi + Hi-C	Chr3	Small	174'586'235	174'589'123	8	2'888
Sikem	PacBio HiFi + Hi-C	Chr3	Small	292'244'577	292'247'463	14	2'886
Sikem	PacBio HiFi + Hi-C	Chr7	Small	34'202'016	34'204'902	4	2'886
Sikem	PacBio HiFi + Hi-C	Chr2	Small	181'834'770	181'837'627	2	2'857
Sikem	PacBio HiFi + Hi-C	Chr6	Small	92'959'283	92'962'112	2	2'829
Sikem	PacBio HiFi + Hi-C	Chr4	Small	299'439'977	299'442'801	27	2'824
Sikem	PacBio HiFi + Hi-C	Chr3	Small	12'547'454	12'550'239	10	2'785
Sikem	PacBio HiFi + Hi-C	Chr3	Small	74'914'857	74'917'641	3	2'784
Sikem	PacBio HiFi + Hi-C	Chr2	Small	8'865'962	8'868'742	2	2'780
Sikem	PacBio HiFi + Hi-C	Chr3	Small	100'437'732	100'440'509	2	2'777

Sikem	PacBio HiFi + Hi-C	Chr1	Small	214'793'316	214'796'071	3	2'755
Sikem	PacBio HiFi + Hi-C	Chr6	Small	114'280'372	114'283'127	3	2'755
Sikem	PacBio HiFi + Hi-C	Chr6	Small	47'331'444	47'334'186	2	2'742
Sikem	PacBio HiFi + Hi-C	Chr4	Small	168'500'980	168'503'713	3	2'733
Sikem	PacBio HiFi + Hi-C	Chr5	Small	121'768'143	121'770'864	17	2'721
Sikem	PacBio HiFi + Hi-C	Chr5	Small	25'862'076	25'864'790	7	2'714
Sikem	PacBio HiFi + Hi-C	Chr2	Small	24'612'882	24'615'577	6	2'695
Sikem	PacBio HiFi + Hi-C	Chr2	Small	191'780'228	191'782'922	14	2'694
Sikem	PacBio HiFi + Hi-C	Chr3	Small	265'229'060	265'231'754	4	2'694
Sikem	PacBio HiFi + Hi-C	Chr5	Small	60'794'110	60'796'794	10	2'684
Sikem	PacBio HiFi + Hi-C	Chr7	Small	93'844'110	93'846'754	3	2'644
Sikem	PacBio HiFi + Hi-C	Chr2	Small	143'083'168	143'085'801	2	2'633
Sikem	PacBio HiFi + Hi-C	Chr3	Small	153'041'020	153'043'644	12	2'624
Sikem	PacBio HiFi + Hi-C	Chr4	Small	295'137'729	295'140'347	2	2'618
Sikem	PacBio HiFi + Hi-C	Chr4	Small	299'566'654	299'569'268	47	2'614
Sikem	PacBio HiFi + Hi-C	Chr7	Small	247'919'445	247'922'059	3	2'614
Sikem	PacBio HiFi + Hi-C	Chr5	Small	145'676'926	145'679'504	4	2'578
Sikem	PacBio HiFi + Hi-C	Chr1	Small	218'840'713	218'843'290	20	2'577
Sikem	PacBio HiFi + Hi-C	Chr2	Small	280'879'204	280'881'779	2	2'575
Sikem	PacBio HiFi + Hi-C	Chr5	Small	160'481'789	160'484'363	3	2'574
Sikem	PacBio HiFi + Hi-C	Chr4	Small	98'747'357	98'749'913	4	2'556
Sikem	PacBio HiFi + Hi-C	Chr4	Small	290'363'501	290'366'052	2	2'551
Sikem	PacBio HiFi + Hi-C	Chr3	Small	248'680'826	248'683'366	4	2'540
Sikem	PacBio HiFi + Hi-C	Chr3	Small	361'100'153	361'102'690	2	2'537
Sikem	PacBio HiFi + Hi-C	Chr4	Small	223'160'507	223'163'043	5	2'536
Sikem	PacBio HiFi + Hi-C	Chr7	Small	137'634'057	137'636'588	6	2'531
Sikem	PacBio HiFi + Hi-C	Chr5	Small	234'365'883	234'368'406	2	2'523
Sikem	PacBio HiFi + Hi-C	Chr3	Small	17'982'640	17'985'154	15	2'514
Sikem	PacBio HiFi + Hi-C	Chr4	Small	409'480'440	409'482'935	5	2'495
Sikem	PacBio HiFi + Hi-C	Chr5	Small	207'353'463	207'355'953	5	2'490
Sikem	PacBio HiFi + Hi-C	Chr4	Small	195'489'523	195'492'007	5	2'484
Sikem	PacBio HiFi + Hi-C	Chr7	Small	316'062'547	316'065'027	5	2'480
Sikem	PacBio HiFi + Hi-C	Chr5	Small	4'338'043	4'340'522	10	2'479
Sikem	PacBio HiFi + Hi-C	Chr7	Small	364'963'496	364'965'964	2	2'468
Sikem	PacBio HiFi + Hi-C	Chr7	Small	175'534'780	175'537'242	21	2'462
Sikem	PacBio HiFi + Hi-C	Chr1	Small	272'876'690	272'879'149	3	2'459
Sikem	PacBio HiFi + Hi-C	Chr5	Small	99'496'651	99'499'093	11	2'442
Sikem	PacBio HiFi + Hi-C	Chr2	Small	158'281'600	158'284'038	7	2'438
Sikem	PacBio HiFi + Hi-C	Chr2	Small	16'523'119	16'525'547	10	2'428
Sikem	PacBio HiFi + Hi-C	Chr5	Small	252'224'085	252'226'512	5	2'427
Sikem	PacBio HiFi + Hi-C	Chr1	Small	220'155'140	220'157'546	13	2'406
Sikem	PacBio HiFi + Hi-C	Chr3	Small	361'172'412	361'174'811	3	2'399
Sikem	PacBio HiFi + Hi-C	Chr3	Small	295'507'529	295'509'916	4	2'387
Sikem	PacBio HiFi + Hi-C	Chr6	Small	123'677'756	123'680'140	6	2'384
Sikem	PacBio HiFi + Hi-C	Chr1	Small	134'157'291	134'159'668	4	2'377
Sikem	PacBio HiFi + Hi-C	Chr3	Small	45'495'522	45'497'890	3	2'368
Sikem	PacBio HiFi + Hi-C	Chr3	Small	241'011'312	241'013'677	3	2'365
Sikem	PacBio HiFi + Hi-C	Chr3	Small	169'677'092	169'679'451	3	2'359
Sikem	PacBio HiFi + Hi-C	Chr6	Small	174'947'661	174'950'017	2	2'356
Sikem	PacBio HiFi + Hi-C	Chr7	Small	120'970'220	120'972'562	3	2'342
Sikem	PacBio HiFi + Hi-C	Chr7	Small	22'860'936	22'863'267	4	2'331
Sikem	PacBio HiFi + Hi-C	Chr7	Small	28'642'526	28'644'844	16	2'318
Sikem	PacBio HiFi + Hi-C	Chr4	Small	20'286'785	20'289'098	3	2'313
Sikem	PacBio HiFi + Hi-C	Chr2	Small	50'361'971	50'364'283	6	2'312
Sikem	PacBio HiFi + Hi-C	Chr4	Small	422'487'128	422'489'409	4	2'281
Sikem	PacBio HiFi + Hi-C	Chr5	Small	61'932'374	61'934'648	26	2'274
Sikem	PacBio HiFi + Hi-C	Chr2	Small	11'192'744	11'195'014	3	2'270
Sikem	PacBio HiFi + Hi-C	Chr4	Small	255'641'378	255'643'628	8	2'250
Sikem	PacBio HiFi + Hi-C	Chr2	Small	62'870'955	62'873'190	3	2'235
Sikem	PacBio HiFi + Hi-C	Chr3	Small	283'894'680	283'896'911	3	2'231
Sikem	PacBio HiFi + Hi-C	Chr4	Small	330'767'025	330'769'245	3	2'220
Sikem	PacBio HiFi + Hi-C	Chr6	Small	127'965'123	127'967'316	3	2'193
Sikem	PacBio HiFi + Hi-C	Chr5	Small	182'255'052	182'257'237	2	2'185
Sikem	PacBio HiFi + Hi-C	Chr1	Small	157'430'997	157'433'168	2	2'171
Sikem	PacBio HiFi + Hi-C	Chr3	Small	97'261'056	97'263'203	3	2'147
Sikem	PacBio HiFi + Hi-C	Chr3	Small	96'445'239	96'447'370	3	2'131
Sikem	PacBio HiFi + Hi-C	Chr5	Small	69'656'954	69'659'081	2	2'127
Sikem	PacBio HiFi + Hi-C	Chr2	Small	26'203'398	26'205'516	5	2'118
Sikem	PacBio HiFi + Hi-C	Chr3	Small	196'749'665	196'751'780	3	2'115
Sikem	PacBio HiFi + Hi-C	Chr3	Small	108'173'414	108'175'502	4	2'088
Sikem	PacBio HiFi + Hi-C	Chr4	Small	389'011'153	389'013'236	8	2'083

Sikem	PacBio HiFi + Hi-C	Chr2	Small	301'075'646	301'077'726	9	2'080
Sikem	PacBio HiFi + Hi-C	Chr4	Small	389'218'369	389'220'434	9	2'065
Sikem	PacBio HiFi + Hi-C	Chr1	Small	48'549'194	48'551'248	5	2'054
Sikem	PacBio HiFi + Hi-C	Chr5	Small	45'988'395	45'990'446	2	2'051
Sikem	PacBio HiFi + Hi-C	Chr1	Small	114'675'189	114'677'236	2	2'047
Sikem	PacBio HiFi + Hi-C	Chr6	Small	100'695'686	100'697'709	6	2'023
Sikem	PacBio HiFi + Hi-C	Chr7	Small	198'348'354	198'350'375	4	2'021
Sikem	PacBio HiFi + Hi-C	Chr4	Small	187'770'439	187'772'459	3	2'020
Sikem	PacBio HiFi + Hi-C	Chr3	Small	385'286'395	385'288'382	6	1'987
Sikem	PacBio HiFi + Hi-C	Chr1	Small	224'401'081	224'403'059	5	1'978
Sikem	PacBio HiFi + Hi-C	Chr7	Small	137'662'841	137'664'814	3	1'973
Sikem	PacBio HiFi + Hi-C	Chr3	Small	147'266'576	147'268'526	2	1'950
Sikem	PacBio HiFi + Hi-C	Chr5	Small	7'572'611	7'574'561	8	1'950
Sikem	PacBio HiFi + Hi-C	Chr2	Small	143'633'195	143'635'140	7	1'945
Sikem	PacBio HiFi + Hi-C	Chr7	Small	204'712'952	204'714'886	7	1'934
Sikem	PacBio HiFi + Hi-C	Chr5	Small	93'737'196	93'739'116	12	1'920
Sikem	PacBio HiFi + Hi-C	Chr3	Small	116'894'584	116'896'503	11	1'919
Sikem	PacBio HiFi + Hi-C	Chr4	Small	309'689'014	309'690'920	2	1'906
Sikem	PacBio HiFi + Hi-C	Chr6	Small	151'174'134	151'176'027	2	1'893
Sikem	PacBio HiFi + Hi-C	Chr7	Small	345'131'004	345'132'888	19	1'884
Sikem	PacBio HiFi + Hi-C	Chr5	Small	127'799'030	127'800'913	3	1'883
Sikem	PacBio HiFi + Hi-C	Chr2	Small	76'682'494	76'684'373	16	1'879
Sikem	PacBio HiFi + Hi-C	Chr7	Small	96'066'045	96'067'917	2	1'872
Sikem	PacBio HiFi + Hi-C	Chr1	Small	127'012'575	127'014'437	6	1'862
Sikem	PacBio HiFi + Hi-C	Chr4	Small	28'682'075	28'683'935	8	1'860
Sikem	PacBio HiFi + Hi-C	Chr7	Small	112'517'766	112'519'616	8	1'850
Sikem	PacBio HiFi + Hi-C	Chr1	Small	163'584'767	163'586'614	6	1'847
Sikem	PacBio HiFi + Hi-C	Chr7	Small	86'093'116	86'094'962	5	1'846
Sikem	PacBio HiFi + Hi-C	Chr7	Small	168'726'684	168'728'528	3	1'844
Sikem	PacBio HiFi + Hi-C	Chr4	Small	204'908'355	204'910'181	2	1'826
Sikem	PacBio HiFi + Hi-C	Chr2	Small	145'423'121	145'424'938	5	1'817
Sikem	PacBio HiFi + Hi-C	Chr2	Small	71'869'270	71'871'082	5	1'812
Sikem	PacBio HiFi + Hi-C	Chr5	Small	116'088'988	116'090'776	13	1'788
Sikem	PacBio HiFi + Hi-C	Chr6	Small	68'862'130	68'863'915	2	1'785
Sikem	PacBio HiFi + Hi-C	Chr4	Small	309'330'042	309'331'819	2	1'777
Sikem	PacBio HiFi + Hi-C	Chr4	Small	418'959'338	418'961'114	3	1'776
Sikem	PacBio HiFi + Hi-C	Chr7	Small	362'994'414	362'996'188	2	1'774
Sikem	PacBio HiFi + Hi-C	Chr3	Small	29'034'385	29'036'157	4	1'772
Sikem	PacBio HiFi + Hi-C	Chr3	Small	384'712'775	384'714'539	22	1'764
Sikem	PacBio HiFi + Hi-C	Chr3	Small	380'744'854	380'746'604	5	1'750
Sikem	PacBio HiFi + Hi-C	Chr2	Small	223'429'366	223'431'085	9	1'719
Sikem	PacBio HiFi + Hi-C	Chr4	Small	171'824'995	171'826'712	3	1'717
Sikem	PacBio HiFi + Hi-C	Chr4	Small	329'558'460	329'560'175	2	1'715
Sikem	PacBio HiFi + Hi-C	Chr4	Small	284'478'337	284'480'051	2	1'714
Sikem	PacBio HiFi + Hi-C	Chr2	Small	183'274'216	183'275'925	8	1'709
Sikem	PacBio HiFi + Hi-C	Chr3	Small	71'865'745	71'867'448	3	1'703
Sikem	PacBio HiFi + Hi-C	Chr3	Small	145'255'836	145'257'539	2	1'703
Sikem	PacBio HiFi + Hi-C	Chr3	Small	289'624'171	289'625'873	3	1'702
Sikem	PacBio HiFi + Hi-C	Chr6	Small	99'154'612	99'156'309	16	1'697
Sikem	PacBio HiFi + Hi-C	Chr2	Small	106'435'687	106'437'379	4	1'692
Sikem	PacBio HiFi + Hi-C	Chr7	Small	118'624'840	118'626'528	2	1'688
Sikem	PacBio HiFi + Hi-C	Chr3	Small	154'664'783	154'666'470	26	1'687
Sikem	PacBio HiFi + Hi-C	Chr4	Small	277'337'634	277'339'320	2	1'686
Sikem	PacBio HiFi + Hi-C	Chr2	Small	99'841'491	99'843'159	6	1'668
Sikem	PacBio HiFi + Hi-C	Chr5	Small	167'698'716	167'700'378	4	1'662
Sikem	PacBio HiFi + Hi-C	Chr4	Small	174'442'172	174'443'828	2	1'656
Sikem	PacBio HiFi + Hi-C	Chr6	Small	204'893'079	204'894'730	7	1'651
Sikem	PacBio HiFi + Hi-C	Chr2	Small	68'123'556	68'125'204	4	1'648
Sikem	PacBio HiFi + Hi-C	Chr3	Small	12'575'096	12'576'737	21	1'641
Sikem	PacBio HiFi + Hi-C	Chr7	Small	103'900'054	103'901'695	6	1'641
Sikem	PacBio HiFi + Hi-C	Chr6	Small	111'130'931	111'132'565	11	1'634
Sikem	PacBio HiFi + Hi-C	Chr5	Small	89'741'276	89'742'909	8	1'633
Sikem	PacBio HiFi + Hi-C	Chr5	Small	211'426'424	211'428'057	9	1'633
Sikem	PacBio HiFi + Hi-C	Chr6	Small	96'000'021	96'001'645	7	1'624
Sikem	PacBio HiFi + Hi-C	Chr4	Small	295'351'140	295'352'734	9	1'594
Sikem	PacBio HiFi + Hi-C	Chr7	Small	79'384'693	79'386'282	5	1'589
Sikem	PacBio HiFi + Hi-C	Chr1	Small	211'330'223	211'331'808	2	1'585
Sikem	PacBio HiFi + Hi-C	Chr5	Small	93'775'170	93'776'750	11	1'580
Sikem	PacBio HiFi + Hi-C	Chr7	Small	286'667'417	286'668'997	2	1'580
Sikem	PacBio HiFi + Hi-C	Chr1	Small	78'712'152	78'713'718	9	1'566
Sikem	PacBio HiFi + Hi-C	Chr2	Small	79'975'758	79'977'324	12	1'566

Sikem	PacBio HiFi + Hi-C	Chr2	Small	41'077'813	41'079'371	7	1'558
Sikem	PacBio HiFi + Hi-C	Chr3	Small	167'933'391	167'934'949	3	1'558
Sikem	PacBio HiFi + Hi-C	Chr3	Small	56'082'600	56'084'156	11	1'556
Sikem	PacBio HiFi + Hi-C	Chr6	Small	79'691'623	79'693'159	3	1'536
Sikem	PacBio HiFi + Hi-C	Chr5	Small	44'275'063	44'276'597	2	1'534
Sikem	PacBio HiFi + Hi-C	Chr2	Small	285'140'297	285'141'825	17	1'528
Sikem	PacBio HiFi + Hi-C	Chr6	Small	103'311'143	103'312'661	3	1'518
Sikem	PacBio HiFi + Hi-C	Chr2	Small	150'037'769	150'039'284	10	1'515
Sikem	PacBio HiFi + Hi-C	Chr6	Small	128'267'202	128'268'701	6	1'499
Sikem	PacBio HiFi + Hi-C	Chr7	Small	50'221'402	50'222'898	3	1'496
Sikem	PacBio HiFi + Hi-C	Chr5	Small	97'995'829	97'997'319	3	1'490
Sikem	PacBio HiFi + Hi-C	Chr5	Small	102'915'898	102'917'383	2	1'485
Sikem	PacBio HiFi + Hi-C	Chr7	Small	192'273'857	192'275'333	17	1'476
Sikem	PacBio HiFi + Hi-C	Chr2	Small	199'496'375	199'497'849	9	1'474
Sikem	PacBio HiFi + Hi-C	Chr6	Small	27'075'773	27'077'247	2	1'474
Sikem	PacBio HiFi + Hi-C	Chr5	Small	89'708'863	89'710'331	3	1'468
Sikem	PacBio HiFi + Hi-C	Chr1	Small	26'602'845	26'604'300	12	1'455
Sikem	PacBio HiFi + Hi-C	Chr4	Small	69'746'467	69'747'917	10	1'450
Sikem	PacBio HiFi + Hi-C	Chr3	Small	78'325'268	78'326'711	3	1'443
Sikem	PacBio HiFi + Hi-C	Chr2	Small	87'431'718	87'433'156	28	1'438
Sikem	PacBio HiFi + Hi-C	Chr3	Small	103'528'788	103'530'217	3	1'429
Sikem	PacBio HiFi + Hi-C	Chr5	Small	123'973'313	123'974'742	5	1'429
Sikem	PacBio HiFi + Hi-C	Chr7	Small	359'843'564	359'844'974	3	1'410
Sikem	PacBio HiFi + Hi-C	Chr4	Small	406'504'055	406'505'464	9	1'409
Sikem	PacBio HiFi + Hi-C	Chr1	Small	42'685'720	42'687'120	3	1'400
Sikem	PacBio HiFi + Hi-C	Chr1	Small	103'254'394	103'255'787	24	1'393
Sikem	PacBio HiFi + Hi-C	Chr6	Small	37'010'988	37'012'372	2	1'384
Sikem	PacBio HiFi + Hi-C	Chr7	Small	72'436'677	72'438'052	22	1'375
Sikem	PacBio HiFi + Hi-C	Chr7	Small	125'505'385	125'506'755	5	1'370
Sikem	PacBio HiFi + Hi-C	Chr4	Small	84'996'690	84'998'051	3	1'361
Sikem	PacBio HiFi + Hi-C	Chr7	Small	217'574'137	217'575'496	9	1'359
Sikem	PacBio HiFi + Hi-C	Chr5	Small	149'938'822	149'940'178	14	1'356
Sikem	PacBio HiFi + Hi-C	Chr4	Small	138'610'791	138'612'143	2	1'352
Sikem	PacBio HiFi + Hi-C	Chr6	Small	33'981'159	33'982'500	4	1'341
Sikem	PacBio HiFi + Hi-C	Chr1	Small	7'458'070	7'459'410	6	1'340
Sikem	PacBio HiFi + Hi-C	Chr3	Small	263'521'269	263'522'607	15	1'338
Sikem	PacBio HiFi + Hi-C	Chr7	Small	107'659'422	107'660'757	15	1'335
Sikem	PacBio HiFi + Hi-C	Chr3	Small	378'968'089	378'969'420	2	1'331
Sikem	PacBio HiFi + Hi-C	Chr3	Small	262'458'460	262'459'780	13	1'320
Sikem	PacBio HiFi + Hi-C	Chr1	Small	127'455'675	127'456'993	3	1'318
Sikem	PacBio HiFi + Hi-C	Chr4	Small	126'218'848	126'220'157	7	1'309
Sikem	PacBio HiFi + Hi-C	Chr5	Small	131'134'154	131'135'449	18	1'295
Sikem	PacBio HiFi + Hi-C	Chr6	Small	69'572'016	69'573'299	5	1'283
Sikem	PacBio HiFi + Hi-C	Chr6	Small	108'786'101	108'787'380	3	1'279
Sikem	PacBio HiFi + Hi-C	Chr6	Small	70'963'031	70'964'308	6	1'277
Sikem	PacBio HiFi + Hi-C	Chr7	Small	82'848'474	82'849'745	2	1'271
Sikem	PacBio HiFi + Hi-C	Chr3	Small	83'482'138	83'483'408	10	1'270
Sikem	PacBio HiFi + Hi-C	Chr4	Small	195'457'996	195'459'264	2	1'268
Sikem	PacBio HiFi + Hi-C	Chr3	Small	251'362'083	251'363'349	23	1'266
Sikem	PacBio HiFi + Hi-C	Chr7	Small	212'518'948	212'520'202	5	1'254
Sikem	PacBio HiFi + Hi-C	Chr3	Small	57'216'838	57'218'091	9	1'253
Sikem	PacBio HiFi + Hi-C	Chr7	Small	85'295'112	85'296'353	8	1'241
Sikem	PacBio HiFi + Hi-C	Chr5	Small	84'313'024	84'314'259	4	1'235
Sikem	PacBio HiFi + Hi-C	Chr4	Small	224'594'960	224'596'191	4	1'231
Sikem	PacBio HiFi + Hi-C	Chr6	Small	13'526'711	13'527'936	4	1'225
Sikem	PacBio HiFi + Hi-C	Chr3	Small	150'845'005	150'846'220	2	1'215
Sikem	PacBio HiFi + Hi-C	Chr4	Small	156'046'291	156'047'468	7	1'177
Sikem	PacBio HiFi + Hi-C	Chr7	Small	275'927'722	275'928'898	12	1'176
Sikem	PacBio HiFi + Hi-C	Chr2	Small	141'086'634	141'087'805	10	1'171
Sikem	PacBio HiFi + Hi-C	Chr2	Small	225'491'724	225'492'895	6	1'171
Sikem	PacBio HiFi + Hi-C	Chr6	Small	135'492'739	135'493'906	3	1'167
Sikem	PacBio HiFi + Hi-C	Chr1	Small	171'187'285	171'188'450	3	1'165
Sikem	PacBio HiFi + Hi-C	Chr7	Small	151'997'698	151'998'856	3	1'158
Sikem	PacBio HiFi + Hi-C	Chr3	Small	317'558'562	317'559'701	2	1'139
Sikem	PacBio HiFi + Hi-C	Chr4	Small	170'263'653	170'264'791	2	1'138
Sikem	PacBio HiFi + Hi-C	Chr6	Small	136'400'223	136'401'353	6	1'130
Sikem	PacBio HiFi + Hi-C	Chr4	Small	294'539'729	294'540'842	4	1'113
Sikem	PacBio HiFi + Hi-C	Chr7	Small	129'409'424	129'410'535	7	1'111
Sikem	PacBio HiFi + Hi-C	Chr1	Small	217'836'337	217'837'442	11	1'105
Sikem	PacBio HiFi + Hi-C	Chr3	Small	374'511'968	374'513'067	9	1'099
Sikem	PacBio HiFi + Hi-C	Chr2	Small	31'210'721	31'211'813	2	1'092

Sikem	PacBio HiFi + Hi-C	Chr1	Small	226'624'542	226'625'629	6	1'087
Sikem	PacBio HiFi + Hi-C	Chr1	Small	110'171'979	110'173'059	2	1'080
Sikem	PacBio HiFi + Hi-C	Chr4	Small	423'234'865	423'235'939	3	1'074
Sikem	PacBio HiFi + Hi-C	Chr2	Small	114'276'224	114'277'296	2	1'072
Sikem	PacBio HiFi + Hi-C	Chr2	Small	232'945'920	232'946'991	2	1'071
Sikem	PacBio HiFi + Hi-C	Chr2	Small	300'216'213	300'217'284	7	1'071
Sikem	PacBio HiFi + Hi-C	Chr7	Small	2'805'494	2'806'564	14	1'070
Sikem	PacBio HiFi + Hi-C	Chr2	Small	282'399'838	282'400'905	4	1'067
Sikem	PacBio HiFi + Hi-C	Chr3	Small	41'518'665	41'519'732	6	1'067
Sikem	PacBio HiFi + Hi-C	Chr2	Small	76'312'338	76'313'395	4	1'057
Sikem	PacBio HiFi + Hi-C	Chr4	Small	167'988'643	167'989'698	3	1'055
Sikem	PacBio HiFi + Hi-C	Chr3	Small	19'102'397	19'103'451	7	1'054
Sikem	PacBio HiFi + Hi-C	Chr7	Small	290'429'295	290'430'348	3	1'053
Sikem	PacBio HiFi + Hi-C	Chr3	Small	1'162'782	1'163'827	3	1'045
Sikem	PacBio HiFi + Hi-C	Chr5	Small	5'582'685	5'583'729	2	1'044
Sikem	PacBio HiFi + Hi-C	Chr3	Small	227'054'294	227'055'335	5	1'041
Sikem	PacBio HiFi + Hi-C	Chr6	Small	72'965'702	72'966'741	4	1'039
Sikem	PacBio HiFi + Hi-C	Chr4	Small	363'164'965	363'166'003	16	1'038
Sikem	PacBio HiFi + Hi-C	Chr5	Small	349'429	350'463	7	1'034
Sikem	PacBio HiFi + Hi-C	Chr6	Small	166'296'982	166'298'010	13	1'028
Sikem	PacBio HiFi + Hi-C	Chr1	Small	218'415'849	218'416'874	13	1'025
Sikem	PacBio HiFi + Hi-C	Chr4	Small	390'697'589	390'698'609	13	1'020
Sikem	PacBio HiFi + Hi-C	Chr6	Small	88'474'921	88'475'941	9	1'020
Sikem	PacBio HiFi + Hi-C	Chr3	Small	10'985'609	10'986'620	9	1'011
Sikem	PacBio HiFi + Hi-C	Chr6	Small	215'082'930	215'083'941	2	1'011
Sikem	PacBio HiFi + Hi-C	Chr3	Small	382'767'872	382'768'866	5	994
Sikem	PacBio HiFi + Hi-C	Chr4	Small	125'693'669	125'694'659	13	990
Sikem	PacBio HiFi + Hi-C	Chr6	Small	120'768'372	120'769'360	2	988
Sikem	PacBio HiFi + Hi-C	Chr5	Small	184'762'550	184'763'531	4	981
Sikem	PacBio HiFi + Hi-C	Chr6	Small	250'642'236	250'643'213	4	977
Sikem	PacBio HiFi + Hi-C	Chr3	Small	355'049'936	355'050'907	25	971
Sikem	PacBio HiFi + Hi-C	Chr1	Small	224'385'142	224'386'112	6	970
Sikem	PacBio HiFi + Hi-C	Chr3	Small	1'311'448	1'312'417	2	969
Sikem	PacBio HiFi + Hi-C	Chr3	Small	42'018'379	42'019'348	4	969
Sikem	PacBio HiFi + Hi-C	Chr7	Small	350'415'915	350'416'883	21	968
Sikem	PacBio HiFi + Hi-C	Chr3	Small	226'883'952	226'884'918	5	966
Sikem	PacBio HiFi + Hi-C	Chr4	Small	280'702'261	280'703'227	5	966
Sikem	PacBio HiFi + Hi-C	Chr5	Small	98'604'156	98'605'121	2	965
Sikem	PacBio HiFi + Hi-C	Chr1	Small	259'889'274	259'890'226	12	952
Sikem	PacBio HiFi + Hi-C	Chr6	Small	20'745'176	20'746'121	31	945
Sikem	PacBio HiFi + Hi-C	Chr5	Small	26'202'060	26'203'002	8	942
Sikem	PacBio HiFi + Hi-C	Chr5	Small	211'225'246	211'226'176	4	930
Sikem	PacBio HiFi + Hi-C	Chr2	Small	199'858'548	199'859'474	2	926
Sikem	PacBio HiFi + Hi-C	Chr7	Small	264'136'466	264'137'387	9	921
Sikem	PacBio HiFi + Hi-C	Chr3	Small	41'649'049	41'649'965	6	916
Sikem	PacBio HiFi + Hi-C	Chr2	Small	222'936'624	222'937'529	4	905
Sikem	PacBio HiFi + Hi-C	Chr1	Small	178'807'896	178'808'794	8	898
Sikem	PacBio HiFi + Hi-C	Chr6	Small	32'534'587	32'535'481	8	894
Sikem	PacBio HiFi + Hi-C	Chr1	Small	256'362'297	256'363'187	7	890
Sikem	PacBio HiFi + Hi-C	Chr4	Small	337'865'826	337'866'711	3	885
Sikem	PacBio HiFi + Hi-C	Chr5	Small	65'596'881	65'597'763	4	882
Sikem	PacBio HiFi + Hi-C	Chr7	Small	232'969'508	232'970'381	2	873
Sikem	PacBio HiFi + Hi-C	Chr3	Small	362'779'817	362'780'684	4	867
Sikem	PacBio HiFi + Hi-C	Chr4	Small	91'557'763	91'558'618	12	855
Sikem	PacBio HiFi + Hi-C	Chr2	Small	144'942'436	144'943'285	11	849
Sikem	PacBio HiFi + Hi-C	Chr2	Small	86'539'958	86'540'801	5	843
Sikem	PacBio HiFi + Hi-C	Chr1	Small	5'799'283	5'800'125	7	842
Sikem	PacBio HiFi + Hi-C	Chr1	Small	256'498'791	256'499'633	7	842
Sikem	PacBio HiFi + Hi-C	Chr1	Small	183'448'525	183'449'362	3	837
Sikem	PacBio HiFi + Hi-C	Chr6	Small	120'602'349	120'603'186	5	837
Sikem	PacBio HiFi + Hi-C	Chr3	Small	374'980'629	374'981'463	4	834
Sikem	PacBio HiFi + Hi-C	Chr3	Small	13'789'613	13'790'439	5	826
Sikem	PacBio HiFi + Hi-C	Chr2	Small	145'005'307	145'006'132	3	825
Sikem	PacBio HiFi + Hi-C	Chr7	Small	77'125'206	77'126'031	8	825
Sikem	PacBio HiFi + Hi-C	Chr7	Small	194'595'126	194'595'951	2	825
Sikem	PacBio HiFi + Hi-C	Chr4	Small	187'312'957	187'313'776	5	819
Sikem	PacBio HiFi + Hi-C	Chr3	Small	66'513'003	66'513'815	6	812
Sikem	PacBio HiFi + Hi-C	Chr6	Small	65'883'389	65'884'197	7	808
Sikem	PacBio HiFi + Hi-C	Chr4	Small	407'347'817	407'348'624	6	807
Sikem	PacBio HiFi + Hi-C	Chr3	Small	12'868'874	12'869'676	3	802
Sikem	PacBio HiFi + Hi-C	Chr2	Small	57'262'195	57'262'991	7	796

Sikem	PacBio HiFi + Hi-C	Chr3	Small	213'790'432	213'791'225	4	793
Sikem	PacBio HiFi + Hi-C	Chr3	Small	119'514'565	119'515'354	21	789
Sikem	PacBio HiFi + Hi-C	Chr1	Small	237'237'681	237'238'469	12	788
Sikem	PacBio HiFi + Hi-C	Chr4	Small	285'403'793	285'404'581	4	788
Sikem	PacBio HiFi + Hi-C	Chr7	Small	72'154'696	72'155'478	4	782
Sikem	PacBio HiFi + Hi-C	Chr3	Small	140'879'866	140'880'646	9	780
Sikem	PacBio HiFi + Hi-C	Chr3	Small	255'213'129	255'213'907	2	778
Sikem	PacBio HiFi + Hi-C	Chr3	Small	236'251'656	236'252'430	2	774
Sikem	PacBio HiFi + Hi-C	Chr7	Small	57'501'929	57'502'703	5	774
Sikem	PacBio HiFi + Hi-C	Chr3	Small	258'457'683	258'458'455	4	772
Sikem	PacBio HiFi + Hi-C	Chr3	Small	41'187'505	41'188'273	2	768
Sikem	PacBio HiFi + Hi-C	Chr1	Small	141'451'518	141'452'274	3	756
Sikem	PacBio HiFi + Hi-C	Chr3	Small	273'200'951	273'201'702	25	751
Sikem	PacBio HiFi + Hi-C	Chr3	Small	292'143'250	292'144'001	3	751
Sikem	PacBio HiFi + Hi-C	Chr7	Small	59'418'905	59'419'652	7	747
Sikem	PacBio HiFi + Hi-C	Chr2	Small	65'267'347	65'268'089	4	742
Sikem	PacBio HiFi + Hi-C	Chr3	Small	384'538'979	384'539'721	4	742
Sikem	PacBio HiFi + Hi-C	Chr1	Small	38'860'253	38'860'994	4	741
Sikem	PacBio HiFi + Hi-C	Chr3	Small	119'419'625	119'420'365	3	740
Sikem	PacBio HiFi + Hi-C	Chr4	Small	17'108'467	17'109'203	2	736
Sikem	PacBio HiFi + Hi-C	Chr5	Small	111'142'332	111'143'066	3	734
Sikem	PacBio HiFi + Hi-C	Chr5	Small	189'418'469	189'419'202	5	733
Sikem	PacBio HiFi + Hi-C	Chr5	Small	59'677'117	59'677'847	4	730
Sikem	PacBio HiFi + Hi-C	Chr2	Small	194'532'485	194'533'213	6	728
Sikem	PacBio HiFi + Hi-C	Chr6	Small	77'723'013	77'723'739	4	726
Sikem	PacBio HiFi + Hi-C	Chr4	Small	21'855'037	21'855'761	2	724
Sikem	PacBio HiFi + Hi-C	Chr4	Small	302'466'365	302'467'089	5	724
Sikem	PacBio HiFi + Hi-C	Chr1	Small	220'345'183	220'345'904	6	721
Sikem	PacBio HiFi + Hi-C	Chr1	Small	137'458'243	137'458'961	2	718
Sikem	PacBio HiFi + Hi-C	Chr3	Small	6'288'714	6'289'432	5	718
Sikem	PacBio HiFi + Hi-C	Chr3	Small	253'894'414	253'895'132	7	718
Sikem	PacBio HiFi + Hi-C	Chr7	Small	364'986'671	364'987'388	6	717
Sikem	PacBio HiFi + Hi-C	Chr1	Small	178'240'865	178'241'578	5	713
Sikem	PacBio HiFi + Hi-C	Chr4	Small	338'488'108	338'488'821	3	713
Sikem	PacBio HiFi + Hi-C	Chr1	Small	44'935'584	44'936'293	2	709
Sikem	PacBio HiFi + Hi-C	Chr3	Small	141'592'201	141'592'909	7	708
Sikem	PacBio HiFi + Hi-C	Chr3	Small	355'933'755	355'934'461	5	706
Sikem	PacBio HiFi + Hi-C	Chr1	Small	201'230'164	201'230'866	3	702
Sikem	PacBio HiFi + Hi-C	Chr5	Small	91'714'305	91'715'007	4	702
Sikem	PacBio HiFi + Hi-C	Chr6	Small	225'859'017	225'859'717	7	700
Sikem	PacBio HiFi + Hi-C	Chr7	Small	260'413'034	260'413'731	3	697
Sikem	PacBio HiFi + Hi-C	Chr7	Small	20'694'623	20'695'315	8	692
Sikem	PacBio HiFi + Hi-C	Chr1	Small	48'422'391	48'423'079	2	688
Sikem	PacBio HiFi + Hi-C	Chr3	Small	141'214'299	141'214'986	7	687
Sikem	PacBio HiFi + Hi-C	Chr7	Small	359'870'544	359'871'231	2	687
Sikem	PacBio HiFi + Hi-C	Chr7	Small	81'368'051	81'368'737	6	686
Sikem	PacBio HiFi + Hi-C	Chr5	Small	232'705'325	232'706'008	5	683
Sikem	PacBio HiFi + Hi-C	Chr5	Small	419'023	419'704	4	681
Sikem	PacBio HiFi + Hi-C	Chr6	Small	150'783'756	150'784'436	2	680
Sikem	PacBio HiFi + Hi-C	Chr5	Small	164'616'623	164'617'301	8	678
Sikem	PacBio HiFi + Hi-C	Chr3	Small	38'370'705	38'371'376	3	671
Sikem	PacBio HiFi + Hi-C	Chr2	Small	64'524'247	64'524'917	4	670
Sikem	PacBio HiFi + Hi-C	Chr7	Small	266'082'585	266'083'251	2	666
Sikem	PacBio HiFi + Hi-C	Chr2	Small	140'821'696	140'822'352	3	656
Sikem	PacBio HiFi + Hi-C	Chr4	Small	68'951'169	68'951'825	4	656
Sikem	PacBio HiFi + Hi-C	Chr5	Small	93'563'395	93'564'051	6	656
Sikem	PacBio HiFi + Hi-C	Chr7	Small	262'678'947	262'679'593	2	646
Sikem	PacBio HiFi + Hi-C	Chr7	Small	303'052'099	303'052'739	3	640
Sikem	PacBio HiFi + Hi-C	Chr6	Small	114'475'913	114'476'548	4	635
Sikem	PacBio HiFi + Hi-C	Chr5	Small	34'960'687	34'961'321	4	634
Sikem	PacBio HiFi + Hi-C	Chr5	Small	250'922'778	250'923'411	16	633
Sikem	PacBio HiFi + Hi-C	Chr2	Small	231'452'199	231'452'831	2	632
Sikem	PacBio HiFi + Hi-C	Chr3	Small	180'746'206	180'746'831	5	625
Sikem	PacBio HiFi + Hi-C	Chr3	Small	43'110'699	43'111'322	7	623
Sikem	PacBio HiFi + Hi-C	Chr5	Small	117'539'355	117'539'978	5	623
Sikem	PacBio HiFi + Hi-C	Chr1	Small	58'526'138	58'526'756	4	618
Sikem	PacBio HiFi + Hi-C	Chr7	Small	211'969'428	211'970'044	5	616
Sikem	PacBio HiFi + Hi-C	Chr3	Small	340'007'547	340'008'157	3	610
Sikem	PacBio HiFi + Hi-C	Chr5	Small	85'823'683	85'824'293	2	610
Sikem	PacBio HiFi + Hi-C	Chr2	Small	43'820'721	43'821'328	3	607
Sikem	PacBio HiFi + Hi-C	Chr6	Small	244'342'910	244'343'515	10	605

Sikem	PacBio HiFi + Hi-C	Chr5	Small	117'657'278	117'657'881	3	603
Sikem	PacBio HiFi + Hi-C	Chr4	Small	415'157'760	415'158'355	2	595
Sikem	PacBio HiFi + Hi-C	Chr3	Small	7'513'187	7'513'779	2	592
Sikem	PacBio HiFi + Hi-C	Chr6	Small	67'191'429	67'192'018	2	589
Sikem	PacBio HiFi + Hi-C	Chr7	Small	214'671'792	214'672'379	3	587
Sikem	PacBio HiFi + Hi-C	Chr7	Small	68'676'121	68'676'707	7	586
Sikem	PacBio HiFi + Hi-C	Chr2	Small	4'011'723	4'012'307	4	584
Sikem	PacBio HiFi + Hi-C	Chr3	Small	312'771'994	312'772'573	2	579
Sikem	PacBio HiFi + Hi-C	Chr6	Small	86'522'463	86'523'040	2	577
Sikem	PacBio HiFi + Hi-C	Chr7	Small	52'669'305	52'669'882	3	577
Sikem	PacBio HiFi + Hi-C	Chr4	Small	132'388'447	132'389'020	3	573
Sikem	PacBio HiFi + Hi-C	Chr6	Small	127'997'634	127'998'204	3	570
Sikem	PacBio HiFi + Hi-C	Chr3	Small	41'611'262	41'611'830	2	568
Sikem	PacBio HiFi + Hi-C	Chr5	Small	160'407'854	160'408'421	7	567
Sikem	PacBio HiFi + Hi-C	Chr7	Small	126'557'925	126'558'489	2	564
Sikem	PacBio HiFi + Hi-C	Chr2	Small	36'733'456	36'734'018	6	562
Sikem	PacBio HiFi + Hi-C	Chr3	Small	75'663'036	75'663'597	9	561
Sikem	PacBio HiFi + Hi-C	Chr4	Small	170'448'768	170'449'328	2	560
Sikem	PacBio HiFi + Hi-C	Chr3	Small	25'736'960	25'737'517	2	557
Sikem	PacBio HiFi + Hi-C	Chr4	Small	293'467'536	293'468'091	8	555
Sikem	PacBio HiFi + Hi-C	Chr7	Small	209'701'888	209'702'440	2	552
Sikem	PacBio HiFi + Hi-C	Chr1	Small	10'817'245	10'817'796	3	551
Sikem	PacBio HiFi + Hi-C	Chr1	Small	115'179'318	115'179'868	4	550
Sikem	PacBio HiFi + Hi-C	Chr3	Small	55'967'582	55'968'129	5	547
Sikem	PacBio HiFi + Hi-C	Chr7	Small	361'114'541	361'115'086	5	545
Sikem	PacBio HiFi + Hi-C	Chr3	Small	309'671'254	309'671'793	2	539
Sikem	PacBio HiFi + Hi-C	Chr5	Small	137'215'058	137'215'597	4	539
Sikem	PacBio HiFi + Hi-C	Chr2	Small	60'016'042	60'016'580	6	538
Sikem	PacBio HiFi + Hi-C	Chr3	Small	200'491'766	200'492'302	4	536
Sikem	PacBio HiFi + Hi-C	Chr4	Small	333'561'737	333'562'272	13	535
Sikem	PacBio HiFi + Hi-C	Chr7	Small	350'228'626	350'229'161	8	535
Sikem	PacBio HiFi + Hi-C	Chr7	Small	105'815'905	105'816'438	2	533
Sikem	PacBio HiFi + Hi-C	Chr4	Small	31'263'818	31'264'348	5	530
Sikem	PacBio HiFi + Hi-C	Chr4	Small	26'256'503	26'257'032	2	529
Sikem	PacBio HiFi + Hi-C	Chr3	Small	279'698'050	279'698'577	3	527
Sikem	PacBio HiFi + Hi-C	Chr3	Small	213'365'799	213'366'324	3	525
Sikem	PacBio HiFi + Hi-C	Chr4	Small	84'001'142	84'001'665	7	523
Sikem	PacBio HiFi + Hi-C	Chr7	Small	904'496	905'019	2	523
Sikem	PacBio HiFi + Hi-C	Chr7	Small	219'445'215	219'445'735	7	520
Sikem	PacBio HiFi + Hi-C	Chr3	Small	140'728'736	140'729'255	3	519
Sikem	PacBio HiFi + Hi-C	Chr6	Small	82'281'647	82'282'165	11	518
Sikem	PacBio HiFi + Hi-C	Chr1	Small	78'617'879	78'618'396	3	517
Sikem	PacBio HiFi + Hi-C	Chr7	Small	346'370'972	346'371'488	3	516
Sikem	PacBio HiFi + Hi-C	Chr5	Small	24'116'860	24'117'375	4	515
Sikem	PacBio HiFi + Hi-C	Chr6	Small	143'128'381	143'128'895	2	514
Sikem	PacBio HiFi + Hi-C	Chr3	Small	137'382'649	137'383'159	4	510
Sikem	PacBio HiFi + Hi-C	Chr5	Small	206'847'874	206'848'383	9	509
Sikem	PacBio HiFi + Hi-C	Chr1	Small	218'354'757	218'355'265	5	508
Sikem	PacBio HiFi + Hi-C	Chr5	Small	96'497'316	96'497'823	2	507
Sikem	PacBio HiFi + Hi-C	Chr2	Small	100'333'264	100'333'769	3	505
Sikem	PacBio HiFi + Hi-C	Chr2	Small	89'362'700	89'363'204	2	504
Sikem	PacBio HiFi + Hi-C	Chr5	Small	82'354'696	82'355'200	3	504
Sikem	PacBio HiFi + Hi-C	Chr4	Small	278'657'109	278'657'612	2	503
Sikem	PacBio HiFi + Hi-C	Chr5	Small	3'784'847	3'785'349	3	502
Sikem	PacBio HiFi + Hi-C	Chr7	Small	198'759'277	198'759'779	2	502
Sikem	PacBio HiFi + Hi-C	Chr3	Small	108'915'538	108'916'037	3	499
Sikem	PacBio HiFi + Hi-C	Chr6	Small	171'519'333	171'519'832	4	499
Sikem	PacBio HiFi + Hi-C	Chr5	Small	135'164'364	135'164'861	3	497
Sikem	PacBio HiFi + Hi-C	Chr6	Small	170'613'724	170'614'221	2	497
Sikem	PacBio HiFi + Hi-C	Chr1	Small	79'637'311	79'637'807	3	496
Sikem	PacBio HiFi + Hi-C	Chr3	Small	43'982'952	43'983'448	6	496
Sikem	PacBio HiFi + Hi-C	Chr5	Small	113'425'356	113'425'852	5	496
Sikem	PacBio HiFi + Hi-C	Chr7	Small	349'995'791	349'996'287	8	496
Sikem	PacBio HiFi + Hi-C	Chr3	Small	88'263'413	88'263'906	3	493
Sikem	PacBio HiFi + Hi-C	Chr4	Small	53'682'996	53'683'489	2	493
Sikem	PacBio HiFi + Hi-C	Chr4	Small	313'803'208	313'803'701	2	493
Sikem	PacBio HiFi + Hi-C	Chr7	Small	123'156'499	123'156'992	3	493
Sikem	PacBio HiFi + Hi-C	Chr6	Small	146'430'752	146'431'240	3	488
Sikem	PacBio HiFi + Hi-C	Chr6	Small	244'758'860	244'759'348	2	488
Sikem	PacBio HiFi + Hi-C	Chr3	Small	241'034'430	241'034'917	2	487
Sikem	PacBio HiFi + Hi-C	Chr3	Small	338'063'641	338'064'127	12	486

Sikem	PacBio HiFi + Hi-C	Chr4	Small	367'294'761	367'295'247	5	486
Sikem	PacBio HiFi + Hi-C	Chr3	Small	137'509'096	137'509'579	11	483
Sikem	PacBio HiFi + Hi-C	Chr5	Small	64'175'871	64'176'349	8	478
Sikem	PacBio HiFi + Hi-C	Chr5	Small	96'811'640	96'812'118	2	478
Sikem	PacBio HiFi + Hi-C	Chr7	Small	210'313'604	210'314'082	8	478
Sikem	PacBio HiFi + Hi-C	Chr7	Small	94'796'013	94'796'484	2	471
Sikem	PacBio HiFi + Hi-C	Chr6	Small	65'240'906	65'241'375	5	469
Sikem	PacBio HiFi + Hi-C	Chr5	Small	151'830'408	151'830'876	2	468
Sikem	PacBio HiFi + Hi-C	Chr7	Small	358'450'770	358'451'238	9	468
Sikem	PacBio HiFi + Hi-C	Chr3	Small	331'302'959	331'303'426	3	467
Sikem	PacBio HiFi + Hi-C	Chr4	Small	387'578'636	387'579'103	5	467
Sikem	PacBio HiFi + Hi-C	Chr7	Small	192'360'183	192'360'650	4	467
Sikem	PacBio HiFi + Hi-C	Chr2	Small	178'215'408	178'215'873	21	465
Sikem	PacBio HiFi + Hi-C	Chr4	Small	297'711'721	297'712'186	4	465
Sikem	PacBio HiFi + Hi-C	Chr7	Small	122'644'675	122'645'140	8	465
Sikem	PacBio HiFi + Hi-C	Chr1	Small	126'009'551	126'010'011	12	460
Sikem	PacBio HiFi + Hi-C	Chr1	Small	239'703'132	239'703'591	5	459
Sikem	PacBio HiFi + Hi-C	Chr7	Small	145'096'976	145'097'434	2	458
Sikem	PacBio HiFi + Hi-C	Chr4	Small	109'318'617	109'319'074	5	457
Sikem	PacBio HiFi + Hi-C	Chr4	Small	82'042'767	82'043'223	3	456
Sikem	PacBio HiFi + Hi-C	Chr1	Small	217'679'675	217'680'130	7	455
Sikem	PacBio HiFi + Hi-C	Chr4	Small	299'512'280	299'512'735	2	455
Sikem	PacBio HiFi + Hi-C	Chr5	Small	164'200'678	164'201'133	3	455
Sikem	PacBio HiFi + Hi-C	Chr7	Small	349'618'249	349'618'704	8	455
Sikem	PacBio HiFi + Hi-C	Chr1	Small	246'696'907	246'697'361	3	454
Sikem	PacBio HiFi + Hi-C	Chr5	Small	228'982'356	228'982'809	4	453
Sikem	PacBio HiFi + Hi-C	Chr7	Small	145'669'620	145'670'070	2	450
Sikem	PacBio HiFi + Hi-C	Chr1	Small	124'388'954	124'389'403	2	449
Sikem	PacBio HiFi + Hi-C	Chr4	Small	312'090'806	312'091'254	3	448
Sikem	PacBio HiFi + Hi-C	Chr5	Small	86'492'580	86'493'027	3	447
Sikem	PacBio HiFi + Hi-C	Chr6	Small	204'151'186	204'151'633	2	447
Sikem	PacBio HiFi + Hi-C	Chr4	Small	363'886'093	363'886'539	3	446
Sikem	PacBio HiFi + Hi-C	Chr7	Small	275'862'122	275'862'568	3	446
Sikem	PacBio HiFi + Hi-C	Chr4	Small	403'499'906	403'500'349	3	443
Sikem	PacBio HiFi + Hi-C	Chr7	Small	187'709'039	187'709'482	3	443
Sikem	PacBio HiFi + Hi-C	Chr7	Small	328'209'629	328'210'072	7	443
Sikem	PacBio HiFi + Hi-C	Chr6	Small	81'798'547	81'798'989	8	442
Sikem	PacBio HiFi + Hi-C	Chr2	Small	245'311'548	245'311'989	2	441
Sikem	PacBio HiFi + Hi-C	Chr5	Small	167'419'399	167'419'837	2	438
Sikem	PacBio HiFi + Hi-C	Chr3	Small	122'444'594	122'445'029	3	435
Sikem	PacBio HiFi + Hi-C	Chr5	Small	250'993'398	250'993'833	7	435
Sikem	PacBio HiFi + Hi-C	Chr1	Small	65'611'401	65'611'834	3	433
Sikem	PacBio HiFi + Hi-C	Chr4	Small	125'480'933	125'481'366	6	433
Sikem	PacBio HiFi + Hi-C	Chr4	Small	299'588'878	299'589'311	4	433
Sikem	PacBio HiFi + Hi-C	Chr6	Small	92'998'062	92'998'495	3	433
Sikem	PacBio HiFi + Hi-C	Chr5	Small	89'476'210	89'476'642	4	432
Sikem	PacBio HiFi + Hi-C	Chr5	Small	160'040'993	160'041'424	2	431
Sikem	PacBio HiFi + Hi-C	Chr2	Small	273'805'120	273'805'550	2	430
Sikem	PacBio HiFi + Hi-C	Chr2	Small	92'323'552	92'323'980	3	428
Sikem	PacBio HiFi + Hi-C	Chr2	Small	171'130'457	171'130'884	3	427
Sikem	PacBio HiFi + Hi-C	Chr5	Small	186'504'868	186'505'295	3	427
Sikem	PacBio HiFi + Hi-C	Chr1	Small	10'156'080	10'156'505	11	425
Sikem	PacBio HiFi + Hi-C	Chr3	Small	149'988'254	149'988'679	3	425
Sikem	PacBio HiFi + Hi-C	Chr4	Small	333'994'355	333'994'780	3	425
Sikem	PacBio HiFi + Hi-C	Chr2	Small	83'852'108	83'852'531	4	423
Sikem	PacBio HiFi + Hi-C	Chr3	Small	6'407'423	6'407'846	3	423
Sikem	PacBio HiFi + Hi-C	Chr4	Small	337'750'822	337'751'245	2	423
Sikem	PacBio HiFi + Hi-C	Chr7	Small	229'056'141	229'056'561	4	420
Sikem	PacBio HiFi + Hi-C	Chr2	Small	165'574'846	165'575'265	4	419
Sikem	PacBio HiFi + Hi-C	Chr4	Small	155'900'653	155'901'072	2	419
Sikem	PacBio HiFi + Hi-C	Chr3	Small	84'802'786	84'803'204	3	418
Sikem	PacBio HiFi + Hi-C	Chr4	Small	358'595'677	358'596'094	3	417
Sikem	PacBio HiFi + Hi-C	Chr7	Small	201'561'571	201'561'988	3	417
Sikem	PacBio HiFi + Hi-C	Chr4	Small	201'861'135	201'861'549	2	414
Sikem	PacBio HiFi + Hi-C	Chr1	Small	197'987'371	197'987'783	2	412
Sikem	PacBio HiFi + Hi-C	Chr6	Small	21'175'958	21'176'370	2	412
Sikem	PacBio HiFi + Hi-C	Chr3	Small	4'780'897	4'781'307	4	410
Sikem	PacBio HiFi + Hi-C	Chr3	Small	141'486'978	141'487'388	7	410
Sikem	PacBio HiFi + Hi-C	Chr4	Small	389'997'292	389'997'702	6	410
Sikem	PacBio HiFi + Hi-C	Chr5	Small	39'448'311	39'448'721	6	410
Sikem	PacBio HiFi + Hi-C	Chr3	Small	286'187'233	286'187'642	3	409

Sikem	PacBio HiFi + Hi-C	Chr2	Small	99'266'185	99'266'593	3	408
Sikem	PacBio HiFi + Hi-C	Chr3	Small	238'937'888	238'938'295	3	407
Sikem	PacBio HiFi + Hi-C	Chr5	Small	54'334'146	54'334'553	7	407
Sikem	PacBio HiFi + Hi-C	Chr3	Small	93'939'502	93'939'907	2	405
Sikem	PacBio HiFi + Hi-C	Chr1	Small	5'775'890	5'776'291	2	401
Sikem	PacBio HiFi + Hi-C	Chr3	Small	80'612'322	80'612'723	3	401
Sikem	PacBio HiFi + Hi-C	Chr6	Small	75'760'371	75'760'772	2	401
Sikem	PacBio HiFi + Hi-C	Chr7	Small	202'269'646	202'270'045	2	399
Sikem	PacBio HiFi + Hi-C	Chr7	Small	156'259'382	156'259'780	4	398
Sikem	PacBio HiFi + Hi-C	Chr3	Small	170'965'756	170'966'153	2	397
Sikem	PacBio HiFi + Hi-C	Chr1	Small	187'282'424	187'282'818	2	394
Sikem	PacBio HiFi + Hi-C	Chr4	Small	365'194'428	365'194'822	3	394
Sikem	PacBio HiFi + Hi-C	Chr6	Small	5'244'537	5'244'931	3	394
Sikem	PacBio HiFi + Hi-C	Chr7	Small	117'448'312	117'448'706	3	394
Sikem	PacBio HiFi + Hi-C	Chr1	Small	44'592'428	44'592'821	2	393
Sikem	PacBio HiFi + Hi-C	Chr2	Small	170'053'496	170'053'888	7	392
Sikem	PacBio HiFi + Hi-C	Chr5	Small	93'978'447	93'978'839	3	392
Sikem	PacBio HiFi + Hi-C	Chr4	Small	186'767'149	186'767'537	7	388
Sikem	PacBio HiFi + Hi-C	Chr5	Small	108'519'488	108'519'876	7	388
Sikem	PacBio HiFi + Hi-C	Chr6	Small	142'208'607	142'208'995	3	388
Sikem	PacBio HiFi + Hi-C	Chr7	Small	146'416'091	146'416'479	4	388
Sikem	PacBio HiFi + Hi-C	Chr6	Small	16'460'337	16'460'722	4	385
Sikem	PacBio HiFi + Hi-C	Chr1	Small	183'744'084	183'744'468	2	384
Sikem	PacBio HiFi + Hi-C	Chr3	Small	285'769'332	285'769'716	3	384
Sikem	PacBio HiFi + Hi-C	Chr7	Small	119'241'977	119'242'361	3	384
Sikem	PacBio HiFi + Hi-C	Chr7	Small	163'917'281	163'917'665	2	384
Sikem	PacBio HiFi + Hi-C	Chr6	Small	144'740'924	144'741'307	2	383
Sikem	PacBio HiFi + Hi-C	Chr1	Small	220'485'674	220'486'055	3	381
Sikem	PacBio HiFi + Hi-C	Chr1	Small	57'934'702	57'935'081	10	379
Sikem	PacBio HiFi + Hi-C	Chr4	Small	287'523'976	287'524'354	3	378
Sikem	PacBio HiFi + Hi-C	Chr2	Small	99'709'212	99'709'586	3	374
Sikem	PacBio HiFi + Hi-C	Chr5	Small	164'759'405	164'759'776	2	371
Sikem	PacBio HiFi + Hi-C	Chr4	Small	307'585'415	307'585'785	2	370
Sikem	PacBio HiFi + Hi-C	Chr7	Small	171'288'042	171'288'412	9	370
Sikem	PacBio HiFi + Hi-C	Chr6	Small	116'724'405	116'724'774	3	369
Sikem	PacBio HiFi + Hi-C	Chr1	Small	25'796'551	25'796'919	2	368
Sikem	PacBio HiFi + Hi-C	Chr1	Small	144'689'340	144'689'708	3	368
Sikem	PacBio HiFi + Hi-C	Chr6	Small	99'183'842	99'184'210	2	368
Sikem	PacBio HiFi + Hi-C	Chr7	Small	98'257'586	98'257'954	4	368
Sikem	PacBio HiFi + Hi-C	Chr3	Small	372'126'555	372'126'922	7	367
Sikem	PacBio HiFi + Hi-C	Chr6	Small	236'519'129	236'519'496	3	367
Sikem	PacBio HiFi + Hi-C	Chr1	Small	226'195'594	226'195'958	3	364
Sikem	PacBio HiFi + Hi-C	Chr3	Small	155'582'260	155'582'620	3	360
Sikem	PacBio HiFi + Hi-C	Chr3	Small	137'848'437	137'848'796	3	359
Sikem	PacBio HiFi + Hi-C	Chr7	Small	349'576'782	349'577'140	2	358
Sikem	PacBio HiFi + Hi-C	Chr6	Small	239'374'345	239'374'702	2	357
Sikem	PacBio HiFi + Hi-C	Chr4	Small	259'857'821	259'858'176	2	355
Sikem	PacBio HiFi + Hi-C	Chr4	Small	406'527'635	406'527'989	2	354
Sikem	PacBio HiFi + Hi-C	Chr7	Small	138'791'880	138'792'234	2	354
Sikem	PacBio HiFi + Hi-C	Chr2	Small	56'045'347	56'045'700	3	353
Sikem	PacBio HiFi + Hi-C	Chr3	Small	37'031'492	37'031'843	3	351
Sikem	PacBio HiFi + Hi-C	Chr4	Small	338'022'840	338'023'191	5	351
Sikem	PacBio HiFi + Hi-C	Chr7	Small	216'778'921	216'779'271	2	350
Sikem	PacBio HiFi + Hi-C	Chr3	Small	137'676'718	137'677'067	5	349
Sikem	PacBio HiFi + Hi-C	Chr7	Small	9'945'250	9'945'598	3	348
Sikem	PacBio HiFi + Hi-C	Chr7	Small	138'193'444	138'193'791	2	347
Sikem	PacBio HiFi + Hi-C	Chr7	Small	299'770'639	299'770'985	2	346
Sikem	PacBio HiFi + Hi-C	Chr2	Small	76'213'204	76'213'547	4	343
Sikem	PacBio HiFi + Hi-C	Chr4	Small	152'549'511	152'549'853	6	342
Sikem	PacBio HiFi + Hi-C	Chr2	Small	77'784'508	77'784'848	6	340
Sikem	PacBio HiFi + Hi-C	Chr5	Small	8'464'848	8'465'188	3	340
Sikem	PacBio HiFi + Hi-C	Chr2	Small	269'478'938	269'479'275	7	337
Sikem	PacBio HiFi + Hi-C	Chr2	Small	138'029'943	138'030'279	2	336
Sikem	PacBio HiFi + Hi-C	Chr6	Small	114'594'070	114'594'406	2	336
Sikem	PacBio HiFi + Hi-C	Chr3	Small	154'848'639	154'848'974	3	335
Sikem	PacBio HiFi + Hi-C	Chr3	Small	259'132'398	259'132'733	3	335
Sikem	PacBio HiFi + Hi-C	Chr2	Small	222'066'127	222'066'458	3	331
Sikem	PacBio HiFi + Hi-C	Chr5	Small	67'070'709	67'071'040	2	331
Sikem	PacBio HiFi + Hi-C	Chr7	Small	10'523'045	10'523'376	2	331
Sikem	PacBio HiFi + Hi-C	Chr2	Small	266'577'799	266'578'125	4	326
Sikem	PacBio HiFi + Hi-C	Chr1	Small	125'161'041	125'161'366	2	325

Sikem	PacBio HiFi + Hi-C	Chr4	Small	387'159'295	387'159'620	2	325
Sikem	PacBio HiFi + Hi-C	Chr7	Small	171'955'986	171'956'308	3	322
Sikem	PacBio HiFi + Hi-C	Chr5	Small	60'674'369	60'674'689	13	320
Sikem	PacBio HiFi + Hi-C	Chr3	Small	97'038'769	97'039'086	11	317
Sikem	PacBio HiFi + Hi-C	Chr5	Small	254'745'156	254'745'472	3	316
Sikem	PacBio HiFi + Hi-C	Chr3	Small	120'655'878	120'656'191	3	313
Sikem	PacBio HiFi + Hi-C	Chr1	Small	106'814'024	106'814'333	2	309
Sikem	PacBio HiFi + Hi-C	Chr5	Small	87'587'635	87'587'943	2	308
Sikem	PacBio HiFi + Hi-C	Chr6	Small	43'670'542	43'670'849	2	307
Sikem	PacBio HiFi + Hi-C	Chr7	Small	57'410'431	57'410'738	2	307
Sikem	PacBio HiFi + Hi-C	Chr7	Small	349'520'202	349'520'506	2	304
Sikem	PacBio HiFi + Hi-C	Chr1	Small	201'258'128	201'258'431	2	303
Sikem	PacBio HiFi + Hi-C	Chr1	Small	212'559'511	212'559'812	3	301
Sikem	PacBio HiFi + Hi-C	Chr6	Small	41'071'081	41'071'380	5	299
Sikem	PacBio HiFi + Hi-C	Chr5	Small	67'230'932	67'231'224	5	292
Sikem	PacBio HiFi + Hi-C	Chr2	Small	230'299'780	230'300'070	2	290
Sikem	PacBio HiFi + Hi-C	Chr2	Small	73'873'322	73'873'611	2	289
Sikem	PacBio HiFi + Hi-C	Chr3	Small	43'394'277	43'394'565	2	288
Sikem	PacBio HiFi + Hi-C	Chr6	Small	18'943'066	18'943'353	2	287
Sikem	PacBio HiFi + Hi-C	Chr4	Small	63'578'069	63'578'355	4	286
Sikem	PacBio HiFi + Hi-C	Chr6	Small	109'717'543	109'717'826	2	283
Sikem	PacBio HiFi + Hi-C	Chr4	Small	187'347'846	187'348'123	2	277
Sikem	PacBio HiFi + Hi-C	Chr4	Small	156'980'257	156'980'531	2	274
Sikem	PacBio HiFi + Hi-C	Chr3	Small	141'404'248	141'404'520	2	272
Sikem	PacBio HiFi + Hi-C	Chr3	Small	234'855'813	234'856'085	5	272
Sikem	PacBio HiFi + Hi-C	Chr5	Small	13'300'698	13'300'966	2	268
Sikem	PacBio HiFi + Hi-C	Chr4	Small	372'110'552	372'110'819	2	267
Sikem	PacBio HiFi + Hi-C	Chr5	Small	232'352'970	232'353'234	3	264
Sikem	PacBio HiFi + Hi-C	Chr2	Small	65'462'915	65'463'171	3	256
Sikem	PacBio HiFi + Hi-C	Chr7	Small	215'646'178	215'646'432	2	254
Sikem	PacBio HiFi + Hi-C	Chr1	Small	151'317'505	151'317'757	2	252
Sikem	PacBio HiFi + Hi-C	Chr6	Small	81'280'127	81'280'379	6	252
Sikem	PacBio HiFi + Hi-C	Chr7	Small	123'907'987	123'908'238	3	251
Sikem	PacBio HiFi + Hi-C	Chr5	Small	18'759'547	18'759'797	2	250
Sikem	PacBio HiFi + Hi-C	Chr7	Small	207'049'124	207'049'374	2	250
Sikem	PacBio HiFi + Hi-C	Chr3	Small	7'537'500	7'537'749	4	249
Sikem	PacBio HiFi + Hi-C	Chr1	Small	134'804'397	134'804'645	2	248
Sikem	PacBio HiFi + Hi-C	Chr6	Small	12'078'873	12'079'121	3	248
Sikem	PacBio HiFi + Hi-C	Chr7	Small	219'496'884	219'497'126	10	242
Sikem	PacBio HiFi + Hi-C	Chr2	Small	165'234'445	165'234'683	3	238
Sikem	PacBio HiFi + Hi-C	Chr2	Small	72'303'362	72'303'595	2	233
Sikem	PacBio HiFi + Hi-C	Chr4	Small	132'488'724	132'488'947	4	223
Sikem	PacBio HiFi + Hi-C	Chr4	Small	339'850'289	339'850'506	15	217
Sikem	PacBio HiFi + Hi-C	Chr2	Small	21'078'979	21'079'191	4	212
Sikem	PacBio HiFi + Hi-C	Chr1	Small	67'229'702	67'229'911	2	209
Sikem	PacBio HiFi + Hi-C	Chr4	Small	27'852'254	27'852'462	2	208
Sikem	PacBio HiFi + Hi-C	Chr3	Small	328'973'607	328'973'809	7	202
Sikem	PacBio HiFi + Hi-C	Chr4	Small	298'096'097	298'096'299	2	202
Sikem	PacBio HiFi + Hi-C	Chr5	Small	111'810'667	111'810'869	10	202
Sikem	PacBio HiFi + Hi-C	Chr3	Small	13'595'655	13'595'853	2	198
Sikem	PacBio HiFi + Hi-C	Chr2	Small	19'143'801	19'143'994	3	193
Sikem	PacBio HiFi + Hi-C	Chr1	Small	24'220'559	24'220'751	7	192
Sikem	PacBio HiFi + Hi-C	Chr3	Small	219'504'895	219'505'087	4	192
Sikem	PacBio HiFi + Hi-C	Chr7	Small	146'953'754	146'953'946	3	192
Sikem	PacBio HiFi + Hi-C	Chr2	Small	228'480'968	228'481'157	3	189
Sikem	PacBio HiFi + Hi-C	Chr1	Small	151'424'523	151'424'711	6	188
Sikem	PacBio HiFi + Hi-C	Chr7	Small	213'584'577	213'584'765	2	188
Sikem	PacBio HiFi + Hi-C	Chr3	Small	341'364'140	341'364'327	3	187
Sikem	PacBio HiFi + Hi-C	Chr5	Small	244'910'942	244'911'129	3	187
Sikem	PacBio HiFi + Hi-C	Chr7	Small	72'180'725	72'180'912	4	187
Sikem	PacBio HiFi + Hi-C	Chr4	Small	322'307'639	322'307'823	2	184
Sikem	PacBio HiFi + Hi-C	Chr7	Small	77'511'521	77'511'705	2	184
Sikem	PacBio HiFi + Hi-C	Chr4	Small	171'351'913	171'352'094	7	181
Sikem	PacBio HiFi + Hi-C	Chr6	Small	199'648'805	199'648'985	3	180
Sikem	PacBio HiFi + Hi-C	Chr1	Small	29'898'605	29'898'783	2	178
Sikem	PacBio HiFi + Hi-C	Chr5	Small	92'002'701	92'002'877	2	176
Sikem	PacBio HiFi + Hi-C	Chr2	Small	292'439'802	292'439'977	3	175
Sikem	PacBio HiFi + Hi-C	Chr7	Small	20'413'622	20'413'796	3	174
Sikem	PacBio HiFi + Hi-C	Chr4	Small	255'941'400	255'941'573	4	173
Sikem	PacBio HiFi + Hi-C	Chr1	Small	82'859'076	82'859'246	3	170
Sikem	PacBio HiFi + Hi-C	Chr4	Small	73'356'495	73'356'660	2	165

Sikem	PacBio HiFi + Hi-C	Chr4	Small	328'673'579	328'673'743	2	164
Sikem	PacBio HiFi + Hi-C	Chr4	Small	3'042'077	3'042'236	6	159
Sikem	PacBio HiFi + Hi-C	Chr5	Small	69'771'371	69'771'530	3	159
Sikem	PacBio HiFi + Hi-C	Chr2	Small	303'781'544	303'781'702	2	158
Sikem	PacBio HiFi + Hi-C	Chr5	Small	73'541'294	73'541'452	3	158
Sikem	PacBio HiFi + Hi-C	Chr1	Small	157'844'408	157'844'565	4	157
Sikem	PacBio HiFi + Hi-C	Chr1	Small	184'853'553	184'853'710	3	157
Sikem	PacBio HiFi + Hi-C	Chr4	Small	276'726'375	276'726'531	2	156
Sikem	PacBio HiFi + Hi-C	Chr1	Small	248'630'714	248'630'869	4	155
Sikem	PacBio HiFi + Hi-C	Chr3	Small	229'758'846	229'759'001	3	155
Sikem	PacBio HiFi + Hi-C	Chr4	Small	180'614'828	180'614'983	2	155
Sikem	PacBio HiFi + Hi-C	Chr6	Small	118'499'381	118'499'536	9	155
Sikem	PacBio HiFi + Hi-C	Chr1	Small	158'800'214	158'800'368	2	154
Sikem	PacBio HiFi + Hi-C	Chr6	Small	63'303'082	63'303'236	9	154
Sikem	PacBio HiFi + Hi-C	Chr4	Small	14'757'116	14'757'268	3	152
Sikem	PacBio HiFi + Hi-C	Chr3	Small	79'520'067	79'520'217	2	150
Sikem	PacBio HiFi + Hi-C	Chr6	Small	55'402'987	55'403'134	4	147
Sikem	PacBio HiFi + Hi-C	Chr1	Small	75'264'140	75'264'286	2	146
Sikem	PacBio HiFi + Hi-C	Chr7	Small	24'353'195	24'353'341	5	146
Sikem	PacBio HiFi + Hi-C	Chr5	Small	83'379'122	83'379'267	2	145
Sikem	PacBio HiFi + Hi-C	Chr6	Small	135'206'643	135'206'787	2	144
Sikem	PacBio HiFi + Hi-C	Chr7	Small	131'747'424	131'747'567	4	143
Sikem	PacBio HiFi + Hi-C	Chr4	Small	200'859'679	200'859'821	2	142
Sikem	PacBio HiFi + Hi-C	Chr1	Small	246'321'116	246'321'257	2	141
Sikem	PacBio HiFi + Hi-C	Chr6	Small	139'655'902	139'656'041	4	139
Sikem	PacBio HiFi + Hi-C	Chr5	Small	142'836'326	142'836'464	2	138
Sikem	PacBio HiFi + Hi-C	Chr1	Small	217'708'985	217'709'122	4	137
Sikem	PacBio HiFi + Hi-C	Chr6	Small	52'728'999	52'729'134	2	135
Sikem	PacBio HiFi + Hi-C	Chr4	Small	254'057'545	254'057'679	2	134
Sikem	PacBio HiFi + Hi-C	Chr6	Small	67'218'636	67'218'770	3	134
Sikem	PacBio HiFi + Hi-C	Chr7	Small	146'273'733	146'273'867	6	134
Sikem	PacBio HiFi + Hi-C	Chr2	Small	110'107'763	110'107'896	2	133
Sikem	PacBio HiFi + Hi-C	Chr1	Small	217'869'141	217'869'273	3	132
Sikem	PacBio HiFi + Hi-C	Chr4	Small	279'962'193	279'962'325	5	132
Sikem	PacBio HiFi + Hi-C	Chr6	Small	21'055'297	21'055'429	3	132
Sikem	PacBio HiFi + Hi-C	Chr4	Small	338'547'575	338'547'706	2	131
Sikem	PacBio HiFi + Hi-C	Chr5	Small	108'800'611	108'800'741	2	130
Sikem	PacBio HiFi + Hi-C	Chr2	Small	166'652'827	166'652'956	2	129
Sikem	PacBio HiFi + Hi-C	Chr4	Small	373'663'612	373'663'741	2	129
Sikem	PacBio HiFi + Hi-C	Chr7	Small	94'268'847	94'268'976	3	129
Sikem	PacBio HiFi + Hi-C	Chr7	Small	250'037'516	250'037'644	4	128
Sikem	PacBio HiFi + Hi-C	Chr7	Small	250'726'557	250'726'685	5	128
Sikem	PacBio HiFi + Hi-C	Chr7	Small	302'196'963	302'197'090	6	127
Sikem	PacBio HiFi + Hi-C	Chr1	Small	27'453'581	27'453'707	5	126
Sikem	PacBio HiFi + Hi-C	Chr4	Small	93'627'701	93'627'827	2	126
Sikem	PacBio HiFi + Hi-C	Chr7	Small	104'420'349	104'420'475	3	126
Sikem	PacBio HiFi + Hi-C	Chr3	Small	83'444'261	83'444'386	3	125
Sikem	PacBio HiFi + Hi-C	Chr2	Small	227'055'335	227'055'459	3	124
Sikem	PacBio HiFi + Hi-C	Chr2	Small	73'407'786	73'407'909	7	123
Sikem	PacBio HiFi + Hi-C	Chr7	Small	70'437'277	70'437'400	4	123
Sikem	PacBio HiFi + Hi-C	Chr3	Small	43'080'389	43'080'511	2	122
Sikem	PacBio HiFi + Hi-C	Chr1	Small	123'200'705	123'200'826	7	121
Sikem	PacBio HiFi + Hi-C	Chr2	Small	92'266'665	92'266'786	6	121
Sikem	PacBio HiFi + Hi-C	Chr4	Small	279'714'740	279'714'860	7	120
Sikem	PacBio HiFi + Hi-C	Chr2	Small	156'789'381	156'789'500	2	119
Sikem	PacBio HiFi + Hi-C	Chr2	Small	224'744'869	224'744'988	5	119
Sikem	PacBio HiFi + Hi-C	Chr5	Small	247'666'882	247'667'000	2	118
Sikem	PacBio HiFi + Hi-C	Chr3	Small	369'968'686	369'968'802	3	116
Sikem	PacBio HiFi + Hi-C	Chr4	Small	163'171'989	163'172'105	2	116
Sikem	PacBio HiFi + Hi-C	Chr4	Small	422'846'228	422'846'344	3	116
Sikem	PacBio HiFi + Hi-C	Chr5	Small	152'632'926	152'633'042	7	116
Sikem	PacBio HiFi + Hi-C	Chr5	Small	157'493'010	157'493'126	3	116
Sikem	PacBio HiFi + Hi-C	Chr6	Small	26'579'416	26'579'530	2	114
Sikem	PacBio HiFi + Hi-C	Chr6	Small	159'529'293	159'529'407	5	114
Sikem	PacBio HiFi + Hi-C	Chr3	Small	1'422'390	1'422'503	3	113
Sikem	PacBio HiFi + Hi-C	Chr4	Small	280'746'542	280'746'655	4	113
Sikem	PacBio HiFi + Hi-C	Chr4	Small	321'228'519	321'228'632	2	113
Sikem	PacBio HiFi + Hi-C	Chr3	Small	165'939'996	165'940'107	4	111
Sikem	PacBio HiFi + Hi-C	Chr4	Small	32'802'529	32'802'639	2	110
Sikem	PacBio HiFi + Hi-C	Chr3	Small	324'869'794	324'869'903	3	109
Sikem	PacBio HiFi + Hi-C	Chr5	Small	92'796'286	92'796'395	3	109

Sikem	PacBio HiFi + Hi-C	Chr5	Small	161'657'886	161'657'995	5	109
Sikem	PacBio HiFi + Hi-C	Chr3	Small	43'375'357	43'375'465	2	108
Sikem	PacBio HiFi + Hi-C	Chr4	Small	336'737'363	336'737'471	2	108
Sikem	PacBio HiFi + Hi-C	Chr6	Small	149'156'239	149'156'347	4	108
Sikem	PacBio HiFi + Hi-C	Chr6	Small	46'704'698	46'704'804	7	106
Sikem	PacBio HiFi + Hi-C	Chr7	Small	146'148'960	146'149'065	2	105
Sikem	PacBio HiFi + Hi-C	Chr3	Small	298'640'092	298'640'196	2	104
Sikem	PacBio HiFi + Hi-C	Chr7	Small	34'167'932	34'168'036	2	104
Sikem	PacBio HiFi + Hi-C	Chr1	Small	147'110'857	147'110'960	4	103
Sikem	PacBio HiFi + Hi-C	Chr5	Small	9'378'985	9'379'088	7	103
Sikem	PacBio HiFi + Hi-C	Chr5	Small	111'170'184	111'170'287	4	103
Sikem	PacBio HiFi + Hi-C	Chr6	Small	139'707'018	139'707'119	2	101
Sikem	PacBio HiFi + Hi-C	Chr7	Small	51'174'153	51'174'254	3	101
Sikem	PacBio HiFi + Hi-C	Chr6	Small	233'906'727	233'906'827	4	100
Sikem	PacBio HiFi + Hi-C	Chr7	Small	108'874'008	108'874'108	6	100
Sikem	PacBio HiFi + Hi-C	Chr1	Small	82'381'803	82'381'902	2	99
Sikem	PacBio HiFi + Hi-C	Chr4	Small	382'337'511	382'337'610	2	99
Sikem	PacBio HiFi + Hi-C	Chr6	Small	105'265'026	105'265'125	5	99
Sikem	PacBio HiFi + Hi-C	Chr4	Small	28'479'799	28'479'896	6	97
Sikem	PacBio HiFi + Hi-C	Chr7	Small	84'642'744	84'642'841	2	97
Sikem	PacBio HiFi + Hi-C	Chr3	Small	154'874'561	154'874'657	2	96
Sikem	PacBio HiFi + Hi-C	Chr6	Small	21'651'851	21'651'946	2	95
Sikem	PacBio HiFi + Hi-C	Chr7	Small	85'340'365	85'340'460	3	95
Sikem	PacBio HiFi + Hi-C	Chr7	Small	146'462'397	146'462'492	3	95
Sikem	PacBio HiFi + Hi-C	Chr2	Small	139'256'977	139'257'070	7	93
Sikem	PacBio HiFi + Hi-C	Chr6	Small	237'513'775	237'513'868	5	93
Sikem	PacBio HiFi + Hi-C	Chr4	Small	26'716'774	26'716'866	3	92
Sikem	PacBio HiFi + Hi-C	Chr4	Small	289'498'122	289'498'214	2	92
Sikem	PacBio HiFi + Hi-C	Chr3	Small	79'848'141	79'848'232	3	91
Sikem	PacBio HiFi + Hi-C	Chr3	Small	97'459'908	97'459'999	4	91
Sikem	PacBio HiFi + Hi-C	Chr7	Small	56'625'102	56'625'193	3	91
Sikem	PacBio HiFi + Hi-C	Chr6	Small	20'774'895	20'774'985	7	90
Sikem	PacBio HiFi + Hi-C	Chr7	Small	139'204'077	139'204'166	4	89
Sikem	PacBio HiFi + Hi-C	Chr3	Small	224'593'528	224'593'616	2	88
Sikem	PacBio HiFi + Hi-C	Chr5	Small	118'210'456	118'210'544	3	88
Sikem	PacBio HiFi + Hi-C	Chr1	Small	69'023'758	69'023'845	3	87
Sikem	PacBio HiFi + Hi-C	Chr1	Small	167'347'828	167'347'915	3	87
Sikem	PacBio HiFi + Hi-C	Chr4	Small	249'850'644	249'850'731	3	87
Sikem	PacBio HiFi + Hi-C	Chr3	Small	354'943'373	354'943'459	5	86
Sikem	PacBio HiFi + Hi-C	Chr5	Small	1'615'955	1'616'041	3	86
Sikem	PacBio HiFi + Hi-C	Chr5	Small	61'021'758	61'021'844	3	86
Sikem	PacBio HiFi + Hi-C	Chr3	Small	127'641'651	127'641'736	3	85
Sikem	PacBio HiFi + Hi-C	Chr7	Small	90'214'837	90'214'922	4	85
Sikem	PacBio HiFi + Hi-C	Chr2	Small	259'259'717	259'259'801	4	84
Sikem	PacBio HiFi + Hi-C	Chr3	Small	171'394'880	171'394'964	6	84
Sikem	PacBio HiFi + Hi-C	Chr4	Small	144'279'060	144'279'144	2	84
Sikem	PacBio HiFi + Hi-C	Chr7	Small	278'157'112	278'157'195	2	83
Sikem	PacBio HiFi + Hi-C	Chr4	Small	46'314'540	46'314'622	2	82
Sikem	PacBio HiFi + Hi-C	Chr6	Small	132'879'554	132'879'636	2	82
Sikem	PacBio HiFi + Hi-C	Chr7	Small	195'540'264	195'540'346	2	82
Sikem	PacBio HiFi + Hi-C	Chr4	Small	121'837'624	121'837'705	2	81
Sikem	PacBio HiFi + Hi-C	Chr5	Small	91'433'617	91'433'698	2	81
Sikem	PacBio HiFi + Hi-C	Chr4	Small	185'398'702	185'398'782	2	80
Sikem	PacBio HiFi + Hi-C	Chr5	Small	3'052'435	3'052'515	2	80
Sikem	PacBio HiFi + Hi-C	Chr4	Small	83'658'993	83'659'072	2	79
Sikem	PacBio HiFi + Hi-C	Chr1	Small	43'705'021	43'705'099	2	78
Sikem	PacBio HiFi + Hi-C	Chr1	Small	189'141'986	189'142'064	2	78
Sikem	PacBio HiFi + Hi-C	Chr7	Small	149'638'473	149'638'551	5	78
Sikem	PacBio HiFi + Hi-C	Chr4	Small	272'659'985	272'660'062	3	77
Sikem	PacBio HiFi + Hi-C	Chr5	Small	64'604'743	64'604'820	3	77
Sikem	PacBio HiFi + Hi-C	Chr5	Small	49'183'109	49'183'185	3	76
Sikem	PacBio HiFi + Hi-C	Chr6	Small	212'047'210	212'047'286	2	76
Sikem	PacBio HiFi + Hi-C	Chr1	Small	133'809'943	133'810'018	3	75
Sikem	PacBio HiFi + Hi-C	Chr4	Small	91'915'914	91'915'989	3	75
Sikem	PacBio HiFi + Hi-C	Chr6	Small	81'899'242	81'899'317	2	75
Sikem	PacBio HiFi + Hi-C	Chr7	Small	147'068'596	147'068'671	3	75
Sikem	PacBio HiFi + Hi-C	Chr1	Small	117'654'176	117'654'250	3	74
Sikem	PacBio HiFi + Hi-C	Chr6	Small	73'614'218	73'614'292	3	74
Sikem	PacBio HiFi + Hi-C	Chr2	Small	50'806'703	50'806'776	3	73
Sikem	PacBio HiFi + Hi-C	Chr2	Small	86'896'606	86'896'679	2	73
Sikem	PacBio HiFi + Hi-C	Chr2	Small	227'461'127	227'461'200	3	73

Sikem	PacBio HiFi + Hi-C	Chr4	Small	21'893'935	21'894'008	2	73
Sikem	PacBio HiFi + Hi-C	Chr2	Small	72'053'362	72'053'434	2	72
Sikem	PacBio HiFi + Hi-C	Chr4	Small	134'515'243	134'515'315	3	72
Sikem	PacBio HiFi + Hi-C	Chr1	Small	144'713'534	144'713'605	2	71
Sikem	PacBio HiFi + Hi-C	Chr1	Small	256'306'077	256'306'148	2	71
Sikem	PacBio HiFi + Hi-C	Chr2	Small	145'515'597	145'515'668	2	71
Sikem	PacBio HiFi + Hi-C	Chr3	Small	140'827'792	140'827'863	2	71
Sikem	PacBio HiFi + Hi-C	Chr7	Small	217'068'424	217'068'495	2	71
Sikem	PacBio HiFi + Hi-C	Chr6	Small	210'102'710	210'102'780	2	70
Sikem	PacBio HiFi + Hi-C	Chr1	Small	135'856'460	135'856'529	7	69
Sikem	PacBio HiFi + Hi-C	Chr2	Small	199'771'384	199'771'453	2	69
Sikem	PacBio HiFi + Hi-C	Chr3	Small	215'673'872	215'673'941	2	69
Sikem	PacBio HiFi + Hi-C	Chr4	Small	174'471'791	174'471'860	3	69
Sikem	PacBio HiFi + Hi-C	Chr7	Small	15'853'799	15'853'868	3	69
Sikem	PacBio HiFi + Hi-C	Chr3	Small	196'887'733	196'887'801	2	68
Sikem	PacBio HiFi + Hi-C	Chr3	Small	273'090'888	273'090'956	2	68
Sikem	PacBio HiFi + Hi-C	Chr5	Small	113'127'030	113'127'098	4	68
Sikem	PacBio HiFi + Hi-C	Chr7	Small	203'502'168	203'502'236	3	68
Sikem	PacBio HiFi + Hi-C	Chr5	Small	98'889'232	98'889'298	2	66
Sikem	PacBio HiFi + Hi-C	Chr7	Small	130'616'446	130'616'512	2	66
Sikem	PacBio HiFi + Hi-C	Chr1	Small	191'955'541	191'955'606	3	65
Sikem	PacBio HiFi + Hi-C	Chr4	Small	30'840'049	30'840'113	3	64
Sikem	PacBio HiFi + Hi-C	Chr4	Small	168'450'979	168'451'043	2	64
Sikem	PacBio HiFi + Hi-C	Chr7	Small	349'399'161	349'399'223	3	62
Sikem	PacBio HiFi + Hi-C	Chr1	Small	235'943'587	235'943'648	2	61
Sikem	PacBio HiFi + Hi-C	Chr3	Small	379'101'367	379'101'428	3	61
Sikem	PacBio HiFi + Hi-C	Chr3	Small	380'704'210	380'704'271	2	61
Sikem	PacBio HiFi + Hi-C	Chr2	Small	59'793'551	59'793'611	2	60
Sikem	PacBio HiFi + Hi-C	Chr2	Small	109'843'422	109'843'481	3	59
Sikem	PacBio HiFi + Hi-C	Chr3	Small	34'038'782	34'038'841	2	59
Sikem	PacBio HiFi + Hi-C	Chr3	Small	149'489'507	149'489'566	3	59
Sikem	PacBio HiFi + Hi-C	Chr2	Small	16'698'221	16'698'279	3	58
Sikem	PacBio HiFi + Hi-C	Chr3	Small	303'585'045	303'585'103	3	58
Sikem	PacBio HiFi + Hi-C	Chr5	Small	61'533'812	61'533'870	5	58
Sikem	PacBio HiFi + Hi-C	Chr2	Small	227'502'152	227'502'209	2	57
Sikem	PacBio HiFi + Hi-C	Chr3	Small	40'920'806	40'920'863	4	57
Sikem	PacBio HiFi + Hi-C	Chr3	Small	149'609'189	149'609'246	3	57
Sikem	PacBio HiFi + Hi-C	Chr7	Small	282'417'362	282'417'419	2	57
Sikem	PacBio HiFi + Hi-C	Chr3	Small	131'315'928	131'315'984	4	56
Sikem	PacBio HiFi + Hi-C	Chr4	Small	298'503'896	298'503'952	2	56
Sikem	PacBio HiFi + Hi-C	Chr6	Small	21'236'912	21'236'968	2	56
Sikem	PacBio HiFi + Hi-C	Chr6	Small	108'758'167	108'758'223	2	56
Sikem	PacBio HiFi + Hi-C	Chr7	Small	111'459'783	111'459'839	2	56
Sikem	PacBio HiFi + Hi-C	Chr7	Small	171'657'111	171'657'167	2	56
Sikem	PacBio HiFi + Hi-C	Chr1	Small	169'491'040	169'491'095	3	55
Sikem	PacBio HiFi + Hi-C	Chr7	Small	13'696'215	13'696'270	2	55
Sikem	PacBio HiFi + Hi-C	Chr7	Small	292'336'451	292'336'506	2	55
Sikem	PacBio HiFi + Hi-C	Chr4	Small	30'282'065	30'282'119	2	54
Sikem	PacBio HiFi + Hi-C	Chr5	Small	232'289'138	232'289'192	4	54
Sikem	PacBio HiFi + Hi-C	Chr7	Small	90'022'092	90'022'146	2	54
Sikem	PacBio HiFi + Hi-C	Chr2	Small	257'496'541	257'496'594	2	53
Sikem	PacBio HiFi + Hi-C	Chr6	Small	98'616'365	98'616'418	3	53
Sikem	PacBio HiFi + Hi-C	Chr4	Small	178'927'176	178'927'228	2	52
Sikem	PacBio HiFi + Hi-C	Chr3	Small	21'854'371	21'854'422	2	51
Sikem	PacBio HiFi + Hi-C	Chr3	Small	166'622'034	166'622'085	2	51
Sikem	PacBio HiFi + Hi-C	Chr3	Small	229'791'661	229'791'712	5	51
Sikem	PacBio HiFi + Hi-C	Chr4	Small	27'633'064	27'633'115	2	51
Sikem	PacBio HiFi + Hi-C	Chr5	Small	98'644'643	98'644'694	2	51
Sikem	PacBio HiFi + Hi-C	Chr6	Small	21'358'481	21'358'532	5	51
Sikem	PacBio HiFi + Hi-C	Chr5	Small	127'213'351	127'213'401	2	50
Sikem	PacBio HiFi + Hi-C	Chr2	Small	56'023'085	56'023'134	2	49
Sikem	PacBio HiFi + Hi-C	Chr2	Small	76'181'340	76'181'389	2	49
Sikem	PacBio HiFi + Hi-C	Chr4	Small	415'009'833	415'009'882	2	49
Sikem	PacBio HiFi + Hi-C	Chr6	Small	8'214'152	8'214'201	3	49
Sikem	PacBio HiFi + Hi-C	Chr6	Small	135'184'765	135'184'814	2	49
Sikem	PacBio HiFi + Hi-C	Chr1	Small	104'063'539	104'063'587	3	48
Sikem	PacBio HiFi + Hi-C	Chr4	Small	367'577'684	367'577'732	3	48
Sikem	PacBio HiFi + Hi-C	Chr5	Small	18'796'356	18'796'404	2	48
Sikem	PacBio HiFi + Hi-C	Chr1	Small	214'114'761	214'114'808	2	47
Sikem	PacBio HiFi + Hi-C	Chr2	Small	259'239'576	259'239'623	2	47
Sikem	PacBio HiFi + Hi-C	Chr4	Small	27'898'268	27'898'314	3	46

Sikem	PacBio HiFi + Hi-C	Chr4	Small	425'617'186	425'617'232	2	46
Sikem	PacBio HiFi + Hi-C	Chr5	Small	76'762'515	76'762'561	2	46
Sikem	PacBio HiFi + Hi-C	Chr3	Small	302'837'485	302'837'530	2	45
Sikem	PacBio HiFi + Hi-C	Chr5	Small	115'553'779	115'553'823	2	44
Sikem	PacBio HiFi + Hi-C	Chr6	Small	174'924'069	174'924'113	2	44
Sikem	PacBio HiFi + Hi-C	Chr7	Small	323'225'854	323'225'898	2	44
Sikem	PacBio HiFi + Hi-C	Chr7	Small	332'557'559	332'557'603	2	44
Sikem	PacBio HiFi + Hi-C	Chr1	Small	4'284'949	4'284'992	2	43
Sikem	PacBio HiFi + Hi-C	Chr1	Small	216'430'631	216'430'674	3	43
Sikem	PacBio HiFi + Hi-C	Chr1	Small	249'258'473	249'258'516	3	43
Sikem	PacBio HiFi + Hi-C	Chr2	Small	106'403'158	106'403'201	2	43
Sikem	PacBio HiFi + Hi-C	Chr4	Small	43'149'153	43'149'196	2	43
Sikem	PacBio HiFi + Hi-C	Chr4	Small	290'751'207	290'751'250	2	43
Sikem	PacBio HiFi + Hi-C	Chr7	Small	238'686'778	238'686'821	2	43
Sikem	PacBio HiFi + Hi-C	Chr3	Small	125'860'486	125'860'528	2	42
Sikem	PacBio HiFi + Hi-C	Chr4	Small	294'351'266	294'351'308	2	42
Sikem	PacBio HiFi + Hi-C	Chr5	Small	143'679'188	143'679'230	2	42
Sikem	PacBio HiFi + Hi-C	Chr7	Small	123'439'488	123'439'529	2	41
Sikem	PacBio HiFi + Hi-C	Chr3	Small	12'525'735	12'525'775	3	40
Sikem	PacBio HiFi + Hi-C	Chr3	Small	29'458'299	29'458'339	3	40
Sikem	PacBio HiFi + Hi-C	Chr6	Small	40'221'497	40'221'537	2	40
Sikem	PacBio HiFi + Hi-C	Chr7	Small	280'503'078	280'503'118	2	40
Sikem	PacBio HiFi + Hi-C	Chr1	Small	168'694'453	168'694'492	3	39
Sikem	PacBio HiFi + Hi-C	Chr3	Small	930'928	930'967	4	39
Sikem	PacBio HiFi + Hi-C	Chr5	Small	136'901'789	136'901'828	2	39
Sikem	PacBio HiFi + Hi-C	Chr7	Small	312'374'229	312'374'268	3	39
Sikem	PacBio HiFi + Hi-C	Chr7	Small	346'017'787	346'017'826	2	39
Sikem	PacBio HiFi + Hi-C	Chr1	Small	104'862'330	104'862'368	2	38
Sikem	PacBio HiFi + Hi-C	Chr4	Small	183'024'543	183'024'581	3	38
Sikem	PacBio HiFi + Hi-C	Chr7	Small	217'188'006	217'188'044	2	38
Sikem	PacBio HiFi + Hi-C	Chr4	Small	121'812'374	121'812'411	3	37
Sikem	PacBio HiFi + Hi-C	Chr6	Small	167'523'052	167'523'089	4	37
Sikem	PacBio HiFi + Hi-C	Chr6	Small	214'248'049	214'248'086	2	37
Sikem	PacBio HiFi + Hi-C	Chr4	Small	362'416'335	362'416'370	3	35
Sikem	PacBio HiFi + Hi-C	Chr7	Small	349'357'082	349'357'117	2	35
Sikem	PacBio HiFi + Hi-C	Chr3	Small	39'307'132	39'307'166	4	34
Sikem	PacBio HiFi + Hi-C	Chr3	Small	44'313'547	44'313'581	3	34
Sikem	PacBio HiFi + Hi-C	Chr5	Small	99'618'133	99'618'167	2	34
Sikem	PacBio HiFi + Hi-C	Chr7	Small	150'485'716	150'485'750	3	34
Sikem	PacBio HiFi + Hi-C	Chr7	Small	205'384'646	205'384'680	3	34
Sikem	PacBio HiFi + Hi-C	Chr2	Small	219'262'946	219'262'979	3	33
Sikem	PacBio HiFi + Hi-C	Chr6	Small	64'943'445	64'943'478	3	33
Sikem	PacBio HiFi + Hi-C	Chr7	Small	361'198'957	361'198'990	2	33
Sikem	PacBio HiFi + Hi-C	Chr1	Small	75'372'079	75'372'110	2	31
Sikem	PacBio HiFi + Hi-C	Chr3	Small	107'343'103	107'343'134	2	31
Sikem	PacBio HiFi + Hi-C	Chr4	Small	186'873'604	186'873'635	2	31
Sikem	PacBio HiFi + Hi-C	Chr6	Small	134'274'429	134'274'460	3	31
Sikem	PacBio HiFi + Hi-C	Chr7	Small	176'305'728	176'305'759	3	31
Sikem	PacBio HiFi + Hi-C	Chr7	Small	293'485'043	293'485'074	2	31
Sikem	PacBio HiFi + Hi-C	Chr2	Small	220'849'150	220'849'180	4	30
Sikem	PacBio HiFi + Hi-C	Chr5	Small	233'745'935	233'745'965	3	30
Sikem	PacBio HiFi + Hi-C	Chr7	Small	260'437'440	260'437'470	2	30
Sikem	PacBio HiFi + Hi-C	Chr3	Small	255'166'630	255'166'659	2	29
Sikem	PacBio HiFi + Hi-C	Chr4	Small	19'732'204	19'732'233	2	29
Sikem	PacBio HiFi + Hi-C	Chr4	Small	86'089'311	86'089'340	2	29
Sikem	PacBio HiFi + Hi-C	Chr1	Small	119'899'119	119'899'147	2	28
Sikem	PacBio HiFi + Hi-C	Chr1	Small	254'939'913	254'939'941	2	28
Sikem	PacBio HiFi + Hi-C	Chr4	Small	137'434'626	137'434'654	5	28
Sikem	PacBio HiFi + Hi-C	Chr5	Small	164'855'568	164'855'596	3	28
Sikem	PacBio HiFi + Hi-C	Chr2	Small	76'710'782	76'710'809	2	27
Sikem	PacBio HiFi + Hi-C	Chr3	Small	13'696'890	13'696'917	2	27
Sikem	PacBio HiFi + Hi-C	Chr3	Small	286'505'118	286'505'145	2	27
Sikem	PacBio HiFi + Hi-C	Chr3	Small	380'723'102	380'723'129	3	27
Sikem	PacBio HiFi + Hi-C	Chr6	Small	48'322'837	48'322'864	2	27
Sikem	PacBio HiFi + Hi-C	Chr7	Small	281'862'779	281'862'806	3	27
Sikem	PacBio HiFi + Hi-C	Chr1	Small	78'821'373	78'821'399	2	26
Sikem	PacBio HiFi + Hi-C	Chr1	Small	105'606'612	105'606'638	2	26
Sikem	PacBio HiFi + Hi-C	Chr3	Small	31'307'843	31'307'869	5	26
Sikem	PacBio HiFi + Hi-C	Chr1	Small	185'957'717	185'957'742	2	25
Sikem	PacBio HiFi + Hi-C	Chr2	Small	20'067'348	20'067'373	3	25
Sikem	PacBio HiFi + Hi-C	Chr2	Small	111'096'138	111'096'163	2	25

Sikem	PacBio HiFi + Hi-C	Chr3	Small	26'895'810	26'895'835	3	25
Sikem	PacBio HiFi + Hi-C	Chr6	Small	107'956'544	107'956'569	3	25
Sikem	PacBio HiFi + Hi-C	Chr1	Small	261'240'865	261'240'889	3	24
Sikem	PacBio HiFi + Hi-C	Chr3	Small	33'973'945	33'973'969	3	24
Sikem	PacBio HiFi + Hi-C	Chr3	Small	176'928'635	176'928'659	2	24
Sikem	PacBio HiFi + Hi-C	Chr7	Small	363'327'973	363'327'997	2	24
Sikem	PacBio HiFi + Hi-C	Chr7	Small	150'327'854	150'327'877	2	23
Sikem	PacBio HiFi + Hi-C	Chr1	Small	103'795'098	103'795'120	2	22
Sikem	PacBio HiFi + Hi-C	Chr2	Small	87'004'666	87'004'688	2	22
Sikem	PacBio HiFi + Hi-C	Chr2	Small	149'988'109	149'988'131	2	22
Sikem	PacBio HiFi + Hi-C	Chr3	Small	41'283'719	41'283'741	2	22
Sikem	PacBio HiFi + Hi-C	Chr5	Small	63'057'410	63'057'432	2	22
Sikem	PacBio HiFi + Hi-C	Chr5	Small	142'005'815	142'005'837	2	22
Sikem	PacBio HiFi + Hi-C	Chr6	Small	16'585'430	16'585'452	3	22
Sikem	PacBio HiFi + Hi-C	Chr6	Small	150'446'041	150'446'063	2	22
Sikem	PacBio HiFi + Hi-C	Chr7	Small	254'350'346	254'350'368	2	22
Sikem	PacBio HiFi + Hi-C	Chr3	Small	40'966'145	40'966'166	2	21
Sikem	PacBio HiFi + Hi-C	Chr4	Small	182'140'873	182'140'894	2	21
Sikem	PacBio HiFi + Hi-C	Chr4	Small	203'339'966	203'339'987	2	21
Sikem	PacBio HiFi + Hi-C	Chr5	Small	110'388'751	110'388'772	2	21
Sikem	PacBio HiFi + Hi-C	Chr5	Small	138'959'548	138'959'569	2	21
Sikem	PacBio HiFi + Hi-C	Chr3	Small	330'615'073	330'615'093	2	20
Sikem	PacBio HiFi + Hi-C	Chr6	Small	102'573'298	102'573'318	2	20
Sikem	PacBio HiFi + Hi-C	Chr1	Small	248'820'898	248'820'917	4	19
Sikem	PacBio HiFi + Hi-C	Chr5	Small	137'407'567	137'407'586	2	19
Sikem	PacBio HiFi + Hi-C	Chr3	Small	174'493'420	174'493'438	2	18
Sikem	PacBio HiFi + Hi-C	Chr5	Small	137'012'306	137'012'324	2	18
Sikem	PacBio HiFi + Hi-C	Chr7	Small	106'195'558	106'195'576	2	18
Sikem	PacBio HiFi + Hi-C	Chr1	Small	165'842'973	165'842'990	2	17
Sikem	PacBio HiFi + Hi-C	Chr4	Small	211'091'065	211'091'082	2	17
Sikem	PacBio HiFi + Hi-C	Chr3	Small	286'223'526	286'223'542	2	16
Sikem	PacBio HiFi + Hi-C	Chr3	Small	375'163'274	375'163'290	2	16
Sikem	PacBio HiFi + Hi-C	Chr5	Small	148'305'543	148'305'559	2	16
Sikem	PacBio HiFi + Hi-C	Chr6	Small	48'420'598	48'420'614	3	16
Sikem	PacBio HiFi + Hi-C	Chr7	Small	163'684'870	163'684'886	2	16
Sikem	PacBio HiFi + Hi-C	Chr4	Small	203'281'636	203'281'651	2	15
Sikem	PacBio HiFi + Hi-C	Chr7	Small	27'895'887	27'895'902	3	15
Sikem	PacBio HiFi + Hi-C	Chr7	Small	271'799'205	271'799'220	2	15
Sikem	PacBio HiFi + Hi-C	Chr1	Small	168'899'898	168'899'912	2	14
Sikem	PacBio HiFi + Hi-C	Chr3	Small	70'308'490	70'308'504	2	14
Sikem	PacBio HiFi + Hi-C	Chr3	Small	292'724'946	292'724'960	3	14
Sikem	PacBio HiFi + Hi-C	Chr4	Small	54'187'809	54'187'823	2	14
Sikem	PacBio HiFi + Hi-C	Chr4	Small	363'256'683	363'256'697	2	14
Sikem	PacBio HiFi + Hi-C	Chr5	Small	158'017'199	158'017'213	2	14
Sikem	PacBio HiFi + Hi-C	Chr6	Small	157'891'653	157'891'667	2	14
Sikem	PacBio HiFi + Hi-C	Chr7	Small	135'900'288	135'900'302	2	14
Sikem	PacBio HiFi + Hi-C	Chr7	Small	149'612'362	149'612'376	2	14
Sikem	PacBio HiFi + Hi-C	Chr1	Small	252'896'722	252'896'735	2	13
Sikem	PacBio HiFi + Hi-C	Chr6	Small	157'939'119	157'939'132	2	13
Sikem	PacBio HiFi + Hi-C	Chr7	Small	38'823'526	38'823'539	2	13
Sikem	PacBio HiFi + Hi-C	Chr1	Small	249'873'451	249'873'463	2	12
Sikem	PacBio HiFi + Hi-C	Chr3	Small	380'267'761	380'267'773	2	12
Sikem	PacBio HiFi + Hi-C	Chr4	Small	151'555'483	151'555'495	2	12
Sikem	PacBio HiFi + Hi-C	Chr6	Small	233'987'679	233'987'691	2	12
Sikem	PacBio HiFi + Hi-C	Chr4	Small	319'052'800	319'052'811	3	11
Sikem	PacBio HiFi + Hi-C	Chr6	Small	107'436'987	107'436'998	2	11
Sikem	PacBio HiFi + Hi-C	Chr1	Small	48'437'146	48'437'156	2	10
Sikem	PacBio HiFi + Hi-C	Chr4	Small	30'522'918	30'522'928	2	10
Sikem	PacBio HiFi + Hi-C	Chr4	Small	157'953'995	157'954'005	2	10
Sikem	PacBio HiFi + Hi-C	Chr5	Small	5'552'067	5'552'077	2	10
Sikem	PacBio HiFi + Hi-C	Chr2	Small	77'584'740	77'584'749	2	9
Sikem	PacBio HiFi + Hi-C	Chr2	Small	227'429'487	227'429'496	2	9
Sikem	PacBio HiFi + Hi-C	Chr3	Small	130'473'865	130'473'874	2	9
Sikem	PacBio HiFi + Hi-C	Chr5	Small	160'367'407	160'367'416	2	9
Sikem	PacBio HiFi + Hi-C	Chr7	Small	78'338'931	78'338'940	2	9
Sikem	PacBio HiFi + Hi-C	Chr1	Small	46'718'601	46'718'609	2	8
Sikem	PacBio HiFi + Hi-C	Chr4	Small	176'326'817	176'326'825	2	8
Sikem	PacBio HiFi + Hi-C	Chr4	Small	313'949'314	313'949'322	2	8
Sikem	PacBio HiFi + Hi-C	Chr6	Small	20'582'589	20'582'597	2	8
Sikem	PacBio HiFi + Hi-C	Chr7	Small	116'858'374	116'858'382	2	8
Sikem	PacBio HiFi + Hi-C	Chr7	Small	146'741'638	146'741'646	2	8

Sikem	PacBio HiFi + Hi-C	Chr2	Small	4'825'123	4'825'130	2	7
Sikem	PacBio HiFi + Hi-C	Chr4	Small	37'413'817	37'413'824	2	7
Sikem	PacBio HiFi + Hi-C	Chr7	Small	254'411'096	254'411'103	2	7
Sikem	PacBio HiFi + Hi-C	Chr2	Small	222'702'807	222'702'813	2	6
Sikem	PacBio HiFi + Hi-C	Chr4	Small	298'043'937	298'043'943	2	6
Sikem	PacBio HiFi + Hi-C	Chr6	Small	20'975'793	20'975'799	2	6
Sikem	PacBio HiFi + Hi-C	Chr6	Small	42'166'500	42'166'506	2	6
Sikem	PacBio HiFi + Hi-C	Chr2	Small	242'735'071	242'735'076	2	5
Sikem	PacBio HiFi + Hi-C	Chr3	Small	155'252'933	155'252'938	2	5
Sikem	PacBio HiFi + Hi-C	Chr4	Small	263'770'302	263'770'307	2	5
Sikem	PacBio HiFi + Hi-C	Chr4	Small	313'611'596	313'611'601	2	5
Sikem	PacBio HiFi + Hi-C	Chr5	Small	209'717'892	209'717'897	2	5
Sikem	PacBio HiFi + Hi-C	Chr7	Small	84'056'021	84'056'026	2	5
Sikem	PacBio HiFi + Hi-C	Chr7	Small	127'866'189	127'866'194	2	5
Sikem	PacBio HiFi + Hi-C	Chr7	Small	329'478'964	329'478'969	2	5
Sikem	PacBio HiFi + Hi-C	Chr5	Small	49'446'756	49'446'757	2	1
Sikem	PacBio HiFi + Hi-C	Chr1	Small	85'730'069	85'730'069	1	0
Sikem	ONT + Hi-C	Chr4	Chromosome-level	798	427'801'028	1'265'524	427'800'230
Sikem	ONT + Hi-C	Chr3	Chromosome-level	2'119'162	390'328'855	1'111'985	388'209'693
Sikem	ONT + Hi-C	Chr7	Chromosome-level	21'182	364'987'388	1'026'864	364'966'206
Sikem	ONT + Hi-C	Chr2	Chromosome-level	597	311'584'369	1'039'438	311'583'772
Sikem	ONT + Hi-C	Chr1	Chromosome-level	12'811	273'125'834	809'013	273'113'023
Sikem	ONT + Hi-C	Chr5	Chromosome-level	19'247	257'459'018	662'451	257'439'771
Sikem	ONT + Hi-C	Chr6	Chromosome-level	122	254'597'595	815'535	254'597'473
Sikem	ONT + Hi-C	Chr5	Small	96'739'267	97'615'808	52	876'541
Sikem	ONT + Hi-C	Chr3	Small	40'920'806	41'312'059	16	391'253
Sikem	ONT + Hi-C	Chr3	Small	41'401'820	41'730'945	149	329'125
Sikem	ONT + Hi-C	Chr5	Small	98'111'923	98'434'219	7	322'296
Sikem	ONT + Hi-C	Chr7	Small	349'955'243	350'267'167	40	311'924
Sikem	ONT + Hi-C	Chr6	Small	108'979'160	109'242'444	57	263'284
Sikem	ONT + Hi-C	Chr7	Small	150'070'449	150'327'877	31	257'428
Sikem	ONT + Hi-C	Chr3	Small	930'928	1'163'827	12	232'899
Sikem	ONT + Hi-C	Chr3	Small	1'624'045	1'838'842	64	214'797
Sikem	ONT + Hi-C	Chr3	Small	108'821'493	109'022'733	5	201'240
Sikem	ONT + Hi-C	Chr1	Small	104'063'539	104'243'043	8	179'504
Sikem	ONT + Hi-C	Chr4	Small	297'938'823	298'096'299	5	157'476
Sikem	ONT + Hi-C	Chr7	Small	349'481'184	349'618'704	39	137'520
Sikem	ONT + Hi-C	Chr3	Small	140'827'792	140'954'294	13	126'502
Sikem	ONT + Hi-C	Chr3	Small	1'311'448	1'422'503	5	111'055
Sikem	ONT + Hi-C	Chr7	Small	57'410'431	57'502'703	7	92'272
Sikem	ONT + Hi-C	Chr1	Small	104'487'430	104'573'574	2	86'144
Sikem	ONT + Hi-C	Chr5	Small	97'734'533	97'815'420	2	80'887
Sikem	ONT + Hi-C	Chr3	Small	372'126'555	372'197'174	8	70'619
Sikem	ONT + Hi-C	Chr3	Small	141'214'299	141'275'942	9	61'643
Sikem	ONT + Hi-C	Chr5	Small	97'939'687	97'997'319	4	57'632
Sikem	ONT + Hi-C	Chr7	Small	38'778'798	38'823'539	3	44'741
Sikem	ONT + Hi-C	Chr7	Small	349'357'082	349'399'223	5	42'141
Sikem	ONT + Hi-C	Chr1	Small	116'404'167	116'436'133	13	31'966
Sikem	ONT + Hi-C	Chr1	Small	238'932'987	238'955'717	6	22'730
Sikem	ONT + Hi-C	Chr6	Small	194'530'079	194'551'230	20	21'151
Sikem	ONT + Hi-C	Chr3	Small	167'231'474	167'251'688	24	20'214
Sikem	ONT + Hi-C	Chr3	Small	129'214'403	129'234'571	8	20'168
Sikem	ONT + Hi-C	Chr6	Small	100'840'916	100'857'181	4	16'265
Sikem	ONT + Hi-C	Chr5	Small	151'919'094	151'932'762	3	13'668
Sikem	ONT + Hi-C	Chr5	Small	142'472'549	142'485'869	19	13'320
Sikem	ONT + Hi-C	Chr3	Small	140'565'361	140'574'568	2	9'207
Sikem	ONT + Hi-C	Chr3	Small	172'486	181'359	17	8'873
Sikem	ONT + Hi-C	Chr7	Small	59'281'945	59'289'877	9	7'932
Sikem	ONT + Hi-C	Chr3	Small	138'152'978	138'157'648	22	4'670
Sikem	ONT + Hi-C	Chr3	Small	387'791'209	387'794'813	14	3'604
Sikem	ONT + Hi-C	Chr3	Small	108'173'414	108'175'502	4	2'088
Sikem	ONT + Hi-C	Chr7	Small	194'595'126	194'595'951	2	825
Sikem	ONT + Hi-C	Chr3	Small	140'728'736	140'729'255	3	519
Sikem	ONT + Hi-C	Chr5	Small	151'830'408	151'830'876	2	468
Sikem	ONT + Hi-C	Chr2	Small	99'266'185	99'266'593	3	408
Sikem	ONT + Hi-C	Chr3	Small	137'848'437	137'848'796	3	359
Sikem	ONT + Hi-C	Chr7	Small	10'523'045	10'523'376	2	331
Sikem	ONT + Hi-C	Chr2	Small	292'439'802	292'439'977	3	175
Sikem	ONT + Hi-C	Chr3	Small	273'090'888	273'090'956	2	68
Sikem	ONT + Hi-C	Chr7	Small	90'022'092	90'022'146	2	54

Assembly statistics of HEN17 chromosome-level haplotype-resolved assembly

	Total length (bp)	Contig N50/N90 (Mb)	Contig L50/L90 (#)	Scaffold N50/N90 (Mb)	Scaffold L50/L90 (#)
Haplome 1	436'702'900	6.72/0.10	19/180	66.23/0.10	4/112
Haplome 2	427'192'558	8.12/0.59	16/90	67.45/4.43	4/7

Proportion of nonrepetitive and repetitive sequences			
Genome	Haplome	Sequence type	Fraction per 1Mb (%)
DH647	H1	Nonrepetitive	20.50
DH647	H2	Nonrepetitive	20.50
DH647	H1	Repetitive	79.47
DH647	H2	Repetitive	79.47
Sikem	H1	Nonrepetitive	21.42
Sikem	H2	Nonrepetitive	21.66
Sikem	H1	Repetitive	78.56
Sikem	H2	Repetitive	78.32
HEN17	H1	Nonrepetitive	53.82
HEN17	H2	Nonrepetitive	52.92
HEN17	H1	Repetitive	46.18
HEN17	H2	Repetitive	47.08

Statistics of nonrepetitive and repetitive sequences (length ≥ 2 kb, mapping QV > 0)

Genome	Sequence type	Number of sequences (#)	Total sequence length (bp)
DH647	Nonrepetitive	26'395	90'753'406
DH647	Repetitive	67'759	254'814'063
DH647	Nonrepetitive not aligned	5'713	19'292'265
DH647	Repetitive not aligned	-	-
Sikem	Nonrepetitive	41'096	142'321'428
Sikem	Repetitive	169'823	902'845'780
Sikem	Nonrepetitive not aligned	9'328	32'568'465
Sikem	Repetitive not aligned	137	520'826
HEN17	Nonrepetitive	17'154	55'865'165
HEN17	Repetitive	7'248	51'618'794
HEN17	Nonrepetitive not aligned	271	831'403
HEN17	Repetitive not aligned	11	33'968

Type of variation in the alignment of nonrepetitive sequences

Genome	Chromosome (C	SNV (#)	INDEL (#)	PAV (#)	SC (#)	SC >= 50 bp (#)
DH647	Chr1	70'424	19'926	257	1'308	806
DH647	Chr2	256'701	51'824	1'124	4'133	2'663
DH647	Chr3	254'594	49'805	1'094	4'044	2'632
DH647	Chr4	168'937	40'429	688	2'772	1'738
DH647	Chr5	206'856	39'004	909	3'267	2'132
DH647	Chr6	171'553	34'665	782	2'924	1'833
DH647	Chr7	216'088	44'017	968	3'579	2'333
Sikem	Chr1	261'327	45'841	1'154	4'004	2'655
Sikem	Chr2	359'447	63'089	1'525	5'245	3'514
Sikem	Chr3	360'945	63'276	1'497	5'432	3'721
Sikem	Chr4	418'932	74'964	1'680	6'383	4'228
Sikem	Chr5	209'862	36'229	943	3'147	2'157
Sikem	Chr6	250'058	44'376	1'067	3'766	2'527
Sikem	Chr7	312'695	53'647	1'341	4'794	3'193
HEN17	Chr1	77'038	18'989	741	1'755	804
HEN17	Chr2	75'328	19'094	748	1'879	823
HEN17	Chr3	69'091	17'117	635	1'612	748
HEN17	Chr4	63'626	16'177	595	1'582	761
HEN17	Chr5	37'830	8'828	339	960	476
HEN17	Chr6	53'266	13'215	503	1'292	575
HEN17	Chr7	60'810	15'471	593	1'510	690