

Table S2 Statistical Bin marker information.

Bin ID	Chr	Genetic distance (cM)	Physical interval
c01b001	Chr1	0	357542-14732173
c01b002	Chr1	20.903	28003350-28605803
c01b003	Chr1	21.428	28621830-29440522
c01b004	Chr1	21.953	29446555-30345826
c01b005	Chr1	23.554	30380934-30860371
c01b006	Chr1	24.079	30864154-31035713
c01b007	Chr1	25.679	31038529-31647343
c01b008	Chr1	26.204	31649855-31764079
c01b009	Chr1	26.729	31766491-32295543
c01b010	Chr1	27.255	32311761-33207118
c01b011	Chr1	41.049	65481509-67079143
c01b012	Chr1	44.937	67097799-68084722
c01b013	Chr1	45.462	68085949-68175985
c01b014	Chr1	45.987	68177171-68854866
c01b015	Chr1	46.512	68865914-68892975
c01b016	Chr1	47.567	68893569-68895500
c01b017	Chr1	48.092	68896115-70353395
c01b018	Chr1	49.147	70354919-70514976
c01b019	Chr1	50.203	70521108-72255247
c01b020	Chr1	50.728	72257772-72268587
c01b021	Chr1	51.253	72270962-72361031
c01b022	Chr1	52.308	72377117-72673017
c01b023	Chr1	56.8	72712501-72900091
c01b024	Chr1	57.325	72901506-73011657
c01b025	Chr1	60.047	73029279-73484655
c01b026	Chr1	61.103	73485834-74863644
c01b027	Chr1	61.628	74864655-75365869
c01b028	Chr1	63.784	75379838-76247477
c01b029	Chr1	64.309	76268222-78371334
c01b030	Chr1	64.834	78389106-78524708
c01b031	Chr1	66.985	78527418-79651265
c01b032	Chr1	67.51	79668249-79670146
c01b033	Chr1	68.035	79678446-80751533
c01b034	Chr1	68.56	80761407-80761407
c01b035	Chr1	71.494	80765079-80773727
c01b036	Chr1	72.019	80779553-82055755
c01b037	Chr1	73.074	82064888-83309427
c01b038	Chr1	74.129	83320602-83983422
c01b039	Chr1	74.654	84012726-84387515
c01b040	Chr1	75.179	84418672-88067332
c01b041	Chr1	75.704	88068436-88868512
c01b042	Chr1	81.399	88894794-88966783
c01b043	Chr1	82.454	88994995-90692883
c01b044	Chr1	82.979	90703180-91561841
c01b045	Chr1	84.579	91562764-92288274
c01b046	Chr1	85.104	92289019-92424468
c01b047	Chr1	85.629	92426513-93458244
c01b048	Chr1	86.685	93479673-93489554
c01b049	Chr1	87.675	93502487-93545664
c01b050	Chr1	88.165	93552496-95233039

Bin ID	Chr	Genetic distance (cM)	Physical interval
c01b051	Chr1	89.15	95251916-95251916
c01b052	Chr1	91.487	95316539-96368726
c01b053	Chr1	94.204	96381809-96408966
c01b054	Chr1	95.259	96434719-97669695
c01b055	Chr1	95.784	97722616-97726142
c01b056	Chr1	98.502	97732988-99402919
c01b057	Chr1	99.027	99408285-101218263
c02b001	Chr2	0	3758-846092
c02b002	Chr2	0.525	847707-1482990
c02b003	Chr2	1.58	1486395-1741618
c02b004	Chr2	6.052	1746876-1751347
c02b005	Chr2	6.577	1752027-2809458
c02b006	Chr2	7.092	2818652-3738983
c02b007	Chr2	8.442	3761008-4180306
c02b008	Chr2	8.932	4207254-4367809
c02b009	Chr2	9.422	4377600-5286872
c02b010	Chr2	9.912	5299785-5301268
c02b011	Chr2	10.898	5321654-5333604
c02b012	Chr2	13.64	5357985-5430856
c02b013	Chr2	14.57	5432978-5448110
c02b014	Chr2	17.238	5457475-5629168
c02b015	Chr2	17.963	5631116-5719879
c02b016	Chr2	18.418	5730220-5744806
c02b017	Chr2	18.873	5760175-6436638
c02b018	Chr2	19.328	6440845-6549623
c02b019	Chr2	19.783	6579015-6595270
c02b020	Chr2	20.503	6596464-6617873
c02b021	Chr2	20.958	6623036-7143791
c02b022	Chr2	22.364	7150314-7231453
c02b023	Chr2	23.179	7265639-7275694
c02b024	Chr2	23.634	7283785-8425276
c02b025	Chr2	24.089	8432978-8740268
c02b026	Chr2	24.544	8755784-8789842
c02b027	Chr2	24.999	8808977-8848170
c02b028	Chr2	25.454	8855492-9023234
c02b029	Chr2	29.176	11410475-11410475
c02b030	Chr2	49.813	19763629-20467787
c02b031	Chr2	63.845	42344143-46157364
c02b032	Chr2	64.9	46158827-46931386
c02b033	Chr2	66.501	46988615-47159062
c02b034	Chr2	67.556	47168574-47828529
c02b035	Chr2	68.081	47876294-48406713
c02b036	Chr2	68.606	48428859-49139763
c02b037	Chr2	69.131	49151496-49888735
c02b038	Chr2	69.656	49910840-52469795
c02b039	Chr2	70.171	52471976-52858052
c02b040	Chr2	70.686	52874912-53698235
c02b041	Chr2	72.782	53703306-53964918
c02b042	Chr2	74.383	53965577-53984563
c02b043	Chr2	74.908	53985380-54150828
c02b044	Chr2	75.963	54153183-54429644

Bin ID	Chr	Genetic distance (cM)	Physical interval
c02b045	Chr2	76.478	54434222-55309762
c02b046	Chr2	76.993	55310430-55706285
c02b047	Chr2	77.508	55706972-55734070
c02b048	Chr2	79.068	55734803-55923761
c02b049	Chr2	79.583	55936289-56088633
c02b050	Chr2	80.098	56103744-56159928
c02b051	Chr2	80.613	56161406-56204386
c02b052	Chr2	81.649	56206936-56295433
c02b053	Chr2	82.174	56302554-57429227
c02b054	Chr2	82.699	57432772-57468263
c02b055	Chr2	83.529	57473705-57780273
c02b056	Chr2	84.044	57781161-57784002
c02b057	Chr2	84.559	57786281-57800268
c02b058	Chr2	85.074	57800904-58303520
c02b059	Chr2	85.589	58311458-58963604
c02b060	Chr2	86.104	58992230-59649826
c02b061	Chr2	86.619	59656627-59911166
c02b062	Chr2	87.144	59920452-60048129
c02b063	Chr2	87.669	60062295-60523610
c02b064	Chr2	88.194	60541813-60831667
c02b065	Chr2	88.719	60849846-61099110
c02b066	Chr2	89.244	61109681-61445845
c02b067	Chr2	93.716	61456685-61771210
c02b068	Chr2	94.241	61785824-61822315
c02b069	Chr2	94.766	61840734-62482955
c02b070	Chr2	98.056	62497895-63513997
c02b071	Chr2	99.656	63518379-63788057
c02b072	Chr2	102.946	63820841-63889823
c02b073	Chr2	104.326	63894984-65147202
c02b074	Chr2	104.841	65155999-65494124
c02b075	Chr2	105.356	65506572-65793829
c02b076	Chr2	105.871	65795734-65800028
c02b077	Chr2	106.906	65801230-65853587
c02b078	Chr2	107.942	65862902-66064396
c02b079	Chr2	108.457	66072139-66939164
c02b080	Chr2	108.972	66941050-66942866
c02b081	Chr2	109.487	66945638-68016446
c03b001	Chr3	0	2787-1257372
c03b002	Chr3	0.83	1285065-1414667
c03b003	Chr3	1.345	1416346-1462569
c03b004	Chr3	2.725	1463736-1978164
c03b005	Chr3	3.781	1987002-2486528
c03b006	Chr3	5.381	2510805-2698152
c03b007	Chr3	5.896	2709019-3164825
c03b008	Chr3	6.411	3168325-4570375
c03b009	Chr3	7.972	4575890-4649059
c03b010	Chr3	9.352	4655172-4893082
c03b011	Chr3	9.877	4910186-6987160
c03b012	Chr3	10.402	7022219-7088142
c03b013	Chr3	12.553	7112379-7561801
c03b014	Chr3	13.078	7567401-8000595

Bin ID	Chr	Genetic distance (cM)	Physical interval
c03b015	Chr3	14.134	8006496-9198228
c03b016	Chr3	14.659	9210509-9444715
c03b017	Chr3	16.81	9468067-9539442
c03b018	Chr3	17.865	9541301-11501485
c03b019	Chr3	18.92	11514818-11964746
c03b020	Chr3	23.998	11965340-12450649
c03b021	Chr3	24.523	12460009-13030387
c03b022	Chr3	25.353	13044608-13449349
c03b023	Chr3	25.868	13453464-13651071
c03b024	Chr3	26.698	13652374-13714966
c03b025	Chr3	27.223	13726740-13799041
c03b026	Chr3	27.748	13821939-13988166
c03b027	Chr3	28.273	13994572-15515489
c03b028	Chr3	28.798	15523868-15770949
c03b029	Chr3	29.323	15793567-15863389
c03b030	Chr3	29.848	15874995-16207616
c03b031	Chr3	30.373	16214965-16513254
c03b032	Chr3	30.898	16521199-17230770
c03b033	Chr3	31.423	17251785-17958925
c03b034	Chr3	31.948	17966549-17966549
c03b035	Chr3	33.003	17975077-18145653
c03b036	Chr3	33.528	18147138-18152680
c03b037	Chr3	34.053	18155897-18160620
c03b038	Chr3	34.578	18175831-18187431
c03b039	Chr3	35.633	18213736-18422117
c03b040	Chr3	36.158	18444094-19523079
c03b041	Chr3	36.683	19527744-19932143
c03b042	Chr3	37.208	19947033-19994023
c03b043	Chr3	37.733	20000598-20200976
c03b044	Chr3	39.89	20228398-20244653
c03b045	Chr3	40.415	20249045-20420079
c03b046	Chr3	42.015	20444667-20444667
c03b047	Chr3	42.54	20450145-21261011
c03b048	Chr3	43.065	21266130-21266130
c03b049	Chr3	43.59	21275312-21275312
c03b050	Chr3	45.747	21296124-21448848
c03b051	Chr3	46.272	21484240-22253693
c03b052	Chr3	46.797	22282629-22282629
c03b053	Chr3	47.852	22291381-22416535
c03b054	Chr3	48.377	22426904-22567045
c03b055	Chr3	48.902	22569019-22580382
c03b056	Chr3	51.625	22581400-22602260
c03b057	Chr3	52.15	22623747-22648442
c03b058	Chr3	53.205	22654330-22654330
c03b059	Chr3	53.73	22687701-23183930
c03b060	Chr3	54.255	23200010-23864724
c03b061	Chr3	54.78	23889050-24152440
c03b062	Chr3	55.305	24158152-24274456
c03b063	Chr3	55.83	24317571-24349815
c03b064	Chr3	56.345	24350942-24420736
c03b065	Chr3	56.86	24433468-25111106

Bin ID	Chr	Genetic distance (cM)	Physical interval
c03b066	Chr3	57.375	25144847-25360432
c03b067	Chr3	57.89	25396367-25703666
c03b068	Chr3	58.875	25714311-25841681
c03b069	Chr3	59.365	25860615-26126484
c03b070	Chr3	64.059	29691434-31174589
c03b071	Chr3	65.044	31471420-31471420
c03b072	Chr3	65.534	31617630-31617630
c03b073	Chr3	66.024	31780754-31780766
c03b074	Chr3	84.542	32915358-33905356
c03b075	Chr3	86.934	35053571-35053571
c03b076	Chr3	87.459	35879498-36318968
c03b077	Chr3	88.514	36998150-37122735
c03b078	Chr3	89.039	37557987-38844720
c03b079	Chr3	90.094	38950220-40972377
c03b080	Chr3	95.171	42356169-42359819
c03b081	Chr3	96.226	42366784-42589790
c03b082	Chr3	100.895	48150590-48303147
c03b083	Chr3	101.42	48317818-48375248
c03b084	Chr3	102.475	48379822-48784594
c03b085	Chr3	103	48816779-48967355
c03b086	Chr3	103.525	48967985-49519236
c03b087	Chr3	104.05	49522897-49867541
c03b088	Chr3	104.575	49870712-50414922
c03b089	Chr3	105.1	50427197-51020179
c03b090	Chr3	106.701	51029951-51083335
c03b091	Chr3	109.423	51102869-51135811
c03b092	Chr3	109.948	51138446-51227456
c03b093	Chr3	111.004	51232750-51794614
c03b094	Chr3	111.529	51796786-51817975
c03b095	Chr3	112.584	51824816-51844692
c03b096	Chr3	113.109	51848726-52660725
c03b097	Chr3	113.634	52671464-53803367
c03b098	Chr3	114.159	53810195-54287449
c03b099	Chr3	114.684	54289609-54314616
c03b100	Chr3	118.572	54321512-54639090
c03b101	Chr3	123.851	54647298-55055250
c03b102	Chr3	124.376	55072480-55183820
c03b103	Chr3	124.901	55191113-56245386
c03b104	Chr3	125.416	56275052-56383244
c03b105	Chr3	125.931	56416160-56500964
c03b106	Chr3	126.446	56522175-56673380
c03b107	Chr3	126.961	56695210-56898752
c03b108	Chr3	127.476	56931468-57332105
c03b109	Chr3	130.661	57342675-57354886
c03b110	Chr3	131.176	57359363-59761486
c03b111	Chr3	131.691	59763844-59882963
c03b112	Chr3	132.206	59888775-60633971
c03b113	Chr3	132.721	60644328-60812894
c03b114	Chr3	133.236	60818155-60904532
c03b115	Chr3	134.796	60926496-61152259
c03b116	Chr3	135.626	61158578-61332353

Bin ID	Chr	Genetic distance (cM)	Physical interval
c03b117	Chr3	136.151	61334596-61922550
c03b118	Chr3	136.676	61936316-64101861
c03b119	Chr3	137.201	64102437-65221154
c03b120	Chr3	139.353	65234101-66281263
c03b121	Chr3	139.878	66281874-68701917
c03b122	Chr3	140.403	68714364-68804402
c03b123	Chr3	141.458	68852607-69950127
c03b124	Chr3	143.609	70021144-70050640
c03b125	Chr3	144.134	70079922-70290601
c03b126	Chr3	145.189	70316798-72634759
c03b127	Chr3	146.245	72699982-73646271
c03b128	Chr3	146.77	73648616-74054932
c03b129	Chr3	147.295	74076932-75808732
c03b130	Chr3	147.82	75820127-78693958
c04b001	Chr4	0	13319-1455116
c04b002	Chr4	3.888	1466242-1952260
c04b003	Chr4	4.943	1966412-2267241
c04b004	Chr4	5.468	2300378-2518258
c04b005	Chr4	5.993	2558851-2621795
c04b006	Chr4	6.518	2622408-3273952
c04b007	Chr4	9.241	3297103-4195699
c04b008	Chr4	9.766	4217666-4814602
c04b009	Chr4	10.291	4815420-5102462
c04b010	Chr4	10.816	5107427-5217824
c04b011	Chr4	11.341	5235800-5376611
c04b012	Chr4	11.866	5409259-6539494
c04b013	Chr4	15.05	6541788-6965590
c04b014	Chr4	16.611	6973727-7503562
c04b015	Chr4	17.126	7511674-7867896
c04b016	Chr4	17.641	7873350-8418629
c04b017	Chr4	18.156	8445549-8897454
c04b018	Chr4	19.141	8926040-9877515
c04b019	Chr4	19.656	9882836-10476011
c04b020	Chr4	20.171	10478239-10479436
c04b021	Chr4	21.731	10486165-11368437
c04b022	Chr4	22.561	11372271-11525669
c04b023	Chr4	23.086	11531651-11927225
c04b024	Chr4	23.892	11928069-12733117
c04b025	Chr4	24.697	12735262-14071850
c04b026	Chr4	31.188	14089859-14755165
c04b027	Chr4	32.673	17154673-17154673
c04b028	Chr4	35.416	20110619-20110619
c04b029	Chr4	48.245	27837801-28590984
c04b030	Chr4	50.116	31153306-31153306
c04b031	Chr4	51.171	32030812-32030812
c04b032	Chr4	53.042	33507866-33507866
c04b033	Chr4	61.507	35373770-35392370
c04b034	Chr4	62.032	35395082-36322508
c04b035	Chr4	63.087	36325493-37003508
c04b036	Chr4	67.559	37024699-38002900
c04b037	Chr4	71.432	38007742-38268338

Bin ID	Chr	Genetic distance (cM)	Physical interval
c04b038	Chr4	75.904	38281786-38757410
c04b039	Chr4	76.429	38779807-40309413
c04b040	Chr4	77.484	40345888-41241642
c04b041	Chr4	80.202	41242392-41266663
c04b042	Chr4	80.727	41268460-41273291
c04b043	Chr4	82.327	42942809-43766907
c04b044	Chr4	82.852	44085326-45058300
c04b045	Chr4	103.702	63167975-68397168
c05b001	Chr5	0	1254143-6831863
c05b002	Chr5	1.055	6856759-10419346
c05b003	Chr5	2.616	10419902-10423190
c05b004	Chr5	3.131	10425535-10571091
c05b005	Chr5	3.646	10579307-11088298
c05b006	Chr5	6.038	11134567-16059459
c05b007	Chr5	6.563	16142954-16459268
c05b008	Chr5	8.163	16482764-17092865
c05b009	Chr5	10.886	17103936-17188126
c05b010	Chr5	14.376	17219917-17220026
c05b011	Chr5	17.094	17245947-17330255
c05b012	Chr5	17.619	17375429-19214656
c05b013	Chr5	22.697	19218371-19257764
c05b014	Chr5	25.414	19265763-19707254
c05b015	Chr5	25.939	19730353-22034022
c05b016	Chr5	28.657	22066890-22586361
c05b017	Chr5	29.182	22593980-22652210
c05b018	Chr5	29.707	22664855-23341723
c05b019	Chr5	30.232	23365852-23381107
c05b020	Chr5	31.832	23391871-24464276
c05b021	Chr5	32.357	24470114-24785805
c05b022	Chr5	33.413	24793151-24846356
c05b023	Chr5	34.468	24856450-25074515
c05b024	Chr5	34.993	25092631-27047859
c05b025	Chr5	37.144	27048464-27442449
c05b026	Chr5	39.295	27445826-27472333
c05b027	Chr5	40.126	27475457-27566093
c05b028	Chr5	40.641	27573704-29687342
c05b029	Chr5	41.156	29693523-29927117
c05b030	Chr5	42.191	29963515-30006459
c05b031	Chr5	42.706	30014675-30375574
c05b032	Chr5	43.221	30388073-30556298
c05b033	Chr5	43.736	30569068-30805184
c05b034	Chr5	44.251	30824768-31266454
c05b035	Chr5	45.286	31311142-31606807
c05b036	Chr5	45.801	31607677-31844166
c05b037	Chr5	46.316	31845427-32491209
c05b038	Chr5	47.877	32492120-34368443
c05b039	Chr5	49.437	34381955-35801563
c05b040	Chr5	50.998	35861584-36109953
c05b041	Chr5	52.868	36133063-36150065
c05b042	Chr5	53.924	36211454-36306551
c05b043	Chr5	56.075	36314167-36998452

Bin ID	Chr	Genetic distance (cM)	Physical interval
c05b044	Chr5	56.6	37012991-37056272
c05b045	Chr5	57.125	37060674-37187792
c05b046	Chr5	57.65	37215308-37547008
c05b047	Chr5	58.175	37551122-38213450
c05b048	Chr5	58.7	38228727-38359890
c05b049	Chr5	59.225	38373773-39467067
c05b050	Chr5	61.381	39479247-39553986
c05b051	Chr5	62.206	39573355-39882755
c05b052	Chr5	63.262	39906660-40033895
c05b053	Chr5	63.787	40039975-40362327
c05b054	Chr5	64.822	40363704-40550742
c05b055	Chr5	66.918	40558392-41212512
c05b056	Chr5	67.433	41221969-44182213
c05b057	Chr5	68.468	44188980-44910751
c05b058	Chr5	83.725	50616210-50616210
c05b059	Chr5	85.876	51775809-51775809
c05b060	Chr5	103.955	57982073-57982073
c05b061	Chr5	104.48	60425867-68359843
c06b001	Chr6	0	45241733-47836283
c06b002	Chr6	0.49	47844339-47873605
c06b003	Chr6	0.98	47874198-47874806
c06b004	Chr6	1.47	47875766-47884771
c06b005	Chr6	2.24	47886659-47955084
c06b006	Chr6	3.185	47955667-47991782
c06b007	Chr6	3.645	48008009-48556608
c06b008	Chr6	4.105	48579311-48750043
c06b009	Chr6	4.565	48751705-48815891
c06b010	Chr6	5.025	48823462-50185322
c06b011	Chr6	5.495	50204671-50229179
c06b012	Chr6	5.965	50236703-50315303
c06b013	Chr6	6.455	50329420-50626786
c06b014	Chr6	7.49	50637172-50858228
c06b015	Chr6	7.98	50873188-51665884
c06b016	Chr6	10.488	51680929-51709839
c06b017	Chr6	10.978	51722359-51870108
c06b018	Chr6	11.468	51870670-52575908
c06b019	Chr6	12.273	52600868-53194041
c06b020	Chr6	12.763	53206936-53462196
c06b021	Chr6	13.233	53477313-54232868
c06b022	Chr6	14.668	54233833-54315975
c06b023	Chr6	15.613	54335164-54351661
c06b024	Chr6	16.083	54356900-54416142
c06b025	Chr6	16.553	54448798-54899618
c06b026	Chr6	17.023	54912897-54991831
c06b027	Chr6	17.493	54994013-55476803
c06b028	Chr6	17.963	55490554-55623740
c06b029	Chr6	18.433	55624359-55642563
c06b030	Chr6	19.378	55643771-55652988
c06b031	Chr6	22.347	55658247-55658247
c06b032	Chr6	22.817	55666944-56065474
c06b033	Chr6	23.287	56085351-56933604

Bin ID	Chr	Genetic distance (cM)	Physical interval
c06b034	Chr6	24.847	56935651-57723160
c07b001	Chr7	0	45971624-47907955
c07b002	Chr7	11.083	48241100-49716113
c07b003	Chr7	15.948	49742865-49786345
c07b004	Chr7	16.463	49801885-49897255
c07b005	Chr7	16.978	49927608-50022702
c07b006	Chr7	17.493	50049828-50964120
c07b007	Chr7	18.018	50974980-51494458
c07b008	Chr7	18.533	51497038-51982392
c07b009	Chr7	19.048	52007377-52045712
c07b010	Chr7	19.563	52052272-52060749
c07b011	Chr7	20.078	52064638-52824650
c07b012	Chr7	20.603	52827201-52892759
c07b013	Chr7	22.204	52898583-52971288
c07b014	Chr7	26.847	57306108-57391848
c07b015	Chr7	27.362	57399025-59481316
c08b001	Chr8	0	4180-2473508
c08b002	Chr8	0.47	2474421-2513921
c08b003	Chr8	1.415	2514825-2732224
c08b004	Chr8	5.731	2751266-2865342
c08b005	Chr8	6.221	2879900-3445752
c08b006	Chr8	6.711	3457566-3638041
c08b007	Chr8	7.201	3651622-3869430
c08b008	Chr8	7.691	3899038-4082132
c08b009	Chr8	9.527	4082706-4480499
c08b010	Chr8	10.357	4481415-5333128
c08b011	Chr8	10.882	5334844-6105671
c08b012	Chr8	11.407	6106278-8748574
c08b013	Chr8	11.932	8753466-8942616
c08b014	Chr8	12.457	8949184-11396329
c08b015	Chr8	12.982	11413777-11527200
c08b016	Chr8	13.507	11542940-12477445
c08b017	Chr8	14.032	12503596-12626050
c08b018	Chr8	14.862	12650423-13891097
c08b019	Chr8	15.917	13898276-13898276
c08b020	Chr8	16.442	13900421-13901927
c08b021	Chr8	20.501	13902723-15888691
c08b022	Chr8	22.838	15918773-16153090
c08b023	Chr8	25.871	16157186-16532953
c08b024	Chr8	27.357	16582455-16686650
c08b025	Chr8	27.847	16697700-16697700
c08b026	Chr8	28.337	16760791-16863314
c08b027	Chr8	28.852	16906031-17031168
c08b028	Chr8	29.367	17031821-17032690
c08b029	Chr8	29.882	17034739-17322243
c08b030	Chr8	30.397	17333308-17513871
c08b031	Chr8	31.432	17521134-17673403
c08b032	Chr8	32.993	17705135-17882502
c08b033	Chr8	33.508	17900941-18636275
c08b034	Chr8	34.023	18639206-18643928
c08b035	Chr8	34.538	18649823-19363494

Bin ID	Chr	Genetic distance (cM)	Physical interval
c08b036	Chr8	35.053	19367194-19408670
c08b037	Chr8	35.568	19420842-19420842
c08b038	Chr8	36.083	19428723-19655092
c08b039	Chr8	36.598	19675827-19989472
c08b040	Chr8	41.075	19993111-20303979
c08b041	Chr8	41.59	20322421-20389227
c08b042	Chr8	42.105	20404388-23624377
c08b043	Chr8	42.595	23642867-25115606
c08b044	Chr8	45.975	25129876-25415045
c08b045	Chr8	46.49	25416605-25429804
c08b046	Chr8	53.751	25434811-25896243
c08b047	Chr8	54.266	25898306-25947995
c08b048	Chr8	54.781	25961321-26490792
c08b049	Chr8	58.663	26511612-26909367
c08b050	Chr8	60.264	26918075-26922763
c08b051	Chr8	60.789	26924230-28589290
c08b052	Chr8	62.389	28599710-29261372
c08b053	Chr8	62.914	29268398-29705401
c08b054	Chr8	63.43	29714385-30399853
c08b055	Chr8	63.945	30412175-30662035
c08b056	Chr8	64.98	30662712-30708404
c08b057	Chr8	65.47	30709891-32386173
c08b058	Chr8	65.96	32396695-32404255
c08b059	Chr8	67.265	32406349-33532814
c08b060	Chr8	67.735	33545874-34375425
c08b061	Chr8	68.625	34406061-34431274
c08b062	Chr8	69.095	34445625-34751353
c08b063	Chr8	70.581	34759883-35638940
c08b064	Chr8	71.071	35644810-35767023
c08b065	Chr8	71.561	35768962-35885832
c08b066	Chr8	72.546	35894140-36845464
c08b067	Chr8	73.581	36846903-36860873
c08b068	Chr8	74.096	36861762-37619484
c08b069	Chr8	83.692	42509032-44101902
c08b070	Chr8	84.217	44106103-44333713
c08b071	Chr8	84.742	44362865-44422300
c08b072	Chr8	89.411	44437236-44442502
c08b073	Chr8	91.011	44446074-44479973
c08b074	Chr8	91.536	44491879-44783892
c08b075	Chr8	92.061	44793440-45899510
c08b076	Chr8	92.586	45932119-46045586
c08b077	Chr8	93.111	46080613-46119451
c08b078	Chr8	94.166	46130209-46152457
c08b079	Chr8	94.681	46168589-46895204
c08b080	Chr8	95.196	46899671-48092489
c08b081	Chr8	95.711	48114793-48144726
c08b082	Chr8	96.226	48162961-48759256
c08b083	Chr8	97.787	48763925-48795781
c08b084	Chr8	98.822	48816348-48883849
c08b085	Chr8	99.337	48884484-49203991
c08b086	Chr8	103.98	49205047-49233162

Bin ID	Chr	Genetic distance (cM)	Physical interval
c08b087	Chr8	114.77	60483119-60524209
c08b088	Chr8	115.295	60531753-60650291
c08b089	Chr8	115.82	60655813-61061169
c08b090	Chr8	118.543	61093483-61331292
c08b091	Chr8	124.283	63310339-63911058
c08b092	Chr8	126.439	63914634-64353402
c08b093	Chr8	126.964	64362762-64407880
c08b094	Chr8	128.019	64409931-65057537
c08b095	Chr8	128.544	65063959-67206879
c09b001	Chr9	0	3575267-15947156
c09b002	Chr9	0.525	17874888-17874888
c09b003	Chr9	1.05	18327120-18327120
c09b004	Chr9	10.895	21609279-21609279
c09b005	Chr9	12.496	23908993-23908993
c09b006	Chr9	14.096	25069160-25069160
c09b007	Chr9	17.587	28343389-28343389
c09b008	Chr9	22.23	30269436-30634778
c09b009	Chr9	23.266	30641012-31420134
c09b010	Chr9	23.781	31434227-31457544
c09b011	Chr9	26.117	31472895-31803752
c09b012	Chr9	32.324	31806698-32299427
c09b013	Chr9	33.359	32310465-33305485
c09b014	Chr9	33.874	33323801-33618416
c09b015	Chr9	34.389	33619739-33674742
c09b016	Chr9	34.904	33692806-35353087
c09b017	Chr9	35.429	35368366-36256345
c09b018	Chr9	41.043	42234893-42795531
c09b019	Chr9	43.76	42805592-42864712
c09b020	Chr9	44.285	42883437-44551828
c09b021	Chr9	44.81	44554139-45030710
c09b022	Chr9	45.335	45042955-49269150
c09b023	Chr9	45.86	49269776-53320285
c09b024	Chr9	47.461	53328068-55522783
c09b025	Chr9	51.953	55523350-55770430
c09b026	Chr9	52.478	55777903-56803650
c09b027	Chr9	53.003	56809045-56970849
c09b028	Chr9	54.604	56971409-56979456
c09b029	Chr9	57.326	56980103-57536146
c09b030	Chr9	57.851	57547403-59014045
c09b031	Chr9	58.376	59017960-59300635
c09b032	Chr9	59.431	59314155-60141902
c09b033	Chr9	59.956	60154009-61931926
c09b034	Chr9	60.481	62137183-62426115
c09b035	Chr9	61.006	62851739-63654048
c09b036	Chr9	61.532	63666737-63854392
c09b037	Chr9	62.587	63863909-63944673
c09b038	Chr9	63.112	64002188-64878329
c09b039	Chr9	63.637	64884466-65887546
c09b040	Chr9	64.162	65933504-66317736
c09b041	Chr9	65.762	66350874-67143613
c09b042	Chr9	69.65	67146647-67962425

Bin ID	Chr	Genetic distance (cM)	Physical interval
c09b043	Chr9	70.175	67963597-68159207
c09b044	Chr9	83.133	75066495-76826409
c09b045	Chr9	84.188	76838768-76858173
c09b046	Chr9	84.713	76868383-77099219
c09b047	Chr9	85.238	77114034-78024868
c09b048	Chr9	86.838	78045242-78045242
c09b049	Chr9	87.363	78073155-78697239
c09b050	Chr9	88.419	78845008-81761107
c09b051	Chr9	88.944	81840803-81916568
c09b052	Chr9	92.233	81940531-82053407
c09b053	Chr9	92.758	82084119-82394966
c09b054	Chr9	93.283	82405848-82958952
c09b055	Chr9	94.338	82961803-84275371
c09b056	Chr9	94.863	84341667-84392209
c09b057	Chr9	95.389	84412143-84499744
c09b058	Chr9	95.914	84556407-84556407
c09b059	Chr9	96.439	84571613-85172383
c09b060	Chr9	101.516	85188474-85888279
c09b061	Chr9	102.041	85890201-86903435
c09b062	Chr9	102.566	86907822-86943403
c09b063	Chr9	103.091	86944691-87068973
c09b064	Chr9	103.616	87069929-87096379
c09b065	Chr9	104.141	87101106-87756756
c09b066	Chr9	105.196	87778969-87850425
c09b067	Chr9	106.797	87851860-88720972
c09b068	Chr9	110.086	88730335-89598845
c09b069	Chr9	111.687	89616826-90113691
c09b070	Chr9	112.212	90131206-91296529
c09b071	Chr9	114.368	91297508-91388600
c09b072	Chr9	114.893	91389797-91599750
c09b073	Chr9	115.418	91617571-91839545
c09b074	Chr9	116.474	91854089-92180645
c09b075	Chr9	119.407	92201956-92284994
c09b076	Chr9	119.932	92285820-92586450
c09b077	Chr9	120.447	92587132-93974093
c10b001	Chr10	0	42608-1571783
c10b002	Chr10	14.994	1576993-3159323
c10b003	Chr10	15.764	3172831-3202672
c10b004	Chr10	16.234	3215143-3329528
c10b005	Chr10	17.179	3342744-3429780
c10b006	Chr10	17.649	3438294-5082444
c10b007	Chr10	18.109	5088256-5462379
c10b008	Chr10	20.315	5514239-6257323
c10b009	Chr10	20.776	6276535-6364333
c10b010	Chr10	21.236	6364885-6365397
c10b011	Chr10	21.696	6368629-6378094
c10b012	Chr10	25.744	6381712-6530949
c10b013	Chr10	26.204	6532895-7602566
c10b014	Chr10	26.674	7603233-7763551
c10b015	Chr10	27.619	7784723-7969579
c10b016	Chr10	28.11	7984413-8324326

Bin ID	Chr	Genetic distance (cM)	Physical interval
c10b017	Chr10	32.41	8330692-11005187
c10b018	Chr10	36.283	11031722-11038128
c10b019	Chr10	39.573	11043396-11043491
c10b020	Chr10	40.098	11049787-11116783
c10b021	Chr10	40.623	11128056-11173538
c10b022	Chr10	41.148	11182843-11642426
c10b023	Chr10	42.748	11659140-11981580
c10b024	Chr10	43.273	11998821-12729011
c10b025	Chr10	44.328	12737611-12827372
c10b026	Chr10	44.853	12841852-12843196
c10b027	Chr10	45.378	12847927-13247250
c10b028	Chr10	45.903	13261797-13295079
c10b029	Chr10	46.428	13310778-13668761
c10b030	Chr10	46.953	13692347-14647615
c10b031	Chr10	48.009	14653594-15142275
c10b032	Chr10	49.064	15142898-15718596
c10b033	Chr10	49.589	15734720-15737524
c10b034	Chr10	50.114	15741556-15741556
c10b035	Chr10	50.639	15747214-15747214
c10b036	Chr10	51.694	15759588-15859656
c10b037	Chr10	52.219	15864354-15897975
c10b038	Chr10	52.744	15900579-16201714
c10b039	Chr10	53.269	16254343-16254343
c10b040	Chr10	54.324	16261267-16568213
c10b041	Chr10	54.849	16592082-16641286
c10b042	Chr10	55.374	16653012-16865423
c10b043	Chr10	55.899	16867229-17137441
c10b044	Chr10	57.5	17177514-17192013
c10b045	Chr10	58.025	17197190-17803340
c10b046	Chr10	59.08	17807350-17810073
c10b047	Chr10	60.68	17814360-18128682
c10b048	Chr10	61.736	18139341-18407803
c10b049	Chr10	62.261	18410048-18448379
c10b050	Chr10	62.786	18449404-18556777
c10b051	Chr10	63.311	18559952-18656854
c10b052	Chr10	63.836	18661256-19011975
c10b053	Chr10	64.361	19013849-19279931
c10b054	Chr10	64.886	19303693-20899865
c10b055	Chr10	69.358	20900477-21132561
c10b056	Chr10	69.883	21141842-21387883
c10b057	Chr10	70.408	21397839-21500055
c10b058	Chr10	71.443	21510630-22731912
c10b059	Chr10	71.958	22751604-22999686
c10b060	Chr10	72.993	23035345-23130646
c10b061	Chr10	73.508	23145137-23367789
c10b062	Chr10	75.344	23377372-23441731
c10b063	Chr10	75.834	23469507-23469507
c10b064	Chr10	76.324	23473129-23603589
c10b065	Chr10	76.814	23611640-23979497
c10b066	Chr10	77.304	23985216-24211215
c10b067	Chr10	77.794	24212718-24227629

Bin ID	Chr	Genetic distance (cM)	Physical interval
c10b068	Chr10	78.284	24228984-24714502
c10b069	Chr10	78.774	24723972-24743674
c10b070	Chr10	79.759	24763823-24763823
c10b071	Chr10	80.249	24790295-25575652
c10b072	Chr10	81.194	25601177-25627769
c10b073	Chr10	81.664	25628455-26752287
c10b074	Chr10	82.134	26760626-29036815
c10b075	Chr10	82.604	29038364-29049482
c10b076	Chr10	83.549	29050506-29207680
c10b077	Chr10	84.019	29224049-31733290
c10b078	Chr10	84.489	31737426-31737426
c10b079	Chr10	84.959	31738650-31797156
c10b080	Chr10	85.729	31811272-32267358
c10b081	Chr10	86.47	32268684-33182762
c10b082	Chr10	86.94	33212484-33224855
c10b083	Chr10	87.885	33230192-33247422
c10b084	Chr10	88.625	33274707-33338873
c10b085	Chr10	89.085	33342166-33580691
c10b086	Chr10	90.015	33581393-33935022
c10b087	Chr10	90.47	33945122-34140074
c10b088	Chr10	90.925	34155011-34659767
c10b089	Chr10	91.38	34661341-34901683
c10b090	Chr10	91.835	34938776-34963314
c10b091	Chr10	92.29	34990292-35113678
c10b092	Chr10	92.745	35131503-35894446
c10b093	Chr10	93.2	35897836-35922482
c10b094	Chr10	93.655	35924937-35997794
c10b095	Chr10	94.575	36001514-36226131
c10b096	Chr10	95.03	36241046-36643777
c10b097	Chr10	95.485	36649982-36875855
c10b098	Chr10	95.94	36877399-36936343
c10b099	Chr10	96.395	36938734-36946125
c10b100	Chr10	96.85	36946758-36957587
c10b101	Chr10	97.575	36958700-36977015
c10b102	Chr10	98.315	36978182-38086675
c10b103	Chr10	98.805	38087363-38140074
c10b104	Chr10	99.295	38140683-38464198
c10b105	Chr10	99.785	38465097-39109617
c10b106	Chr10	100.77	39112474-39682659
c10b107	Chr10	101.26	39684007-40892421
c10b108	Chr10	102.246	40917697-41521539
c10b109	Chr10	103.731	41541988-41996403
c10b110	Chr10	104.221	42001921-42168163
c10b111	Chr10	104.711	42196943-42259368
c10b112	Chr10	105.201	42263986-43044184
c10b113	Chr10	105.691	43045575-43227173
c10b114	Chr10	108.725	43247208-43252342
c10b115	Chr10	109.215	43252947-43254070
c10b116	Chr10	111.722	43263558-43288307
c10b117	Chr10	112.212	43300979-44866885
c10b118	Chr10	112.702	44884686-45351845

Bin ID	Chr	Genetic distance (cM)	Physical interval
c10b119	Chr10	113.192	45378144-45533602
c10b120	Chr10	116.768	45552947-45567403
c10b121	Chr10	117.258	45576260-45613634
c10b122	Chr10	117.748	45625852-45720896
c10b123	Chr10	118.518	45726237-46295404
c10b124	Chr10	122.391	46296235-46513211
c10b125	Chr10	122.916	46516951-46597252
c10b126	Chr10	123.441	46606718-47945150
c10b127	Chr10	123.966	47965010-47999008
c10b128	Chr10	124.491	48013063-48258833
c10b129	Chr10	125.926	48262970-48308528
c10b130	Chr10	126.416	48325989-49663327
c10b131	Chr10	128.407	49666641-49798753
c10b132	Chr10	128.897	49807932-49838092
c10b133	Chr10	133.591	49849892-50910113
c10b134	Chr10	136.765	50912715-50920697
c10b135	Chr10	137.22	50921897-50953090
c10b136	Chr10	137.675	50959114-51895798
c10b137	Chr10	138.6	51919551-51921072
c10b138	Chr10	139.055	51935642-52044878
c10b139	Chr10	140.716	52055483-54282068
c10b140	Chr10	141.231	54288314-54344423
c10b141	Chr10	141.746	54350470-55317504
c10b142	Chr10	145.619	55318102-56115704
c10b143	Chr10	146.674	56119210-56805179
c10b144	Chr10	147.199	56805731-57003038
c10b145	Chr10	147.724	57015478-58110029
c10b146	Chr10	151.612	58116677-58126733
c10b147	Chr10	154.335	58139333-58239619
c10b148	Chr10	154.86	58257652-59388018
c10b149	Chr10	155.385	59388792-60441287
c10b150	Chr10	155.91	60442281-60613166
c10b151	Chr10	156.435	60622954-60757630
c10b152	Chr10	156.96	60759475-61041049
c10b153	Chr10	157.485	61058446-62258049
c11b001	Chr11	0	3747-1099661
c11b002	Chr11	2.507	1104670-1298752
c11b003	Chr11	2.997	1316032-1392624
c11b004	Chr11	3.982	1394310-2283397
c11b005	Chr11	6.134	2319833-2504022
c11b006	Chr11	6.659	2550974-2977487
c11b007	Chr11	7.174	2994621-3067989
c11b008	Chr11	8.734	3069880-3106466
c11b009	Chr11	10.084	3122119-3132288
c11b010	Chr11	10.574	3161879-4322719
c11b011	Chr11	11.089	4328680-4550902
c11b012	Chr11	23.116	9141197-9141197
c11b013	Chr11	34.588	24494275-24695752
c11b014	Chr11	35.103	24698957-25661061
c11b015	Chr11	35.618	25662492-26896689
c11b016	Chr11	36.654	26908576-27823830

Bin ID	Chr	Genetic distance (cM)	Physical interval
c11b017	Chr11	37.169	27832694-27944183
c11b018	Chr11	37.684	27946366-31557445
c11b019	Chr11	38.199	31566282-31566282
c11b020	Chr11	38.714	31580397-31580397
c11b021	Chr11	39.229	31590434-31590434
c11b022	Chr11	40.609	31601448-31743496
c11b023	Chr11	41.134	31775795-34252068
c11b024	Chr11	45.606	34279237-34762263
c11b025	Chr11	47.206	34762872-34784004
c11b026	Chr11	47.731	34787178-35468254
c11b027	Chr11	49.883	35469503-35705715
c11b028	Chr11	50.398	35710329-35809757
c11b029	Chr11	50.913	35810864-37407119
c11b030	Chr11	51.428	37413238-37502769
c11b031	Chr11	51.953	37503974-38199523
c11b032	Chr11	53.553	38229515-38486672
c11b033	Chr11	54.078	38492556-39787804
c11b034	Chr11	55.114	39794379-40256321
c11b035	Chr11	55.629	40265824-40930011
c11b036	Chr11	57.725	40931293-40982292
c11b037	Chr11	58.24	40983533-41331388
c11b038	Chr11	59.275	41332298-41502336
c11b039	Chr11	61.912	41506526-41894529
c11b040	Chr11	62.437	41900593-42290734
c11b041	Chr11	62.962	42340322-42539383
c11b042	Chr11	64.563	42539949-42802764
c11b043	Chr11	65.088	42803556-43586463
c11b044	Chr11	65.613	43590998-44863542
c11b045	Chr11	66.128	44883870-44890571
c11b046	Chr11	66.933	44897272-45016312
c11b047	Chr11	67.423	45033668-46447355
c11b048	Chr11	68.408	46475567-47474827
c11b049	Chr11	69.443	47500134-48059290
c11b050	Chr11	70.248	48105037-48105037
c11b051	Chr11	70.738	48111441-50134268
c11b052	Chr11	71.229	50160425-50173859
c11b053	Chr11	74.805	50196459-50196779
c11b054	Chr11	75.295	50221233-50255218
c11b055	Chr11	78.871	50266948-51122778
c11b056	Chr11	79.856	51128767-51922453
c11b057	Chr11	82.363	51923269-51939858
c11b058	Chr11	84.87	51940484-52232330
c11b059	Chr11	85.36	52236330-52932664
c11b060	Chr11	85.885	52933831-53223094
c11b061	Chr11	86.41	53255824-54606772
c11b062	Chr11	86.935	54612449-55275235
c11b063	Chr11	90.235	55277452-57319323
c11b064	Chr11	90.76	57323502-57514847
c11b065	Chr11	91.285	57543509-57545188
c11b066	Chr11	91.81	57546874-57751944
c11b067	Chr11	92.865	57761147-58046186

Bin ID	Chr	Genetic distance (cM)	Physical interval
c11b068	Chr11	93.39	58059358-58660062
c11b069	Chr11	93.915	58674328-59347644
c11b070	Chr11	96.066	59355403-61234724
c11b071	Chr11	96.581	61237444-61260536
c11b072	Chr11	97.096	61261556-62040420
c11b073	Chr11	98.132	62043671-62068158
c11b074	Chr11	99.167	62068738-62086051
c11b075	Chr11	100.202	62089518-62614873
c11b076	Chr11	100.717	62620898-62784645
c11b077	Chr11	103.901	62790108-63194031
c11b078	Chr11	104.416	63201385-63992276
c11b079	Chr11	104.931	63999749-64112492
c11b080	Chr11	105.966	64117368-64179478
c11b081	Chr11	106.481	64182194-64206264
c11b082	Chr11	107.312	64215060-64322598
c11b083	Chr11	107.837	64332217-64391873
c11b084	Chr11	108.362	64430032-64520994
c11b085	Chr11	108.887	64525320-64610653
c11b086	Chr11	115.21	67052335-67052335
c11b087	Chr11	125.999	70050093-70074280
c11b088	Chr11	127.055	70087396-70087396
c11b089	Chr11	127.58	70093917-70157762
c11b090	Chr11	128.105	70163292-70342100
c11b091	Chr11	128.63	70375530-70950338
c11b092	Chr11	129.155	70961634-71822229
c11b093	Chr11	129.67	71829002-72676608
c11b094	Chr11	130.185	72677567-72791227
c11b095	Chr11	130.7	72795905-72795905
c11b096	Chr11	131.215	72800035-72849654
c11b097	Chr11	131.73	72852687-73035458
c11b098	Chr11	132.245	73047722-73319298
c11b099	Chr11	134.341	73324707-73754437
c11b100	Chr11	134.866	73756820-75027797
c11b101	Chr11	135.391	75038338-75351458
c11b102	Chr11	135.916	75388543-75466909
c11b103	Chr11	136.441	75483213-75600704
c11b104	Chr11	136.966	75606903-75721974
c11b105	Chr11	137.491	75722729-76295037
c11b106	Chr11	141.983	76299622-76980246
c11b107	Chr11	143.038	76990237-77139979
c11b108	Chr11	144.094	77160449-78170547
c11b109	Chr11	144.619	78219517-78325381
c11b110	Chr11	145.144	78349639-79233897
c11b111	Chr11	145.669	79246281-79819163
c11b112	Chr11	146.194	79822327-79871665
c11b113	Chr11	147.249	79887132-80866607
c11b114	Chr11	151.741	80869619-80949188
c11b115	Chr11	153.341	80981385-82195665
c11b116	Chr11	153.866	82207702-82263170
c11b117	Chr11	157.166	82340337-82443717
c11b118	Chr11	158.767	82513041-83168814

Bin ID	Chr	Genetic distance (cM)	Physical interval
c11b119	Chr11	159.292	83179346-85476171
c12b001	Chr12	0	13000-951616
c12b002	Chr12	0.515	975187-985878
c12b003	Chr12	1.03	1015522-1156515
c12b004	Chr12	2.591	1159581-1324296
c12b005	Chr12	3.106	1324855-1527630
c12b006	Chr12	3.911	1536485-2368691
c12b007	Chr12	4.381	2379751-2404434
c12b008	Chr12	4.851	2431084-2629887
c12b009	Chr12	6.286	2637765-3979136
c12b010	Chr12	10.929	4015318-4015318
c12b011	Chr12	11.985	4037419-4653448
c12b012	Chr12	12.51	4658482-4660243
c12b013	Chr12	13.035	4661714-4683915
c12b014	Chr12	13.56	4699804-6923941
c12b015	Chr12	85.511	43375936-43587774
c12b016	Chr12	87.667	43589024-44693022
c12b017	Chr12	88.192	44734570-44974510
c12b018	Chr12	92.86	54357904-54805404
c12b019	Chr12	98.11	58149681-58287100
c12b020	Chr12	99.67	58287874-58726576
c12b021	Chr12	100.185	58728863-58825447
c12b022	Chr12	100.675	58848111-58911684
c12b023	Chr12	101.165	58932606-59053990
c12b024	Chr12	101.655	59064820-60131414
c12b025	Chr12	102.125	60151844-60182895
c12b026	Chr12	102.595	60209376-60407413
c12b027	Chr12	103.065	60408369-60489469
c12b028	Chr12	103.535	60490613-60667842
c12b029	Chr12	104.005	60668969-61379811
c12b030	Chr12	104.475	61383908-61608939
c12b031	Chr12	104.945	61611901-62094303
c12b032	Chr12	105.415	62099806-62124289
c12b033	Chr12	108.148	62132511-62484289
c12b034	Chr12	108.663	62487916-62871851
c12b035	Chr12	109.178	62886325-62886325
c12b036	Chr12	109.693	62906284-63282254
c12b037	Chr12	110.728	63315603-63339461
c12b038	Chr12	111.763	63351462-63361777
c12b039	Chr12	112.798	63375833-63375833
c12b040	Chr12	113.834	63394985-64251438
c12b041	Chr12	114.349	64257599-64554125
c12b042	Chr12	114.874	64559077-64992288
c12b043	Chr12	115.399	65015749-65373531
c12b044	Chr12	115.924	65394309-65601121
c12b045	Chr12	116.449	65612405-65648233
c12b046	Chr12	116.974	65667094-65892412
c12b047	Chr12	117.499	65899936-66066755
c12b048	Chr12	122.576	66068038-67115295
c12b049	Chr12	123.101	67116255-67400599
c12b050	Chr12	125.819	68381249-68381249

Bin ID	Chr	Genetic distance (cM)	Physical interval
c12b051	Chr12	132.682	71982885-71982885
c12b052	Chr12	140.305	74618168-74973477
c12b053	Chr12	141.906	74982170-75098584
c12b054	Chr12	143.466	75114928-75410639
c12b055	Chr12	145.027	75438480-75712335
c12b056	Chr12	145.542	75721809-76830952
c12b057	Chr12	146.057	76848303-76909347
c12b058	Chr12	146.572	76916301-76917341
c12b059	Chr12	147.087	76921350-76925815
c12b060	Chr12	148.122	76928803-76928803
c12b061	Chr12	148.637	76929848-77667668
c12b062	Chr12	149.152	77668420-77826068
c12b063	Chr12	150.207	77843633-77892401
c12b064	Chr12	150.732	77894890-77914231
c12b065	Chr12	151.257	77916603-78035489
c12b066	Chr12	151.782	78037162-78526053
c12b067	Chr12	153.939	78546954-78806961
c12b068	Chr12	154.464	78815027-79131205
c12b069	Chr12	154.989	79156765-79237581
c12b070	Chr12	155.514	79243853-79542576
c12b071	Chr12	156.569	79546322-79558566
c12b072	Chr12	159.868	79582164-79855783
c12b073	Chr12	160.924	79922895-79975208
c12b074	Chr12	161.449	79976009-80428817
c12b075	Chr12	161.974	80457048-80606845
c12b076	Chr12	164.13	80618796-81146291
c12b077	Chr12	164.655	81158874-81255597
c12b078	Chr12	165.18	81266057-81389857
c12b079	Chr12	165.705	81398161-81649062
c12b080	Chr12	166.23	81651773-81781506
c12b081	Chr12	167.831	81787481-82015198
c12b082	Chr12	168.356	82019275-82124063
c12b083	Chr12	169.411	82128030-82543501
c12b084	Chr12	169.936	82547178-83058573
c12b085	Chr12	171.536	83062367-83305206
c12b086	Chr12	172.051	83325864-84362853
c12b087	Chr12	173.612	84370666-84370666
c12b088	Chr12	174.127	84392468-84752308
c12b089	Chr12	174.652	84753078-85994713