

Table S1. FAIRE peak data sets.

(A) Association loci					
#	Cell type	Gene locus	Genomic position		
			Chromosome	Start	End
1	MK	VAV3	1	107,914,840	107,915,135
2	MK	CELSR2, PSRC1, SORT1	1	109,537,919	109,538,062
3	MK	CELSR2, PSRC1, SORT1	1	109,557,893	109,558,576
4	MK	CELSR2, PSRC1, SORT1	1	109,562,771	109,563,006
5	MK	CELSR2, PSRC1, SORT1	1	109,593,505	109,594,216
6	MK	CELSR2, PSRC1, SORT1	1	109,627,258	109,627,475
7	MK	CELSR2, PSRC1, SORT1	1	109,660,767	109,660,957
8	MK	CELSR2, PSRC1, SORT1	1	109,664,465	109,664,672
9	MK	CELSR2, PSRC1, SORT1	1	109,714,935	109,715,078
10	MK	CELSR2, PSRC1, SORT1	1	109,734,038	109,734,237
11	MK	CELSR2, PSRC1, SORT1	1	109,734,968	109,735,126
12	MK	PEAR1	1	155,102,735	155,102,938
13	MK	PEAR1	1	155,126,625	155,126,793
14	MK	PEAR1	1	155,128,772	155,128,965
15	MK	PEAR1	1	155,131,394	155,131,731
16	MK	PEAR1	1	155,194,762	155,194,983
17	MK	FCER1G	1	159,451,530	159,451,747
18	MK	FCER1G	1	159,453,843	159,454,060
19	MK	FCER1G	1	159,462,115	159,462,448
20	MK	FCER1G	1	159,463,886	159,464,219
21	MK	DNM3	1	170,184,382	170,184,657
22	MK	DNM3	1	170,205,693	170,205,939
23	MK	DNM3	1	170,207,408	170,207,753
24	MK	DNM3	1	170,220,764	170,220,954
25	MK	DNM3	1	170,238,612	170,238,785
26	MK	DNM3	1	170,239,997	170,240,212
27	MK	DNM3	1	170,246,245	170,246,374
28	MK	DNM3	1	170,345,175	170,345,373
29	MK	TMCC2	1	203,447,052	203,447,525
30	MK	TMCC2	1	203,463,544	203,463,663
31	MK	TMCC2	1	203,492,061	203,492,206
32	MK	TMCC2	1	203,503,192	203,503,337
33	MK	TMCC2	1	203,524,084	203,524,303
34	MK	MIA3	1	220,683,640	220,683,839
35	MK	MIA3	1	220,695,158	220,695,367
36	MK	MIA3	1	220,704,890	220,705,039
37	MK	MIA3	1	220,705,566	220,706,004
38	MK	MIA3	1	220,829,860	220,830,153
39	MK	MIA3	1	220,857,748	220,857,865
40	MK	MIA3	1	220,874,539	220,874,712

41	MK	<i>MIA3</i>	1	220,881,541	220,881,708
42	MK	<i>MIA3</i>	1	220,884,113	220,884,324
43	MK	<i>MIA3</i>	1	220,894,985	220,895,158
44	MK	<i>MIA3</i>	1	220,895,763	220,895,936
45	MK	<i>MIA3</i>	1	220,951,347	220,951,492
46	MK	<i>MIA3</i>	1	220,952,425	220,952,565
47	MK	<i>MIA3</i>	1	220,952,756	220,953,397
48	MK	<i>MIA3</i>	1	221,013,036	221,013,171
49	MK	<i>MIA3</i>	1	221,054,903	221,055,115
50	MK	<i>EHD3</i>	2	31,310,233	31,310,426
51	MK	<i>EHD3</i>	2	31,312,109	31,312,250
52	MK	<i>EHD3</i>	2	31,313,350	31,313,549
53	MK	<i>EHD3</i>	2	31,316,040	31,316,233
54	MK	<i>STK39</i>	2	168,701,192	168,701,417
55	MK	<i>WDR12</i>	2	203,444,209	203,444,704
56	MK	<i>WDR12</i>	2	203,484,606	203,484,932
57	MK	<i>WDR12</i>	2	203,485,121	203,485,242
58	MK	<i>ITPR1</i>	3	4,789,003	4,789,189
59	MK	<i>ITPR1</i>	3	4,823,523	4,823,700
60	MK	<i>ITPR1</i>	3	4,847,909	4,848,262
61	MK	<i>ITPR1</i>	3	4,851,141	4,851,312
62	MK	<i>ITPR1</i>	3	4,852,491	4,852,736
63	MK	<i>ITPR1</i>	3	4,853,989	4,854,492
64	MK	<i>RAF1</i>	3	12,680,681	12,680,868
65	MK	<i>ARHGEF3</i>	3	56,765,356	56,765,495
66	MK	<i>ARHGEF3</i>	3	56,793,061	56,793,222
67	MK	<i>ARHGEF3</i>	3	56,799,422	56,799,589
68	MK	<i>ARHGEF3</i>	3	56,808,646	56,808,811
69	MK	<i>ARHGEF3</i>	3	56,810,974	56,811,195
70	MK	<i>ARHGEF3</i>	3	56,824,732	56,824,917
71	MK	<i>ARHGEF3</i>	3	56,865,019	56,865,132
72	MK	<i>MRAS</i>	3	139,550,152	139,550,443
73	MK	<i>P2RY12</i>	3	152,428,299	152,428,498
74	MK	<i>P2RY12</i>	3	152,478,861	152,479,030
75	MK	<i>P2RY12</i>	3	152,483,531	152,483,685
76	MK	<i>P2RY12</i>	3	152,484,566	152,484,761
77	MK	<i>ITGA2</i>	5	52,280,195	52,280,370
78	MK	<i>ITGA2</i>	5	52,320,783	52,321,224
79	MK	<i>ITGA2</i>	5	52,384,112	52,384,247
80	MK	<i>ITGA2</i>	5	52,384,726	52,384,848
81	MK	<i>ITGA2</i>	5	52,427,696	52,427,819
82	MK	<i>PHACTR1</i>	6	13,002,199	13,002,360
83	MK	<i>PHACTR1</i>	6	13,019,720	13,019,888
84	MK	<i>PHACTR1</i>	6	13,049,651	13,049,938
85	MK	<i>PHACTR1</i>	6	13,053,344	13,053,593

86	MK	<i>PHACTR1</i>	6	13,055,492	13,056,072
87	MK	<i>HFE</i>	6	26,205,599	26,205,740
88	MK	<i>HFE</i>	6	26,211,949	26,212,141
89	MK	<i>HFE</i>	6	26,231,260	26,231,461
90	MK	<i>HFE</i>	6	26,232,120	26,232,359
91	MK	<i>HFE</i>	6	26,234,394	26,234,537
92	MK	<i>BAK1</i>	6	33,647,044	33,647,233
93	MK	<i>BAK1</i>	6	33,655,957	33,656,142
94	MK	<i>BAK1</i>	6	33,661,450	33,661,691
95	MK	<i>MAPK14</i>	6	36,103,320	36,103,575
96	MK	<i>MAPK14</i>	6	36,104,608	36,104,824
97	MK	<i>MAPK14</i>	6	36,171,002	36,171,191
98	MK	<i>MAPK14</i>	6	36,175,109	36,175,320
99	MK	<i>MAPK14</i>	6	36,194,392	36,194,563
100	MK	<i>MAPK14</i>	6	36,207,508	36,207,723
101	MK	<i>BSYL, CCND3</i>	6	41,996,743	41,997,270
102	MK	<i>BSYL, CCND3</i>	6	42,011,971	42,012,241
103	MK	<i>BSYL, CCND3</i>	6	42,013,961	42,014,170
104	MK	<i>BSYL, CCND3</i>	6	42,015,207	42,015,420
105	MK	<i>BSYL, CCND3</i>	6	42,016,385	42,016,594
106	MK	<i>BSYL, CCND3</i>	6	42,017,537	42,017,826
107	MK	<i>BSYL, CCND3</i>	6	42,093,014	42,093,153
108	MK	<i>BSYL, CCND3</i>	6	42,104,341	42,104,544
109	MK	<i>HBS1L, MYB</i>	6	135,417,607	135,417,890
110	MK	<i>HBS1L, MYB</i>	6	135,456,516	135,456,779
111	MK	<i>HBS1L, MYB</i>	6	135,491,460	135,491,619
112	MK	<i>HBS1L, MYB</i>	6	135,507,891	135,508,040
113	MK	<i>HBS1L, MYB</i>	6	135,543,853	135,544,170
114	MK	<i>HBS1L, MYB</i>	6	135,554,328	135,554,777
115	MK	<i>HBS1L, MYB</i>	6	135,572,627	135,573,056
116	MK	<i>HBS1L, MYB</i>	6	135,575,418	135,575,559
117	MK	<i>MTHFD1L</i>	6	151,228,401	151,228,738
118	MK	<i>MTHFD1L</i>	6	151,254,856	151,254,996
119	MK	<i>SLC22A3, LPAL2, LPA</i>	6	160,797,077	160,797,244
120	MK	<i>SLC22A3, LPAL2, LPA</i>	6	160,803,572	160,803,737
121	MK	<i>SLC22A3, LPAL2, LPA</i>	6	160,861,000	160,861,377
122	MK	<i>CD36</i>	7	80,126,768	80,126,956
123	MK	<i>FLJ36031, PIK3CG</i>	7	106,088,749	106,088,894
124	MK	<i>FLJ36031, PIK3CG</i>	7	106,145,952	106,146,128
125	MK	<i>FLJ36031, PIK3CG</i>	7	106,159,393	106,159,887
126	MK	<i>AK3, RCL1, JAK2</i>	9	4,731,175	4,731,296
127	MK	<i>AK3, RCL1, JAK2</i>	9	4,740,131	4,740,474
128	MK	<i>AK3, RCL1, JAK2</i>	9	4,749,443	4,749,608
129	MK	<i>AK3, RCL1, JAK2</i>	9	4,752,645	4,752,818
130	MK	<i>AK3, RCL1, JAK2</i>	9	4,782,722	4,782,987

131	MK	AK3, RCL1, JAK2	9	4,787,876	4,788,040
132	MK	AK3, RCL1, JAK2	9	4,788,379	4,788,594
133	MK	AK3, RCL1, JAK2	9	4,789,900	4,790,089
134	MK	AK3, RCL1, JAK2	9	4,975,107	4,975,244
135	MK	AK3, RCL1, JAK2	9	4,978,008	4,978,177
136	MK	CACNB2	10	18,608,247	18,608,466
137	MK	CACNB2	10	18,747,666	18,747,838
138	MK	CXCL12	10	44,027,150	44,027,346
139	MK	CXCL12	10	44,131,962	44,132,213
140	MK	JMJD1C	10	64,588,027	64,588,162
141	MK	JMJD1C	10	64,596,656	64,596,856
142	MK	JMJD1C	10	64,646,953	64,647,146
143	MK	JMJD1C	10	64,686,249	64,686,361
144	MK	JMJD1C	10	64,694,919	64,695,102
145	MK	JMJD1C	10	64,697,313	64,697,676
146	MK	JMJD1C	10	64,698,979	64,699,230
147	MK	JMJD1C	10	64,818,293	64,818,410
148	MK	CYP17A1	10	104,525,551	104,525,930
149	MK	CYP17A1	10	104,530,963	104,531,222
150	MK	CYP17A1	10	104,546,243	104,546,420
151	MK	CYP17A1	10	104,584,763	104,584,934
152	MK	CYP17A1	10	104,603,961	104,604,344
153	MK	CYP17A1	10	104,651,251	104,651,444
154	MK	CYP17A1	10	104,667,304	104,668,027
155	MK	CYP17A1	10	104,677,523	104,677,686
156	MK	BET1L, SIRT3, PSMD13	11	192,159	192,360
157	MK	BET1L, SIRT3, PSMD13	11	197,413	197,708
158	MK	BET1L, SIRT3, PSMD13	11	198,637	198,838
159	MK	BET1L, SIRT3, PSMD13	11	210,615	210,739
160	MK	BET1L, SIRT3, PSMD13	11	226,313	227,021
161	MK	PLEKHA7	11	16,798,523	16,798,666
162	MK	PLEKHA7	11	16,835,449	16,835,666
163	MK	PLEKHA7	11	16,861,395	16,861,589
164	MK	PLEKHA7	11	16,914,078	16,914,254
165	MK	ATP2B1	12	88,626,699	88,627,268
166	MK	ATP2B1	12	88,627,333	88,627,650
167	MK	SH2B3/LNK, ATXN2	12	110,319,239	110,319,601
168	MK	SH2B3/LNK, ATXN2	12	110,327,583	110,327,960
169	MK	SH2B3/LNK, ATXN2	12	110,331,748	110,332,468
170	MK	SH2B3/LNK, ATXN2	12	110,351,039	110,351,324
171	MK	SH2B3/LNK, ATXN2	12	110,352,457	110,352,655
172	MK	SH2B3/LNK, ATXN2	12	110,360,147	110,360,284
173	MK	SH2B3/LNK, ATXN2	12	110,360,817	110,360,964
174	MK	SH2B3/LNK, ATXN2	12	110,373,957	110,374,307
175	MK	SH2B3/LNK, ATXN2	12	110,519,271	110,519,681

176	MK	<i>SH2B3/LNK, ATXN2</i>	12	110,521,427	110,521,891
177	MK	<i>SH2B3/LNK, ATXN2</i>	12	110,557,836	110,558,035
178	MK	<i>SH2B3/LNK, ATXN2</i>	12	110,558,924	110,559,089
179	MK	<i>PTPN11</i>	12	111,331,727	111,331,918
180	MK	<i>PTPN11</i>	12	111,333,831	111,333,958
181	MK	<i>PTPN11</i>	12	111,341,030	111,341,279
182	MK	<i>PTPN11</i>	12	111,369,425	111,369,580
183	MK	<i>TBX3, TBX5</i>	12	113,844,268	113,844,407
184	MK	<i>TBX3, TBX5</i>	12	113,923,933	113,924,094
185	MK	<i>HNF1A/TCF1, C12orf43</i>	12	119,894,071	119,894,229
186	MK	<i>HNF1A/TCF1, C12orf43</i>	12	119,938,622	119,938,801
187	MK	<i>HNF1A/TCF1, C12orf43</i>	12	119,968,834	119,969,061
188	MK	<i>WDR66</i>	12	120,761,849	120,762,094
189	MK	<i>WDR66</i>	12	120,810,848	120,811,065
190	MK	<i>WDR66</i>	12	120,840,714	120,840,925
191	MK	<i>TPM1</i>	15	61,121,690	61,121,873
192	MK	<i>TPM1</i>	15	61,127,403	61,127,604
193	MK	<i>TPM1</i>	15	61,129,502	61,129,701
194	MK	<i>TPM1</i>	15	61,130,635	61,130,867
195	MK	<i>TPM1</i>	15	61,142,689	61,142,866
196	MK	<i>TPM1</i>	15	61,155,658	61,155,927
197	MK	<i>TPM1</i>	15	61,158,766	61,158,953
198	MK	<i>SMAD3</i>	15	65,160,616	65,160,775
199	MK	<i>SMAD3</i>	15	65,170,713	65,170,888
200	MK	<i>SMAD3</i>	15	65,177,832	65,178,049
201	MK	<i>SMAD3</i>	15	65,189,105	65,189,412
202	MK	<i>SMAD3</i>	15	65,237,270	65,237,461
203	MK	<i>SMAD3</i>	15	65,287,173	65,287,445
204	MK	<i>SMAD3</i>	15	65,334,097	65,334,248
205	MK	<i>CSK, ULK3</i>	15	72,856,637	72,856,998
206	MK	<i>CSK, ULK3</i>	15	72,859,620	72,859,806
207	MK	<i>CSK, ULK3</i>	15	72,866,958	72,867,531
208	MK	<i>CSK, ULK3</i>	15	72,922,603	72,922,794
209	MK	<i>CSK, ULK3</i>	15	72,947,549	72,947,718
210	MK	<i>CSK, ULK3</i>	15	72,949,446	72,949,723
211	MK	<i>CSK, ULK3</i>	15	72,952,371	72,952,532
212	MK	<i>CSK, ULK3</i>	15	72,969,303	72,969,478
213	MK	<i>CSK, ULK3</i>	15	72,986,202	72,986,345
214	MK	<i>CSK, ULK3</i>	15	73,017,434	73,017,675
215	MK	<i>MAP2K4</i>	17	11,864,740	11,865,023
216	MK	<i>TAOK1</i>	17	24,721,381	24,721,534
217	MK	<i>TAOK1</i>	17	24,741,338	24,741,554
218	MK	<i>TAOK1</i>	17	24,813,063	24,813,280
219	MK	<i>TAOK1</i>	17	24,888,222	24,888,373
220	MK	<i>TAOK1</i>	17	24,919,622	24,919,734

221	MK	<i>GSDMA, ORMDL3</i>	17	35,337,403	35,337,552
222	MK	<i>GSDMA, ORMDL3</i>	17	35,362,633	35,363,258
223	MK	<i>GSDMA, ORMDL3</i>	17	35,368,822	35,369,018
224	MK	<i>GSDMA, ORMDL3</i>	17	35,382,108	35,382,315
225	MK	<i>CD226</i>	18	65,657,414	65,657,608
226	MK	<i>CD226</i>	18	65,684,550	65,684,718
227	MK	<i>CD226</i>	18	65,716,914	65,717,089
228	MK	<i>MAP2K2</i>	19	4,040,110	4,040,611
229	MK	<i>MAP2K2</i>	19	4,075,128	4,075,297
230	MK	<i>LDLR</i>	19	11,060,982	11,061,167
231	MK	<i>LDLR</i>	19	11,061,950	11,062,244
232	MK	<i>AKT2</i>	19	45,419,804	45,419,969
233	MK	<i>AKT2</i>	19	45,483,138	45,483,327
234	MK	<i>AKT2</i>	19	45,491,966	45,492,158
235	MK	<i>AKT2</i>	19	45,503,197	45,503,389
236	MK	<i>APOC1, APOC4, APOE</i>	19	50,041,184	50,041,401
237	MK	<i>APOC1, APOC4, APOE</i>	19	50,051,484	50,051,995
238	MK	<i>APOC1, APOC4, APOE</i>	19	50,085,805	50,086,330
239	MK	<i>APOC1, APOC4, APOE</i>	19	50,150,331	50,150,527
240	MK	<i>APOC1, APOC4, APOE</i>	19	50,196,319	50,196,568
241	MK	<i>APOC1, APOC4, APOE</i>	19	50,197,042	50,197,263
242	MK	<i>GP6</i>	19	60,209,244	60,209,397
243	MK	<i>GP6</i>	19	60,241,556	60,241,679
244	MK	<i>GP6</i>	19	60,245,094	60,245,382
245	MK	<i>SIRPA</i>	20	1,894,347	1,894,752
246	MK	<i>SLC5A3, MRPS6, KCNE2</i>	21	34,356,285	34,356,436
247	MK	<i>SLC5A3, MRPS6, KCNE2</i>	21	34,367,396	34,367,825
248	MK	<i>SLC5A3, MRPS6, KCNE2</i>	21	34,368,044	34,368,422
249	MK	<i>GNAZ</i>	22	21,742,217	21,742,604
250	MK	<i>GNAZ</i>	22	21,759,106	21,759,267
251	MK	<i>GNAZ</i>	22	21,814,206	21,814,411
252	MK	<i>FBXO7</i>	22	31,199,429	31,199,582
253	MK	<i>FBXO7</i>	22	31,200,572	31,201,245
254	MK	<i>TMPRSS6</i>	22	35,734,504	35,734,624
1	EB	<i>PCSK9</i>	1	55,274,268	55,274,391
2	EB	<i>PCSK9</i>	1	55,277,637	55,277,808
3	EB	<i>VAV3</i>	1	107,914,840	107,915,135
4	EB	<i>CELSR2, PSRC1, SORT1</i>	1	109,525,340	109,525,629
5	EB	<i>CELSR2, PSRC1, SORT1</i>	1	109,537,919	109,538,062
6	EB	<i>CELSR2, PSRC1, SORT1</i>	1	109,542,236	109,542,359
7	EB	<i>CELSR2, PSRC1, SORT1</i>	1	109,545,395	109,545,538
8	EB	<i>CELSR2, PSRC1, SORT1</i>	1	109,557,953	109,558,138
9	EB	<i>CELSR2, PSRC1, SORT1</i>	1	109,559,051	109,559,228
10	EB	<i>CELSR2, PSRC1, SORT1</i>	1	109,593,547	109,593,856
11	EB	<i>CELSR2, PSRC1, SORT1</i>	1	109,598,235	109,598,954

12	EB	<i>CELSR2, PSRC1, SORT1</i>	1	109,607,821	109,608,078
13	EB	<i>CELSR2, PSRC1, SORT1</i>	1	109,621,701	109,621,870
14	EB	<i>CELSR2, PSRC1, SORT1</i>	1	109,627,312	109,627,595
15	EB	<i>CELSR2, PSRC1, SORT1</i>	1	109,651,363	109,651,970
16	EB	<i>CELSR2, PSRC1, SORT1</i>	1	109,734,038	109,734,237
17	EB	<i>CELSR2, PSRC1, SORT1</i>	1	109,737,130	109,737,247
18	EB	<i>CELSR2, PSRC1, SORT1</i>	1	109,738,078	109,738,788
19	EB	<i>PEAR1</i>	1	155,126,625	155,126,793
20	EB	<i>PEAR1</i>	1	155,128,772	155,128,965
21	EB	<i>PEAR1</i>	1	155,131,308	155,131,731
22	EB	<i>PEAR1</i>	1	155,151,018	155,151,163
23	EB	<i>PEAR1</i>	1	155,156,848	155,157,069
24	EB	<i>PEAR1</i>	1	155,194,832	155,194,983
25	EB	<i>FCER1G</i>	1	159,462,115	159,462,448
26	EB	<i>FCER1G</i>	1	159,463,860	159,464,007
27	EB	<i>DNM3</i>	1	170,238,636	170,238,785
28	EB	<i>TMCC2</i>	1	203,447,052	203,447,525
29	EB	<i>TMCC2</i>	1	203,463,544	203,463,687
30	EB	<i>TMCC2</i>	1	203,491,827	203,492,110
31	EB	<i>TMCC2</i>	1	203,509,317	203,509,504
32	EB	<i>TMCC2</i>	1	203,520,592	203,520,795
33	EB	<i>MIA3</i>	1	220,695,202	220,695,367
34	EB	<i>MIA3</i>	1	220,704,890	220,705,065
35	EB	<i>MIA3</i>	1	220,705,358	220,705,709
36	EB	<i>MIA3</i>	1	220,829,812	220,829,985
37	EB	<i>MIA3</i>	1	220,857,762	220,858,116
38	EB	<i>MIA3</i>	1	220,874,539	220,874,712
39	EB	<i>MIA3</i>	1	220,884,085	220,884,324
40	EB	<i>MIA3</i>	1	220,949,894	220,950,017
41	EB	<i>MIA3</i>	1	220,952,051	220,952,194
42	EB	<i>MIA3</i>	1	220,952,425	220,953,397
43	EB	<i>EHD3</i>	2	31,310,205	31,310,690
44	EB	<i>STK39</i>	2	168,701,254	168,701,388
45	EB	<i>WDR12</i>	2	203,443,847	203,444,734
46	EB	<i>WDR12</i>	2	203,484,326	203,485,130
47	EB	<i>WDR12</i>	2	203,485,151	203,485,300
48	EB	<i>ITPR1</i>	3	4,831,121	4,831,353
49	EB	<i>ITPR1</i>	3	4,842,520	4,842,829
50	EB	<i>ITPR1</i>	3	4,847,957	4,848,126
51	EB	<i>RAF1</i>	3	12,677,475	12,677,696
52	EB	<i>RAF1</i>	3	12,680,631	12,680,868
53	EB	<i>ULK4</i>	3	41,716,767	41,716,992
54	EB	<i>ULK4</i>	3	41,722,521	41,722,672
55	EB	<i>ARHGEF3</i>	3	56,808,646	56,808,811
56	EB	<i>ARHGEF3</i>	3	56,810,752	56,811,195

57	EB	<i>MRAS</i>	3	139,550,152	139,550,443
58	EB	<i>P2RY12</i>	3	152,428,319	152,428,498
59	EB	<i>P2RY12</i>	3	152,483,531	152,483,709
60	EB	<i>P2RY12</i>	3	152,528,231	152,528,398
61	EB	<i>ITGA2</i>	5	52,280,175	52,280,348
62	EB	<i>ITGA2</i>	5	52,320,815	52,321,224
63	EB	<i>ITGA2</i>	5	52,350,926	52,351,127
64	EB	<i>ITGA2</i>	5	52,427,696	52,427,819
65	EB	<i>PHACTR1</i>	6	13,002,249	13,002,377
66	EB	<i>HFE</i>	6	26,195,745	26,196,200
67	EB	<i>HFE</i>	6	26,205,599	26,205,740
68	EB	<i>HFE</i>	6	26,211,917	26,212,141
69	EB	<i>HFE</i>	6	26,227,238	26,227,731
70	EB	<i>HFE</i>	6	26,231,260	26,231,427
71	EB	<i>HFE</i>	6	26,232,120	26,232,436
72	EB	<i>HFE</i>	6	26,234,394	26,234,537
73	EB	<i>BAK1</i>	6	33,647,058	33,647,257
74	EB	<i>BAK1</i>	6	33,655,957	33,656,076
75	EB	<i>MAPK14</i>	6	36,101,431	36,101,637
76	EB	<i>MAPK14</i>	6	36,103,262	36,103,575
77	EB	<i>MAPK14</i>	6	36,105,345	36,105,533
78	EB	<i>MAPK14</i>	6	36,143,537	36,143,732
79	EB	<i>MAPK14</i>	6	36,171,002	36,171,191
80	EB	<i>MAPK14</i>	6	36,174,679	36,175,296
81	EB	<i>MAPK14</i>	6	36,192,670	36,192,965
82	EB	<i>MAPK14</i>	6	36,194,368	36,194,593
83	EB	<i>MAPK14</i>	6	36,203,342	36,203,513
84	EB	<i>BSYL, CCND3</i>	6	41,996,759	41,997,176
85	EB	<i>BSYL, CCND3</i>	6	42,012,097	42,012,241
86	EB	<i>BSYL, CCND3</i>	6	42,014,025	42,014,170
87	EB	<i>BSYL, CCND3</i>	6	42,015,249	42,015,400
88	EB	<i>BSYL, CCND3</i>	6	42,017,009	42,017,658
89	EB	<i>BSYL, CCND3</i>	6	42,042,869	42,043,025
90	EB	<i>BSYL, CCND3</i>	6	42,043,397	42,043,601
91	EB	<i>BSYL, CCND3</i>	6	42,093,014	42,093,185
92	EB	<i>BSYL, CCND3</i>	6	42,104,341	42,104,544
93	EB	<i>HBS1L, MYB</i>	6	135,417,607	135,417,890
94	EB	<i>HBS1L, MYB</i>	6	135,436,982	135,437,159
95	EB	<i>HBS1L, MYB</i>	6	135,447,456	135,447,646
96	EB	<i>HBS1L, MYB</i>	6	135,457,519	135,457,641
97	EB	<i>HBS1L, MYB</i>	6	135,459,977	135,460,413
98	EB	<i>HBS1L, MYB</i>	6	135,473,102	135,473,368
99	EB	<i>HBS1L, MYB</i>	6	135,507,891	135,508,040
100	EB	<i>HBS1L, MYB</i>	6	135,510,588	135,510,958
101	EB	<i>HBS1L, MYB</i>	6	135,525,588	135,525,737

102	EB	<i>HBS1L, MYB</i>	6	135,543,329	135,543,480
103	EB	<i>HBS1L, MYB</i>	6	135,544,020	135,544,170
104	EB	<i>HBS1L, MYB</i>	6	135,546,826	135,546,982
105	EB	<i>HBS1L, MYB</i>	6	135,554,400	135,555,332
106	EB	<i>MTHFD1L</i>	6	151,207,350	151,207,504
107	EB	<i>MTHFD1L</i>	6	151,228,401	151,228,738
108	EB	<i>MTHFD1L</i>	6	151,254,856	151,254,996
109	EB	<i>SLC22A3, LPAL2, LPA</i>	6	160,797,077	160,797,318
110	EB	<i>SLC22A3, LPAL2, LPA</i>	6	160,861,000	160,861,409
111	EB	<i>SLC22A3, LPAL2, LPA</i>	6	160,919,779	160,919,916
112	EB	<i>TFR2</i>	7	100,062,195	100,062,441
113	EB	<i>TFR2</i>	7	100,065,016	100,065,141
114	EB	<i>TFR2</i>	7	100,077,067	100,077,206
115	EB	<i>TFR2</i>	7	100,091,895	100,092,114
116	EB	<i>FLJ36031, PIK3CG</i>	7	106,085,915	106,086,298
117	EB	<i>FLJ36031, PIK3CG</i>	7	106,086,951	106,087,369
118	EB	<i>FLJ36031, PIK3CG</i>	7	106,087,579	106,088,608
119	EB	<i>FLJ36031, PIK3CG</i>	7	106,088,749	106,088,894
120	EB	<i>FLJ36031, PIK3CG</i>	7	106,106,954	106,107,461
121	EB	<i>FLJ36031, PIK3CG</i>	7	106,145,978	106,146,139
122	EB	<i>FLJ36031, PIK3CG</i>	7	106,164,291	106,164,480
123	EB	<i>FLJ36031, PIK3CG</i>	7	106,165,063	106,165,231
124	EB	<i>AK3, RCL1, JAK2</i>	9	4,731,191	4,731,464
125	EB	<i>AK3, RCL1, JAK2</i>	9	4,740,131	4,740,281
126	EB	<i>AK3, RCL1, JAK2</i>	9	4,752,645	4,752,818
127	EB	<i>AK3, RCL1, JAK2</i>	9	4,759,460	4,759,622
128	EB	<i>AK3, RCL1, JAK2</i>	9	4,782,722	4,783,059
129	EB	<i>AK3, RCL1, JAK2</i>	9	4,788,403	4,788,594
130	EB	<i>AK3, RCL1, JAK2</i>	9	4,789,900	4,790,089
131	EB	<i>AK3, RCL1, JAK2</i>	9	4,818,810	4,819,123
132	EB	<i>AK3, RCL1, JAK2</i>	9	4,823,320	4,823,517
133	EB	<i>AK3, RCL1, JAK2</i>	9	4,842,517	4,842,710
134	EB	<i>AK3, RCL1, JAK2</i>	9	4,845,071	4,845,268
135	EB	<i>AK3, RCL1, JAK2</i>	9	4,852,849	4,853,186
136	EB	<i>AK3, RCL1, JAK2</i>	9	4,855,814	4,855,959
137	EB	<i>AK3, RCL1, JAK2</i>	9	4,914,359	4,914,516
138	EB	<i>AK3, RCL1, JAK2</i>	9	4,917,093	4,917,637
139	EB	<i>AK3, RCL1, JAK2</i>	9	4,975,147	4,975,388
140	EB	<i>AK3, RCL1, JAK2</i>	9	4,978,008	4,978,131
141	EB	<i>CXCL12</i>	10	44,126,559	44,126,820
142	EB	<i>CXCL12</i>	10	44,131,944	44,132,213
143	EB	<i>JMJD1C</i>	10	64,588,027	64,588,162
144	EB	<i>JMJD1C</i>	10	64,596,732	64,596,856
145	EB	<i>JMJD1C</i>	10	64,646,971	64,647,116
146	EB	<i>JMJD1C</i>	10	64,666,261	64,666,430

147	EB	<i>JMJD1C</i>	10	64,694,262	64,694,665
148	EB	<i>JMJD1C</i>	10	64,694,963	64,695,179
149	EB	<i>JMJD1C</i>	10	64,695,295	64,696,104
150	EB	<i>JMJD1C</i>	10	64,696,220	64,697,726
151	EB	<i>JMJD1C</i>	10	64,697,743	64,698,439
152	EB	<i>JMJD1C</i>	10	64,698,979	64,699,206
153	EB	<i>JMJD1C</i>	10	64,753,836	64,754,060
154	EB	<i>JMJD1C</i>	10	64,894,834	64,895,217
155	EB	<i>JMJD1C</i>	10	64,895,652	64,895,891
156	EB	<i>CYP17A1</i>	10	104,564,250	104,564,529
157	EB	<i>CYP17A1</i>	10	104,604,251	104,604,420
158	EB	<i>CYP17A1</i>	10	104,651,251	104,651,444
159	EB	<i>CYP17A1</i>	10	104,667,738	104,668,027
160	EB	<i>BET1L, SIRT3, PSMD13</i>	11	197,021	197,756
161	EB	<i>BET1L, SIRT3, PSMD13</i>	11	210,615	210,739
162	EB	<i>BET1L, SIRT3, PSMD13</i>	11	226,313	226,941
163	EB	<i>PLEKHA7</i>	11	16,798,523	16,798,666
164	EB	<i>PLEKHA7</i>	11	16,835,449	16,835,666
165	EB	<i>ATP2B1</i>	12	88,460,946	88,461,129
166	EB	<i>ATP2B1</i>	12	88,492,709	88,493,151
167	EB	<i>ATP2B1</i>	12	88,581,495	88,581,644
168	EB	<i>ATP2B1</i>	12	88,582,070	88,582,255
169	EB	<i>ATP2B1</i>	12	88,596,236	88,596,392
170	EB	<i>ATP2B1</i>	12	88,626,553	88,627,268
171	EB	<i>ATP2B1</i>	12	88,627,333	88,627,650
172	EB	<i>SH2B3/LNK, ATXN2</i>	12	110,325,149	110,325,300
173	EB	<i>SH2B3/LNK, ATXN2</i>	12	110,327,583	110,328,060
174	EB	<i>SH2B3/LNK, ATXN2</i>	12	110,332,012	110,332,542
175	EB	<i>SH2B3/LNK, ATXN2</i>	12	110,373,983	110,374,130
176	EB	<i>SH2B3/LNK, ATXN2</i>	12	110,500,460	110,500,606
177	EB	<i>SH2B3/LNK, ATXN2</i>	12	110,519,271	110,519,415
178	EB	<i>SH2B3/LNK, ATXN2</i>	12	110,520,341	110,521,038
179	EB	<i>SH2B3/LNK, ATXN2</i>	12	110,521,760	110,521,891
180	EB	<i>SH2B3/LNK, ATXN2</i>	12	110,557,836	110,557,985
181	EB	<i>SH2B3/LNK, ATXN2</i>	12	110,558,848	110,559,043
182	EB	<i>PTPN11</i>	12	111,331,727	111,331,862
183	EB	<i>PTPN11</i>	12	111,333,831	111,333,979
184	EB	<i>PTPN11</i>	12	111,340,934	111,341,279
185	EB	<i>HNF1A/TCF1, C12orf43</i>	12	119,894,015	119,894,229
186	EB	<i>HNF1A/TCF1, C12orf43</i>	12	119,938,622	119,938,801
187	EB	<i>WDR66</i>	12	120,761,821	120,762,094
188	EB	<i>WDR66</i>	12	120,810,814	120,811,511
189	EB	<i>WDR66</i>	12	120,815,510	120,815,633
190	EB	<i>WDR66</i>	12	120,856,177	120,856,394
191	EB	<i>WDR66</i>	12	120,944,486	120,945,014

192	EB	<i>TPM1</i>	15	61,127,313	61,127,676
193	EB	<i>TPM1</i>	15	61,130,687	61,130,867
194	EB	<i>TPM1</i>	15	61,142,505	61,142,866
195	EB	<i>SMAD3</i>	15	65,155,728	65,155,873
196	EB	<i>SMAD3</i>	15	65,170,689	65,170,888
197	EB	<i>SMAD3</i>	15	65,205,049	65,205,218
198	EB	<i>SMAD3</i>	15	65,287,103	65,287,445
199	EB	<i>SMAD3</i>	15	65,334,079	65,334,248
200	EB	<i>CSK, ULK3</i>	15	72,861,346	72,861,599
201	EB	<i>CSK, ULK3</i>	15	72,922,029	72,922,288
202	EB	<i>CSK, ULK3</i>	15	72,922,603	72,922,794
203	EB	<i>CSK, ULK3</i>	15	72,952,395	72,952,532
204	EB	<i>CSK, ULK3</i>	15	72,969,359	72,969,478
205	EB	<i>CSK, ULK3</i>	15	72,986,226	72,986,345
206	EB	<i>CSK, ULK3</i>	15	73,017,434	73,017,675
207	EB	<i>CSK, ULK3</i>	15	73,029,865	73,030,026
208	EB	<i>MAP2K4</i>	17	11,864,740	11,864,995
209	EB	<i>TAOK1</i>	17	24,721,397	24,721,534
210	EB	<i>TAOK1</i>	17	24,741,312	24,741,554
211	EB	<i>TAOK1</i>	17	24,888,250	24,888,373
212	EB	<i>TAOK1</i>	17	24,908,398	24,908,777
213	EB	<i>TAOK1</i>	17	24,919,092	24,919,239
214	EB	<i>TAOK1</i>	17	24,919,646	24,919,832
215	EB	<i>GSDMA, ORMDL3</i>	17	35,337,403	35,337,552
216	EB	<i>GSDMA, ORMDL3</i>	17	35,339,061	35,339,338
217	EB	<i>GSDMA, ORMDL3</i>	17	35,362,511	35,363,278
218	EB	<i>GSDMA, ORMDL3</i>	17	35,368,822	35,368,959
219	EB	<i>CD226</i>	18	65,657,222	65,657,632
220	EB	<i>MAP2K2</i>	19	4,075,128	4,075,297
221	EB	<i>MAP2K2</i>	19	4,082,054	4,082,195
222	EB	<i>LDLR</i>	19	11,061,022	11,061,167
223	EB	<i>LDLR</i>	19	11,062,115	11,062,260
224	EB	<i>LDLR</i>	19	11,066,803	11,066,988
225	EB	<i>AKT2</i>	19	45,406,952	45,407,150
226	EB	<i>AKT2</i>	19	45,483,138	45,483,327
227	EB	<i>AKT2</i>	19	45,503,197	45,503,389
228	EB	<i>APOC1, APOC4, APOE</i>	19	50,041,082	50,041,319
229	EB	<i>APOC1, APOC4, APOE</i>	19	50,085,593	50,086,330
230	EB	<i>APOC1, APOC4, APOE</i>	19	50,122,302	50,122,487
231	EB	<i>APOC1, APOC4, APOE</i>	19	50,150,303	50,150,503
232	EB	<i>APOC1, APOC4, APOE</i>	19	50,196,398	50,196,568
233	EB	<i>APOC1, APOC4, APOE</i>	19	50,197,042	50,197,351
234	EB	<i>GP6</i>	19	60,209,244	60,209,397
235	EB	<i>GP6</i>	19	60,230,073	60,230,138
236	EB	<i>GP6</i>	19	60,230,479	60,230,694

237	EB	<i>GP6</i>	19	60,241,578	60,241,731
238	EB	<i>GP6</i>	19	60,245,122	60,245,382
239	EB	<i>SIRPA</i>	20	1,823,147	1,824,032
240	EB	<i>SIRPA</i>	20	1,894,417	1,894,616
241	EB	<i>SLC5A3, MRPS6, KCNE2</i>	21	34,356,285	34,356,436
242	EB	<i>SLC5A3, MRPS6, KCNE2</i>	21	34,367,396	34,367,825
243	EB	<i>SLC5A3, MRPS6, KCNE2</i>	21	34,368,044	34,368,452
244	EB	<i>SLC5A3, MRPS6, KCNE2</i>	21	34,404,980	34,405,117
245	EB	<i>SLC5A3, MRPS6, KCNE2</i>	21	34,484,864	34,485,014
246	EB	<i>GNAZ</i>	22	21,742,291	21,742,604
247	EB	<i>GNAZ</i>	22	21,814,182	21,814,349
248	EB	<i>GNAZ</i>	22	21,817,463	21,817,638
249	EB	<i>FBXO7</i>	22	31,195,930	31,196,041
250	EB	<i>FBXO7</i>	22	31,200,572	31,200,839
251	EB	<i>FBXO7</i>	22	31,208,867	31,209,065

(B) Lineage-specific reference genes

#	Cell type	Gene	Lineage	Genomic position		
				Chromosome	Start	End
1	MK	<i>SELP</i>	megakaryocytic	1	167,837,047	167,837,214
2	MK	<i>SELP</i>	megakaryocytic	1	167,840,713	167,840,910
3	MK	<i>SELP</i>	megakaryocytic	1	167,860,923	167,861,131
4	MK	<i>SELP</i>	megakaryocytic	1	167,864,661	167,864,809
5	MK	<i>SELP</i>	megakaryocytic	1	167,865,949	167,866,124
6	MK	<i>DDEF2</i>	megakaryocytic	2	9,263,856	9,264,613
7	MK	<i>DDEF2</i>	megakaryocytic	2	9,280,894	9,281,103
8	MK	<i>DDEF2</i>	megakaryocytic	2	9,288,553	9,288,734
9	MK	<i>DDEF2</i>	megakaryocytic	2	9,292,403	9,292,583
10	MK	<i>DDEF2</i>	megakaryocytic	2	9,321,027	9,321,370
11	MK	<i>DDEF2</i>	megakaryocytic	2	9,324,449	9,324,618
12	MK	<i>DDEF2</i>	megakaryocytic	2	9,352,468	9,352,664
13	MK	<i>DDEF2</i>	megakaryocytic	2	9,388,234	9,388,453
14	MK	<i>DDEF2</i>	megakaryocytic	2	9,389,371	9,389,510
15	MK	<i>DDEF2</i>	megakaryocytic	2	9,391,309	9,391,498
16	MK	<i>MEIS1</i>	megakaryocytic	2	66,514,062	66,514,325
17	MK	<i>MEIS1</i>	megakaryocytic	2	66,514,948	66,515,087
18	MK	<i>MEIS1</i>	megakaryocytic	2	66,515,690	66,515,914
19	MK	<i>MEIS1</i>	megakaryocytic	2	66,559,525	66,559,685
20	MK	<i>MEIS1</i>	megakaryocytic	2	66,561,771	66,562,180
21	MK	<i>MEIS1</i>	megakaryocytic	2	66,570,205	66,570,361
22	MK	<i>MEIS1</i>	megakaryocytic	2	66,571,513	66,571,665
23	MK	<i>MEIS1</i>	megakaryocytic	2	66,607,872	66,607,998
24	MK	<i>MEIS1</i>	megakaryocytic	2	66,608,356	66,608,553
25	MK	<i>PID1</i>	monocytic	2	229,753,747	229,754,002

26	MK	<i>MYLK</i>	megakaryocytic	3	124,844,018	124,844,185
27	MK	<i>MYLK</i>	megakaryocytic	3	124,869,318	124,869,576
28	MK	<i>MYLK</i>	megakaryocytic	3	124,895,526	124,895,719
29	MK	<i>MYLK</i>	megakaryocytic	3	124,897,280	124,897,593
30	MK	<i>MYLK</i>	megakaryocytic	3	124,925,235	124,925,374
31	MK	<i>MYLK</i>	megakaryocytic	3	125,015,596	125,015,865
32	MK	<i>MYLK</i>	megakaryocytic	3	125,043,039	125,043,245
33	MK	<i>MYLK</i>	megakaryocytic	3	125,085,915	125,086,098
34	MK	<i>FAM83A</i>	erythroblastoid	8	124,263,976	124,264,163
35	MK	<i>FAM83A</i>	erythroblastoid	8	124,284,318	124,284,538
36	MK	<i>NFIB</i>	megakaryocytic	9	14,145,441	14,145,629
37	MK	<i>NFIB</i>	megakaryocytic	9	14,189,398	14,189,555
38	MK	<i>NFIB</i>	megakaryocytic	9	14,200,125	14,200,850
39	MK	<i>NFIB</i>	megakaryocytic	9	14,202,185	14,203,126
40	MK	<i>NFIB</i>	megakaryocytic	9	14,204,486	14,204,659
41	MK	<i>NFIB</i>	megakaryocytic	9	14,299,554	14,299,728
42	MK	<i>KLF4</i>	monocytic	9	109,286,348	109,286,517
43	MK	<i>FER1L3</i>	monocytic	10	95,102,486	95,102,667
44	MK	<i>FER1L3</i>	monocytic	10	95,107,552	95,107,709
45	MK	<i>FER1L3</i>	monocytic	10	95,126,230	95,126,399
46	MK	<i>FER1L3</i>	monocytic	10	95,162,999	95,163,416
47	MK	<i>FER1L3</i>	monocytic	10	95,185,908	95,186,083
48	MK	<i>FER1L3</i>	monocytic	10	95,192,142	95,192,393
49	MK	<i>FER1L3</i>	monocytic	10	95,198,267	95,198,447
50	MK	<i>FER1L3</i>	monocytic	10	95,232,410	95,232,551
51	MK	<i>ADCY6</i>	megakaryocytic	12	47,445,610	47,446,237
52	MK	<i>ADCY6</i>	megakaryocytic	12	47,460,026	47,460,291
53	MK	<i>CMTM5</i>	megakaryocytic	14	22,916,720	22,916,905
54	MK	<i>CALB2</i>	erythroblastoid	16	69,949,952	69,950,141
55	MK	<i>CALB2</i>	erythroblastoid	16	69,958,830	69,959,111
56	MK	<i>GDF15</i>	erythroblastoid	19	18,360,289	18,360,482
57	MK	<i>RIN2</i>	monocytic	20	19,863,502	19,863,781
58	MK	<i>RIN2</i>	monocytic	20	19,871,823	19,871,962
59	MK	<i>RIN2</i>	monocytic	20	19,924,018	19,924,243
1	EB	<i>DDEF2</i>	megakaryocytic	2	9,263,856	9,264,367
2	EB	<i>DDEF2</i>	megakaryocytic	2	9,292,425	9,292,593
3	EB	<i>DDEF2</i>	megakaryocytic	2	9,389,371	9,389,510
4	EB	<i>DDEF2</i>	megakaryocytic	2	9,392,990	9,393,351
5	EB	<i>DDEF2</i>	megakaryocytic	2	9,394,746	9,394,892
6	EB	<i>MEIS1</i>	megakaryocytic	2	66,514,142	66,514,283
7	EB	<i>MEIS1</i>	megakaryocytic	2	66,515,690	66,515,914
8	EB	<i>MEIS1</i>	megakaryocytic	2	66,561,947	66,562,116
9	EB	<i>MEIS1</i>	megakaryocytic	2	66,571,277	66,571,637
10	EB	<i>MEIS1</i>	megakaryocytic	2	66,576,847	66,577,049
11	EB	<i>LOC51252</i>	erythroblastoid	2	96,924,685	96,924,852

12	EB	<i>PID1</i>	monocytic	2	229,753,747	229,754,002
13	EB	<i>MYLK</i>	megakaryocytic	3	124,838,096	124,838,321
14	EB	<i>MYLK</i>	megakaryocytic	3	124,844,018	124,844,185
15	EB	<i>MYLK</i>	megakaryocytic	3	124,925,235	124,925,374
16	EB	<i>MYLK</i>	megakaryocytic	3	125,085,779	125,086,098
17	EB	<i>CA1</i>	erythroblastoid	8	86,477,702	86,477,887
18	EB	<i>FAM83A</i>	erythroblastoid	8	124,264,050	124,264,163
19	EB	<i>NFIB</i>	megakaryocytic	9	14,098,110	14,098,253
20	EB	<i>NFIB</i>	megakaryocytic	9	14,303,979	14,304,498
21	EB	<i>KLF4</i>	monocytic	9	109,286,348	109,286,487
22	EB	<i>KLF4</i>	monocytic	9	109,291,850	109,292,093
23	EB	<i>FER1L3</i>	monocytic	10	95,102,464	95,102,667
24	EB	<i>FER1L3</i>	monocytic	10	95,232,428	95,232,551
25	EB	<i>EPB42</i>	erythroblastoid	15	41,300,451	41,300,890
26	EB	<i>HBZ</i>	erythroblastoid	16	142,536	142,677
27	EB	<i>HBZ</i>	erythroblastoid	16	144,102	144,258
28	EB	<i>ERAF</i>	erythroblastoid	16	31,446,616	31,446,727
29	EB	<i>CALB2</i>	erythroblastoid	16	69,958,830	69,958,999
30	EB	<i>GDF15</i>	erythroblastoid	19	18,357,853	18,358,148
31	EB	<i>GDF15</i>	erythroblastoid	19	18,360,091	18,360,482
32	EB	<i>RIN2</i>	monocytic	20	19,876,616	19,876,811
33	EB	<i>RIN2</i>	monocytic	20	19,924,062	19,924,380