

Additional Material

Inferring Gene Regulatory Networks of ALS from Blood Transcriptome Profiles

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Additional Tables

Additional Table 1. Input gene regulator list. Catalogue of 1635 human transcription factors from database of Terrence Donnelly Centre for Cellular and Biomolecular Research (CCBR) - University of Toronto (<http://humanfns.ccbbr.utoronto.ca/download.php>).

Additional Table 2. Lists of hub genes selected from pathological (GRN1), healthy (GRN2), disease-control (GRN3), spinal (GRN4), bulbar (GRN5), female (GRN6) and male (GRN7) ALS network calculated by 95th percentile of mutual information.

Table 1 AM

no.	Gene name
1	<i>ADNP</i>
2	<i>ADNP2</i>
3	<i>AEBP1</i>
4	<i>AEBP2</i>
5	<i>AHCTF1</i>
6	<i>AHDC1</i>
7	<i>AHR</i>
8	<i>AHRR</i>
9	<i>AIRE</i>
10	<i>AKAP8</i>
11	<i>AKAP8L</i>
12	<i>AKNA</i>
13	<i>ALX1</i>
14	<i>ALX3</i>
15	<i>ALX4</i>
16	<i>ANHXL</i>
17	<i>ANKZF1</i>
18	<i>AR</i>
19	<i>ARGFX</i>
20	<i>ARHGAP35</i>
21	<i>ARID2</i>
22	<i>ARID3A</i>
23	<i>ARID3B</i>
24	<i>ARID3C</i>
25	<i>ARID5A</i>
26	<i>ARID5B</i>
27	<i>ARNT</i>
28	<i>ARNT2</i>
29	<i>ARNTL</i>
30	<i>ARNTL2</i>
31	<i>ARX</i>
32	<i>ASCL1</i>
33	<i>ASCL2</i>
34	<i>ASCL3</i>
35	<i>ASCL4</i>
36	<i>ASCL5</i>
37	<i>ASH1L</i>
38	<i>ATF1</i>
39	<i>ATF2</i>
40	<i>ATF3</i>
41	<i>ATF4</i>
42	<i>ATF5</i>
43	<i>ATF6</i>
44	<i>ATF6B</i>
45	<i>ATF7</i>
46	<i>ATMIN</i>
47	<i>ATOH1</i>

48 *ATOH7*
49 *ATOH8*
50 *BACH1*
51 *BACH2*
52 *BARHL1*
53 *BARHL2*
54 *BARX1*
55 *BARX2*
56 *BATF*
57 *BATF2*
58 *BATF3*
59 *BAZ2A*
60 *BAZ2B*
61 *BBX*
62 *BCL11A*
63 *BCL11B*
64 *BCL6*
65 *BCL6B*
66 *BHLHA15*
67 *BHLHA9*
68 *BHLHE22*
69 *BHLHE23*
70 *BHLHE40*
71 *BHLHE41*
72 *BNC1*
73 *BNC2*
74 *BORCS8-MEF2B*
75 *BPTF*
76 *BRF2*
77 *BSX*
78 *C11orf95*
79 *CAMTA1*
80 *CAMTA2*
81 *CARF*
82 *CASZ1*
83 *CBX2*
84 *CC2D1A*
85 *CCDC169-SOHLH2*
86 *CCDC17*
87 *CDC5L*
88 *CDX1*
89 *CDX2*
90 *CDX4*
91 *CEBPA*
92 *CEBPB*
93 *CEBPD*
94 *CEBPE*
95 *CEBPG*
96 *CEBPZ*
97 *CENPA*
98 *CENPB*

99 *CENPBD1*
100 *CENPS*
101 *CENPT*
102 *CENPX*
103 *CGGBP1*
104 *CHAMP1*
105 *CHCHD3*
106 *CIC*
107 *CLOCK*
108 *CPEB1*
109 *CPXCR1*
110 *CREB1*
111 *CREB3*
112 *CREB3L1*
113 *CREB3L2*
114 *CREB3L3*
115 *CREB3L4*
116 *CREB5*
117 *CREBL2*
118 *CREBZF*
119 *CREM*
120 *CRX*
121 *CSRNP1*
122 *CSRNP2*
123 *CSRNP3*
124 *CTCF*
125 *CTCFL*
126 *CUX1*
127 *CUX2*
128 *CXXC1*
129 *CXXC4*
130 *CXXC5*
131 *DACH1*
132 *DACH2*
133 *DBP*
134 *DBX1*
135 *DBX2*
136 *DDIT3*
137 *DEAF1*
138 *DLX1*
139 *DLX2*
140 *DLX3*
141 *DLX4*
142 *DLX5*
143 *DLX6*
144 *DMBX1*
145 *DMRT1*
146 *DMRT2*
147 *DMRT3*
148 *DMRTA1*
149 *DMRTA2*

150 *DMRTB1*
151 *DMRTC2*
152 *DMTF1*
153 *DNMT1*
154 *DNTTIP1*
155 *DOT1L*
156 *DPF1*
157 *DPF3*
158 *DPRX*
159 *DR1*
160 *DRAP1*
161 *DRGX*
162 *DUX1*
163 *DUX3*
164 *DUX4*
165 *DUXA*
166 *DZIP1*
167 *E2F1*
168 *E2F2*
169 *E2F3*
170 *E2F4*
171 *E2F5*
172 *E2F6*
173 *E2F7*
174 *E2F8*
175 *E4F1*
176 *EBF1*
177 *EBF2*
178 *EBF3*
179 *EBF4*
180 *EEA1*
181 *EGR1*
182 *EGR2*
183 *EGR3*
184 *EGR4*
185 *EHF*
186 *ELF1*
187 *ELF2*
188 *ELF3*
189 *ELF4*
190 *ELF5*
191 *ELK1*
192 *ELK3*
193 *ELK4*
194 *EMX1*
195 *EMX2*
196 *EN1*
197 *EN2*
198 *EOMES*
199 *EPAS1*
200 *ERF*

201 *ERG*
202 *ESR1*
203 *ESR2*
204 *ESRRA*
205 *ESRRB*
206 *ESRRG*
207 *ESX1*
208 *ETS1*
209 *ETS2*
210 *ETV1*
211 *ETV2*
212 *ETV3*
213 *ETV3L*
214 *ETV4*
215 *ETV5*
216 *ETV6*
217 *ETV7*
218 *EVX1*
219 *EVX2*
220 *FAM170A*
221 *FAM200B*
222 *FBXL19*
223 *FERD3L*
224 *FEV*
225 *FEZF1*
226 *FEZF2*
227 *FIGLA*
228 *FIZ1*
229 *FLI1*
230 *FLYWCH1*
231 *FOS*
232 *FOSB*
233 *FOSL1*
234 *FOSL2*
235 *FOXA1*
236 *FOXA2*
237 *FOXA3*
238 *FOXB1*
239 *FOXB2*
240 *FOXC1*
241 *FOXC2*
242 *FOXD1*
243 *FOXD2*
244 *FOXD3*
245 *FOXD4*
246 *FOXD4L1*
247 *FOXD4L3*
248 *FOXD4L4*
249 *FOXD4L5*
250 *FOXD4L6*
251 *FOXE1*

252 *FOXE3*
253 *FOXF1*
254 *FOXF2*
255 *FOXG1*
256 *FOXH1*
257 *FOXI1*
258 *FOXI2*
259 *FOXI3*
260 *FOXJ1*
261 *FOXJ2*
262 *FOXJ3*
263 *FOXK1*
264 *FOXK2*
265 *FOXL1*
266 *FOXL2*
267 *FOXM1*
268 *FOXN1*
269 *FOXN2*
270 *FOXN3*
271 *FOXN4*
272 *FOXO1*
273 *FOXO3*
274 *FOXO4*
275 *FOXO6*
276 *FOXP1*
277 *FOXP2*
278 *FOXP3*
279 *FOXP4*
280 *FOXQ1*
281 *FOXR1*
282 *FOXR2*
283 *FOXS1*
284 *GABPA*
285 *GATA1*
286 *GATA2*
287 *GATA3*
288 *GATA4*
289 *GATA5*
290 *GATA6*
291 *GATAD2A*
292 *GATAD2B*
293 *GBX1*
294 *GBX2*
295 *GCM1*
296 *GCM2*
297 *GFI1*
298 *GFI1B*
299 *GLI1*
300 *GLI2*
301 *GLI3*
302 *GLI4*

303 *GLIS1*
304 *GLIS2*
305 *GLIS3*
306 *GLMP*
307 *GLYR1*
308 *GMEB1*
309 *GMEB2*
310 *GPBP1*
311 *GPBP1L1*
312 *GRHL1*
313 *GRHL2*
314 *GRHL3*
315 *GSC*
316 *GSC2*
317 *GSX1*
318 *GSX2*
319 *GTF2B*
320 *GTF2I*
321 *GTF2IRD1*
322 *GTF2IRD2*
323 *GTF2IRD2B*
324 *GTF3A*
325 *GZF1*
326 *HAND1*
327 *HAND2*
328 *HBP1*
329 *HDX*
330 *HELT*
331 *HES1*
332 *HES2*
333 *HES3*
334 *HES4*
335 *HES5*
336 *HES6*
337 *HES7*
338 *HESX1*
339 *HEY1*
340 *HEY2*
341 *HEYL*
342 *HHEX*
343 *HIC1*
344 *HIC2*
345 *HIF1A*
346 *HIF3A*
347 *HINFP*
348 *HIVEP1*
349 *HIVEP2*
350 *HIVEP3*
351 *HKR1*
352 *HLF*
353 *HLX*

354 *HMBOX1*
355 *HMG20A*
356 *HMG20B*
357 *HMGA1*
358 *HMGA2*
359 *HMGN3*
360 *HMX1*
361 *HMX2*
362 *HMX3*
363 *HNFB1A*
364 *HNFB1B*
365 *HNFB4A*
366 *HNFB4G*
367 *HOMEZ*
368 *HOXA1*
369 *HOXA10*
370 *HOXA11*
371 *HOXA13*
372 *HOXA2*
373 *HOXA3*
374 *HOXA4*
375 *HOXA5*
376 *HOXA6*
377 *HOXA7*
378 *HOXA9*
379 *HOXB1*
380 *HOXB13*
381 *HOXB2*
382 *HOXB3*
383 *HOXB4*
384 *HOXB5*
385 *HOXB6*
386 *HOXB7*
387 *HOXB8*
388 *HOXB9*
389 *HOXC10*
390 *HOXC11*
391 *HOXC12*
392 *HOXC13*
393 *HOXC4*
394 *HOXC5*
395 *HOXC6*
396 *HOXC8*
397 *HOXC9*
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399 *HOXD10*
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401 *HOXD12*
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404 *HOXD4*

405 *HOXD8*
406 *HOXD9*
407 *HSF1*
408 *HSF2*
409 *HSF4*
410 *HSF5*
411 *HSFX1*
412 *HSFX2*
413 *HSFY1*
414 *HSFY2*
415 *IKZF1*
416 *IKZF2*
417 *IKZF3*
418 *IKZF4*
419 *IKZF5*
420 *INSM1*
421 *INSM2*
422 *IRF1*
423 *IRF2*
424 *IRF3*
425 *IRF4*
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427 *IRF6*
428 *IRF7*
429 *IRF8*
430 *IRF9*
431 *IRX1*
432 *IRX2*
433 *IRX3*
434 *IRX4*
435 *IRX5*
436 *IRX6*
437 *ISL1*
438 *ISL2*
439 *ISX*
440 *JAZF1*
441 *JDP2*
442 *JRK*
443 *JRKL*
444 *JUN*
445 *JUNB*
446 *JUND*
447 *KAT7*
448 *KCMF1*
449 *KCNIP3*
450 *KDM2A*
451 *KDM2B*
452 *KDM5B*
453 *KIN*
454 *KLF1*
455 *KLF10*

456 *KLF11*
457 *KLF12*
458 *KLF13*
459 *KLF14*
460 *KLF15*
461 *KLF16*
462 *KLF17*
463 *KLF2*
464 *KLF3*
465 *KLF4*
466 *KLF5*
467 *KLF6*
468 *KLF7*
469 *KLF8*
470 *KLF9*
471 *KMT2A*
472 *KMT2B*
473 *L3MBTL1*
474 *L3MBTL3*
475 *L3MBTL4*
476 *LBX1*
477 *LBX2*
478 *LCOR*
479 *LCORL*
480 *LEF1*
481 *LEUTX*
482 *LHX1*
483 *LHX2*
484 *LHX3*
485 *LHX4*
486 *LHX5*
487 *LHX6*
488 *LHX8*
489 *LHX9*
490 *LIN28A*
491 *LIN28B*
492 *LIN54*
493 *LMX1A*
494 *LMX1B*
495 *LTF*
496 *LYL1*
497 *MAF*
498 *MAFA*
499 *MAFB*
500 *MAFF*
501 *MAFG*
502 *MAFK*
503 *MAX*
504 *MAZ*
505 *MBD1*
506 *MBD2*

507 *MBD3*
508 *MBD4*
509 *MBD6*
510 *MBNL2*
511 *MECOM*
512 *MECP2*
513 *MEF2A*
514 *MEF2B*
515 *MEF2C*
516 *MEF2D*
517 *MEIS1*
518 *MEIS2*
519 *MEIS3*
520 *MEOX1*
521 *MEOX2*
522 *MESP1*
523 *MESP2*
524 *MGA*
525 *MITF*
526 *MIXL1*
527 *MKX*
528 *MLX*
529 *MLXIP*
530 *MLXIPL*
531 *MNT*
532 *MNX1*
533 *MSANTD1*
534 *MSANTD3*
535 *MSANTD4*
536 *MSC*
537 *MSGN1*
538 *MSX1*
539 *MSX2*
540 *MTERF1*
541 *MTERF2*
542 *MTERF3*
543 *MTERF4*
544 *MTF1*
545 *MTF2*
546 *MXD1*
547 *MXD3*
548 *MXD4*
549 *MXI1*
550 *MYB*
551 *MYBL1*
552 *MYBL2*
553 *MYC*
554 *MYCL*
555 *MYCN*
556 *MYF5*
557 *MYF6*

558 *MYNN*
559 *MYOD1*
560 *MYOG*
561 *MYPOP*
562 *MYRF*
563 *MYRFL*
564 *MYSM1*
565 *MYT1*
566 *MYT1L*
567 *MZF1*
568 *NACC2*
569 *NAIF1*
570 *NANOG*
571 *NANOGNB*
572 *NANOGP8*
573 *NCOA1*
574 *NCOA2*
575 *NCOA3*
576 *NEUROD1*
577 *NEUROD2*
578 *NEUROD4*
579 *NEUROD6*
580 *NEUROG1*
581 *NEUROG2*
582 *NEUROG3*
583 *NFAT5*
584 *NFATC1*
585 *NFATC2*
586 *NFATC3*
587 *NFATC4*
588 *NFE2*
589 *NFE2L1*
590 *NFE2L2*
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594 *NFIB*
595 *NFIC*
596 *NFIL3*
597 *NFIX*
598 *NFKB1*
599 *NFKB2*
600 *NFX1*
601 *NFXL1*
602 *NFYA*
603 *NFYB*
604 *NFYC*
605 *NHLH1*
606 *NHLH2*
607 *NKRF*
608 *NKX1-1*

609 *NKX1-2*
610 *NKX2-1*
611 *NKX2-2*
612 *NKX2-3*
613 *NKX2-4*
614 *NKX2-5*
615 *NKX2-6*
616 *NKX2-8*
617 *NKX3-1*
618 *NKX3-2*
619 *NKX6-1*
620 *NKX6-2*
621 *NKX6-3*
622 *NME2*
623 *NOBOX*
624 *NOTO*
625 *NPAS1*
626 *NPAS2*
627 *NPAS3*
628 *NPAS4*
629 *NR0B1*
630 *NR1D1*
631 *NR1D2*
632 *NR1H2*
633 *NR1H3*
634 *NR1H4*
635 *NR1I2*
636 *NR1I3*
637 *NR2C1*
638 *NR2C2*
639 *NR2E1*
640 *NR2E3*
641 *NR2F1*
642 *NR2F2*
643 *NR2F6*
644 *NR3C1*
645 *NR3C2*
646 *NR4A1*
647 *NR4A2*
648 *NR4A3*
649 *NR5A1*
650 *NR5A2*
651 *NR6A1*
652 *NRF1*
653 *NRL*
654 *OLIG1*
655 *OLIG2*
656 *OLIG3*
657 *ONECUT1*
658 *ONECUT2*
659 *ONECUT3*

660 *OSR1*
661 *OSR2*
662 *OTP*
663 *OTX1*
664 *OTX2*
665 *OVOL1*
666 *OVOL2*
667 *OVOL3*
668 *PA2G4*
669 *PATZ1*
670 *PAX1*
671 *PAX2*
672 *PAX3*
673 *PAX4*
674 *PAX5*
675 *PAX6*
676 *PAX7*
677 *PAX8*
678 *PAX9*
679 *PBX1*
680 *PBX2*
681 *PBX3*
682 *PBX4*
683 *PCGF2*
684 *PCGF6*
685 *PDX1*
686 *PEG3*
687 *PGR*
688 *PHF1*
689 *PHF19*
690 *PHF20*
691 *PHF21A*
692 *PHOX2A*
693 *PHOX2B*
694 *PIN1*
695 *PITX1*
696 *PITX2*
697 *PITX3*
698 *PKNOX1*
699 *PKNOX2*
700 *PLAG1*
701 *PLAGL1*
702 *PLAGL2*
703 *PLSCR1*
704 *POGK*
705 *POU1F1*
706 *POU2AF1*
707 *POU2F1*
708 *POU2F2*
709 *POU2F3*
710 *POU3F1*

711 *POU3F2*
712 *POU3F3*
713 *POU3F4*
714 *POU4F1*
715 *POU4F2*
716 *POU4F3*
717 *POU5F1*
718 *POU5F1B*
719 *POU5F2*
720 *POU6F1*
721 *POU6F2*
722 *PPARA*
723 *PPARD*
724 *PPARG*
725 *PRDM1*
726 *PRDM10*
727 *PRDM12*
728 *PRDM13*
729 *PRDM14*
730 *PRDM15*
731 *PRDM16*
732 *PRDM2*
733 *PRDM4*
734 *PRDM5*
735 *PRDM6*
736 *PRDM8*
737 *PRDM9*
738 *PREB*
739 *PRMT3*
740 *PROP1*
741 *PROX1*
742 *PROX2*
743 *PRR12*
744 *PRRX1*
745 *PRRX2*
746 *PTF1A*
747 *PURA*
748 *PURB*
749 *PURG*
750 *RAG1*
751 *RARA*
752 *RARB*
753 *RARG*
754 *RAX*
755 *RAX2*
756 *RBAK*
757 *RBCK1*
758 *RBPJ*
759 *RBPJL*
760 *RBSN*
761 *REL*

762 *RELA*
763 *RELB*
764 *REPIN1*
765 *REST*
766 *REXO4*
767 *RFX1*
768 *RFX2*
769 *RFX3*
770 *RFX4*
771 *RFX5*
772 *RFX6*
773 *RFX7*
774 *RFX8*
775 *RHOXF1*
776 *RHOXF2*
777 *RHOXF2B*
778 *RLF*
779 *RORA*
780 *RORB*
781 *RORC*
782 *RREB1*
783 *RUNX1*
784 *RUNX2*
785 *RUNX3*
786 *RXRA*
787 *RXRB*
788 *RXRG*
789 *SAFB*
790 *SAFB2*
791 *SALL1*
792 *SALL2*
793 *SALL3*
794 *SALL4*
795 *SATB1*
796 *SATB2*
797 *SCMH1*
798 *SCML4*
799 *SCRT1*
800 *SCRT2*
801 *SCX*
802 *SEBOX*
803 *SETBP1*
804 *SETDB1*
805 *SETDB2*
806 *SGSM2*
807 *SHOX*
808 *SHOX2*
809 *SIM1*
810 *SIM2*
811 *SIX1*
812 *SIX2*

813 *SIX3*
814 *SIX4*
815 *SIX5*
816 *SIX6*
817 *SKI*
818 *SKIL*
819 *SKOR1*
820 *SKOR2*
821 *SLC2A4RG*
822 *SMAD1*
823 *SMAD3*
824 *SMAD4*
825 *SMAD5*
826 *SMAD9*
827 *SMYD3*
828 *SNAI1*
829 *SNAI2*
830 *SNAI3*
831 *SNAPC2*
832 *SNAPC4*
833 *SNAPC5*
834 *SOHLH1*
835 *SOHLH2*
836 *SON*
837 *SOX1*
838 *SOX10*
839 *SOX11*
840 *SOX12*
841 *SOX13*
842 *SOX14*
843 *SOX15*
844 *SOX17*
845 *SOX18*
846 *SOX2*
847 *SOX21*
848 *SOX3*
849 *SOX30*
850 *SOX4*
851 *SOX5*
852 *SOX6*
853 *SOX7*
854 *SOX8*
855 *SOX9*
856 *SP1*
857 *SP100*
858 *SP110*
859 *SP140*
860 *SP140L*
861 *SP2*
862 *SP3*
863 *SP4*

864 *SP5*
865 *SP6*
866 *SP7*
867 *SP8*
868 *SP9*
869 *SPDEF*
870 *SPEN*
871 *SPI1*
872 *SPIB*
873 *SPIC*
874 *SPZ1*
875 *SRCAP*
876 *SREBF1*
877 *SREBF2*
878 *SRF*
879 *SRY*
880 *ST18*
881 *STAT1*
882 *STAT2*
883 *STAT3*
884 *STAT4*
885 *STAT5A*
886 *STAT5B*
887 *STAT6*
888 *T*
889 *TAL1*
890 *TAL2*
891 *TBP*
892 *TBPL1*
893 *TBPL2*
894 *TBR1*
895 *TBX1*
896 *TBX10*
897 *TBX15*
898 *TBX18*
899 *TBX19*
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AADACL4	AARS2	AADACL4	ABHD13	AADAT	AADACL4
AADAT	AASDH	AASDH	ACTL8	ABCG1	AADAT
AASDH	ABCG5	ABCD2	ADAMTSL5	ADAM7	AASDH
ABCD2	ABP1	ABCG5	ADH1B	ADM	ABCD2
ABCG5	ACAA2	ABP1	ADRM1	AK7	ABCG1
ABHD13	ACAD11	ACBD3	AFAR3	ALAS1	ABCG5
ABP1	ACBD6	ACBD6	ANKRD32	ALDH1A3	ABHD13
ACBD3	ACCN1	ACCN1	APOBEC1	AP3B2	ABP1
ACBD6	ACCN5	ACCN5	APOBEC3H	API5	ACBD3
ACCN1	ACCSL	ACCSL	ARD1B	AQP9	ACBD6
ACCSL	ACOX3	ACO1	ARL3	ARIH2	ACCN1
ACO1	ACSL5	ACOX3	ASF1B	ASTN2	ACCN5
ACOX3	ACSM3	ACSM2A	ATP6V0B	ATP2A2	ACCSL
ACSM2A	ACTG1	ACTG1	ATPBD3	BMP7	ACO1
ACTG1	ACTL6B	ADAMTS10	AXUD1	BTAF1	ACOX3
ACTL8	ADAMTS10	ADAMTS16	BAIAP2L1	BTG3	ACSM2A
ADAMTS16	ADAMTS16	ADAMTS8	BAP1	CA5A	ACTG1
ADAMTS8	ADAMTS8	ADAMTSL3	BMP3	CBLN1	ADAMTS16
ADAMTSL3	ADAMTSL3	ADAMTSL5	BRI3	CCDC14	ADAMTS8
ADAMTSL5	ADH1B	ADARB1	BTF3	CCDC148	ADAMTSL3
ADH1B	ADM	ADH1B	BTN2A1	CCDC35	ADH1B
ADM	ADRA1B	ADM	C8B	CCDC58	ADM
ADPGK	ADRA2A	ADRB1	CACNA1A	CD34	ADRB1
ADRB1	ADRB1	ADRBK2	CANX	CD8B	ADRBK2
ADRBK2	ADRBK2	ADRM1	CCDC50	CDK5RAP1	ADRM1
ADRM1	ADRM1	AES	CCDC81	CDKN1A	AES
AES	AES	AFAR3	CCNG1	CDKN1C	AFAR3
AFAR3	AFF4	AFF4	CCPG1	CLDN11	AFF4
AFF4	AGPS	AGPS	CD164	CLEC17A	AHCTF1
AHCTF1	AHCTF1	AHCTF1	CD209	CLEC2B	AK7
AKR1CL1	AKAP8L	AKR1CL1	CD81	CLMN	AKR1CL1
ALAS2	ALAD	ALAD	CDC123	CMPK1	ALAD
ALDH1L2	ALAS1	ALAS2	CDYL	CNN1	ALAS2
ALG1L	ALAS2	ALDH1L2	CELA2B	COMMD1	ALDH1L2
ALKBH4	ALDH1L2	ALG1L	CELSR3	COMMD2	ALG1L
ALMS1	ALG1L	ALKBH4	CENPE	COPS3	ALKBH4
ALPK3	ALMS1	ALMS1	CHI3L2	CTDSPL2	ALMS1
ALS2CR4	ALPK2	ALPK2	CHP2	CTNNB1	ALPK3
AMACR	AMACR	ALPK3	CLYBL	CXCL1	AMACR
AMELY	AMELY	AMACR	CMPK2	DAAM2	AMELY
ANAPC1	AMY2B	AMELY	COL19A1	DCLRE1A	ANAPC1
ANKK1	ANAPC1	AMY2B	CORO1B	DEFB118	ANKHD1-EIF4EBP3
ANKRD13D	ANKRD13D	ANAPC1	CPLX1	DGAT1	ANKRD19

ANKRD19	ANKRD19	ANKRD13D	CSMD1	DNAH8	ANKRD32
ANKRD32	ANKRD29	ANKRD19	CSPP1	DOPEY1	ANKRD58
ANKRD58	ANKRD32	ANKRD32	CST4	DYRK1A	ANO2
ANO2	ANKRD39	ANKRD58	CSTF3	EIF1AX	ANP32C
ANP32C	ANO2	ANO2	CTCF	EIF4E3	ANTXR1
ANTXR1	ANP32C	ANP32C	CTHRC1	ETV5	ANTXR2
ANTXR2	ANTXR1	ANTXR1	CXXC1	FBLN7	ANXA4
ANXA4	ANTXR2	ANTXR2	CYCS	FBXL3	AOC3
AOC3	AP1M2	ANXA4	CYTH1	FBXO36	AP1G2
AP1M2	AP2B1	AOC3	DGKI	FER1L4	AP1M2
AP2B1	APLF	AP1M2	DHFR	FKBP7	AP2B1
APLF	APLNR	AP2B1	DHFRL1	FLNA	API5
APOA4	APOA5	APLF	DHRS3	FOXD3	APLF
APOBEC1	APOBEC1	APOBEC1	DHX37	FZR1	APOA4
APOBEC3H	APOBEC3H	APOBEC3H	DNAJB7	G6PC2	APOBEC1
APOH	APTX	APTX	DNM1	GATAD1	APOBEC3H
APTX	ARGFXP2	AQP7	DNPEP	GDF10	APOH
AQP6	ARHGAP20	AQP9	DOC2A	GIMAP8	APTX
AQP7	ARHGEF10L	ARFIP2	DOK7	GNPDA1	AQP7
AQP9	ARHGEF5	ARGFXP2	DPY19L3	GPR89C	AQP9
ARD1B	ARID3C	ARHGEF10L	DR1	GSTK1	ARD1B
ARFIP2	ARL2	ARL2	DSE	GSTT2	AREG
ARGFXP2	ARL3	ARL3	DTX1	GTF2IRD2	ARFIP2
ARHGEF10L	ARL6IP1	ARL6IP1	DUSP3	GUCA1B	ARGFXP2
ARID5A	ART1	ART1	DUXAP3	HDAC2	ARHGEF10L
ARL2	ASB14	ASB14	DYRK4	HIC2	ARID5A
ARL3	ASF1B	ASF1B	ECHDC1	HINT2	ARL2
ART1	ASPRV1	ASPRV1	EFCAB7	HIST1H2BM	ARL3
ASB14	ASPSCR1	ASPSCR1	EHMT1	HIST2H2BF	ARL6IP1
ASPRV1	ASS1	ASXL1	EIF4EBP1	HNRNPD	ART1
ASPSCR1	ASXL1	ASXL3	EXD3	HOXD1	ASB14
ASXL1	ATE1	ATE1	EZH2	HOXD13	ASCL4
ASXL3	ATF4	ATF7IP2	FAAH2	HPN	ASF1B
ATE1	ATP10D	ATP12A	FBXL2	IFT172	ASPRV1
ATF7IP2	ATP12A	ATP2A2	FIT1	IL20RA	ASPSCR1
ATP12A	ATP2A2	ATP6V0B	FNDC1	IRAK4	ASTN2
ATP6V0B	ATP2B3	ATP6V1G2	FOXS1	ITIH2	ASXL1
ATP6V1G2	ATP6V1G2	ATPBD3	FRAT2	KCNA10	ASXL3
ATPBD3	ATP8B2	ATXN3L	FRMD1	KCTD2	ATE1
ATXN3L	ATPBD3	AXUD1	FTHL8	KIF20A	ATP12A
AXUD1	ATXN3L	AZI1	GABRP	KLHL20	ATP6V0B
AZI1	AZI1	B3GNT1	GALNT14	KRTAP5-9	ATP6V1G2
B3GNT1	B3GNT9	B4GALNT4	GHRHR	LCE2A	ATXN3L
B4GALNT4	B4GALNT4	B4GALT7	GJA5	LHCGR	AXUD1
B4GALT7	B4GALT7	BACH1	GJB6	LILRA2	AZI1
BACH1	BACH1	BAG4	GLRA3	LIN28B	B3GNT1
BAG4	BAIAP2L1	BAIAP2L1	GPR50	LRAT	B4GALNT4
BAIAP2L1	BANF2	BAK1	HEBP2	LRRC59	B4GALT7
BAK1	BAP1	BANF2	HELZ	LRRC8D	BACH1
BANF2	BAT1	BAP1	HIRIP3	LY6E	BAG4
BAP1	BBOX1	BAT1	HIST1H2BF	LY6G6F	BAK1

BBC3	BBS5	BBC3	HIVEP1	MAPK10	BANF2
BCAN	BCL7C	BCL7C	HMCN1	MAZ	BAT1
BCL7C	BCMO1	BCMO1	HSD11B1	MGC5457	BBC3
BCR	BCR	BCR	HSN2	MGC57346	BCAN
BEND3	BEND3	BEND3	HSPBP1	MGC71993	BCL7C
BEND6	BEND6	BEND6	HTRA2	MICB	BCR
BMPR1B	BMPR1B	BMPR1A	IDO2	MMD2	BEND3
BPIL3	BRCA2	BMPR1B	IFITM5	MRPS18A	BEND6
BRCA2	BRCC3	BRCA2	IFNE1	MS4A6A	BMPR1B
BRCC3	BRD1	BRCC3	INE1	MT1F	BRCA2
BRD1	BRD8	BRD1	INHA	MTG1	BRCC3
BRD8	BREA2	BRD8	INHBA	MYH10	BRD1
BREA2	BRI3	BREA2	INPP5A	MYOCD	BRD8
BRI3	BTD	BRI3	INTS7	NFATC3	BREA2
BTD	BTG1	BTD	IP6K3	NKPD1	BTD
BTN2A1	C1QTNF3	BTF3	IQCK	NOC4L	BTN2A1
C1D	C4BPA	C1QL4	JAZF1	NOL7	C1QL4
C1QL4	CA13	C1QTNF3	KBTD10	NR2F1	C1QTNF3
C1QTNF3	CA5A	C3	KCNH4	NRXN3	C3
C3	CA9	C5	KCTD9	NT5C1B	C5
C5	CAB39L	CA13	KIF24	OR10H3	CA5A
C8B	CABIN1	CA5A	KIF5B	OR1J4	CAB39L
CA5A	CACNG4	CABIN1	KRTAP10-12	OR2T10	CABIN1
CABIN1	CACNG7	CACNG4	KRTAP19-7	OR52B6	CACNA1A
CADM1	CADM1	CADM1	KRTAP23-1	P2RY1	CACNG4
CADM3	CADM3	CADM3	LALBA	PABPC5	CACNG7
CALU	CAMK2D	CANX	LCN2	PARP9	CADM1
CAP2	CAP2	CAP2	LHFPL2	PCDH17	CADM3
CARKD	CAPN5	CARKD	LILRA4	PEX5L	CALU
CASC1	CARKD	CATSPER1	LIM2	PHKG2	CAP2
CASQ1	CASP8	CATSPER3	LMO3	PIK3IP1	CARKD
CATSPER1	CATSPER1	CBLC	LPAL2	PLAC8L1	CASK
CATSPER3	CATSPERB	CBS	LPPR1	PLEKHH3	CASQ1
CBLC	CBS	CCDC106	LRRC45	PLSCR1	CATSPER1
CBS	CCDC106	CCDC138	LRRN2	PNRC1	CATSPER3
CCDC106	CCDC148	CCDC148	LRRN4CL	PPIE	CBLC
CCDC138	CCDC50	CCDC25	LSM11	PRLH	CBS
CCDC148	CCDC58	CCDC50	LYPD5	PRPSAP1	CCDC106
CCDC24	CCDC7	CCDC58	MAGEB18	PSMC4	CCDC138
CCDC25	CCDC8	CCDC7	MAPK7	PSMD11	CCDC144NL
CCDC7	CCDC82	CCDC75	MARS2	PTPRH	CCDC148
CCDC75	CCHCR1	CCDC81	MED24	QRICH1	CCDC24
CCDC81	CCM2	CCDC82	MEIS3	RAB11FIP5	CCDC25
CCDC82	CCNA2	CCHCR1	METTL2A	RANBP3L	CCDC35
CCHCR1	CCNG1	CCM2	MFF	RBM11	CCDC58
CCM2	CCR5	CCNA2	MGC15763	RC3H1	CCDC7
CCNA2	CD19	CCNB3	MGC34829	RDH8	CCDC75
CCND1	CD1C	CCND1	MID1IP1	RHOBTB3	CCDC81
CCNT1	CD200	CCNG1	MLL	RNASE9	CCDC82
CCR5	CD24	CCNT1	MRPL45	RPL27A	CCDC88A
CCR7	CD302	CCR5	MTM	RPS4X	CCHCR1

CD1C	CD69	CD1C	MYBL2	RUNDC3A	CCM2
CD1D	CD79A	CD1D	MYO1B	S100A9	CCNA2
CD200	CD86	CD200	NBL1	SAMD13	CCND1
CD24	CD8B	CD24	NCOA6	SCYL3	CCNG1
CD274	CD99L2	CD274	NEK2	Septin 9	CCNT1
CD302	CDC14C	CD302	NKX2-3	SF3B1	CCPG1
CD69	CDC42	CD69	NMBR	SGCB	CCR5
CD79A	CDKN1A	CD79A	NOL8	SH2D5	CD1C
CD86	CDT1	CD86	NOP14	SIM2	CD1D
CD99L2	CDYL	CD8B	N-PAC	SLC12A8	CD200
CDC123	CEACAM7	CD99L2	NRG1	SLC34A1	CD24
CDC42	CELSR3	CDC14C	NSMAF	SLC43A2	CD274
CDK5RAP1	CENPE	CDC42	NSUN5C	SLC4A9	CD302
CDKN1C	CENPK	CDC42EP4	NTNG2	SLC5A8	CD34
CELA2B	CENPM	CDK2	OLFM3	SPRED3	CD69
CENPE	CENTD2	CDKN1A	OPN3	SUNC1	CD79A
CENPM	CES2	CDYL	OR2AG2	TAS2R39	CD81
CENTD2	CFC1	CELA2B	OR2H2	TAS2R41	CD86
CES2	CGI-96	CELSR3	OR4D9	TBC1D9B	CD8B
CFC1	CHD8	CENPE	OR51S1	THBS4	CD99L2
CGI-96	CHKA	CENPM	OR52I1	THEM4	CDC123
CHMP6	CHMP6	CENTD2	OR5AS1	TLN2	CDC14C
CHP2	CHP2	CES2	OR5B21	TMEM132D	CDC42
CHRD1	CHRD1	CFC1	OR5K4	TMEM14A	CDK5RAP1
CHRNE	CHRNE	CGI-96	OR6K3	TMX1	CDKN1C
CHST14	CHST14	CHI3L2	OR7A5	TPTE2	CDYL
CHUK	CHUK	CHKA	ORC5L	TRAPPC9	CELA2B
CILP	CIAPIN1	CHMP6	PAK7	TRMU	CENPM
CIRBP	CIB1	CHP2	PARP3	TTC8	CENTD2
CKM	CISH	CHRD1	PBX2	UAP1L1	CES2
CLCN1	CKM	CHRNE	PCDHB8	UBASH3A	CFC1
CLEC17A	CLCN1	CHST14	PHYH	UBE4A	CFHR3
CLEC5A	CLCNKB	CHUK	PI3	UBR4	CGI-96
CLEC7A	CLDN11	CIRBP	PIP4K2B	UBXN6	CHKA
CLK2P	CLK2P	CISH	PLA2G15	UGCGL2	CHMP6
CLU	CLMN	CKM	PLA2R1	UNC119	CHP2
CMPK2	CLU	CLCN1	PMEPA1	UPK1B	CHRD1
CMTM8	CMPK2	CLEC7A	PMP2	UROD	CHRNE
CNNM2	CMTM8	CLK2P	POU5F1	USP37	CHST14
CNOT8	CNN1	CLMN	PPA2	VNN2	CHST9
CNR2	CNNM2	CLU	PPM1H	VPS26B	CHUK
COBLL1	CNOT7	CMPK2	PPP1R13B	VPS28	CILP
COL20A1	CNPY3	CMTM8	PPP4R1	WHSC1L1	CIRBP
COL2A1	COBLL1	CNNM2	PREB	WRB	CKM
COL4A1	COL20A1	CNR2	PRPF18	YWHAG	CLCA1
COL6A2	COL4A6	COBLL1	PRPF4B	ZBTB39	CLCN1
COL9A3	COL8A2	COL20A1	PRR16	ZNF330	CLCN5
COMMD6	COL9A3	COL2A1	PSG11	ZNF362	CLEC2B
COPS3	COMMD1	COL4A6	PSKH2	ZNF542	CLEC5A
COQ2	COQ2	COL6A2	PSMB6	ZNF585A	CLEC7A
COQ5	COQ5	COL9A3	PTPDC1	AADA4L4	CLK2P

COX4NB	COX4NB	COMMD1	PTPRJ	AASDH	CLU
COX5B	COX8C	COMMD6	RAB22A	ABAT	CLYBL
COX8C	CPAMD8	COQ2	RAB8A	ABCD2	CMAS
CPAMD8	CPB2	COQ5	RAD23A	ABCG5	CMPK1
CPVL	CPLX1	COX15	RBM17	ABP1	CMTM3
CPZ	CPVL	COX4NB	RBX1	ACBD3	CMTM8
CRABP1	CPZ	COX5B	RDH14	ACBD6	CNN1
CRB2	CRABP1	COX8C	RFC3	ACCN1	CNNM2
CRISP2	CRB2	CPAMD8	RGNEF	ACCN5	CNR2
CRISP3	CRISP3	CPB2	RING1	ACCSL	COBLL1
CROCC	CRLF3	CPVL	RLTPR	ACO1	COL19A1
CRTAP	CRNKL1	CPZ	RND1	ACOX3	COL20A1
CSAG3	CROCC	CRABP1	RNF13	ACSM2A	COL2A1
CSDA	CRSP6	CRAT	RNF135	ACTG1	COL4A1
CSN1S2A	CRY2	CRB2	RNF166	ADAMTS16	COL6A2
CSRP2	CSAG3	CRISP2	RNF168	ADAMTS8	COL9A3
CTCF	CSDA	CRISP3	RP2	ADAMTSL3	COMMD2
CTDP1	CSF2	CRNKL1	RPL10	ADCY9	COMMD6
CTDSP1	CSMD1	CROCC	RPL6	ADRB1	COPS3
CTHRC1	CSNK1A1	CSAG3	RRM2B	ADRBK2	COQ2
CTSH	CSPP1	CSDA	SAA2	AES	COQ5
CTSL2	CTBP1	CSMD1	SALL1	AFF4	COX15
CTTN	CTCF	CSN1S2A	SASS6	AHCTF1	COX4NB
CTTNBP2NL	CTDP1	CSRP2	SCFD1	AKR1CL1	COX5B
CTXN1	CTDSP1	CSTF3	SCML4	ALAS2	COX8C
CUZD1	CTDSPL2	CTCF	SDCCAG3	ALDH1L2	CPAMD8
CX3CL1	CTHRC1	CTDP1	SDHAF1	ALG1L	CPLX3
CXCL1	CTSH	CTDSP1	SEC24B	ALKBH4	CPVL
CXCL10	CTSL2	CTSH	SEC61G	ALMS1	CPZ
CXCL14	CTTN	CTSL2	SEMA4B	ALPK3	CRABP1
CXCL6	CTXN1	CTTN	SEPP1	ALS2CR4	CRB2
CXXC1	CUL9	CTXN1	SLC17A9	AMACR	CRISP2
CYB5R4	CX3CL1	CUZD1	SLC2A12	AMELY	CRISP3
CYCS	CXCL1	CX3CL1	SLC33A1	ANAPC1	CRNKL1
CYP11B2	CXCL10	CXCL1	SLC34A2	ANKK1	CSAG3
CYP27B1	CXCL14	CXCL10	SLC39A11	ANKRD13D	CSDA
CYP4F2	CXCL6	CXCL14	SLIT1	ANKRD19	CSN1S2A
CYP4Z1	CXXC1	CXCL6	SOC57	ANKRD58	CSRP2
CYP51A1	CYCS	CXXC1	SPCS2	ANO2	CSTF3
CYTH1	CYP11B2	CYB5R4	SPN	ANP32C	CTCF
DACT1	CYP27B1	CYCS	SPOCD1	ANTXR1	CTDP1
DAK	CYP46A1	CYP11B2	SRGAP2	ANTXR2	CTDSP1
DAPK1	CYP4F12	CYP27B1	SRL	ANXA4	CTHRC1
DARC	CYP4F2	CYP46A1	SSR4	AOC3	CTSH
DBF4B	CYP4Z1	CYP4F2	SSX4	AP1M2	CTSL2
DCAMKL3	CYP51A1	CYP4Z1	ST18	AP2B1	CTTN
DCUN1D1	CYTH1	CYP51A1	ST8SIA4	APLF	CTTNBP2NL
DCXR	CYYR1	CYTH1	STAMBPL1	APOA4	CTXN1
DDA1	DAK	CYYR1	STAT5B	APOH	CUZD1
DDAH1	DAPL1	DACT1	STC1	APTX	CX3CL1
DDHD1	DARC	DAK	STYK1	AQP6	CXCL10

DDO	DBF4B	DAPL1	SULT1B1	AQP7	CXCL14
DDR2	DCXR	DARC	SV2B	ARFIP2	CXCL6
DDX23	DDA1	DBF4B	SYN1	ARGFXP2	CXXC1
DEFA1B	DDR2	DCAMKL3	TAC3	ARHGEF10L	CYB5R4
DGKI	DDX23	DCUN1D1	TAS2R19	ART1	CYCS
DGKQ	DDX31	DCXR	TBX19	ASB14	CYP11B2
DHFR	DDX49	DDA1	TCEAL7	ASPRV1	CYP27B1
DHFRL1	DDX50	DDAH1	TCEB1	ASPSCR1	CYP4F12
DHRS3	DEGS2	DDHD1	TCF25	ASXL1	CYP4F2
DHX30	DGKQ	DDO	TEX28	ASXL3	CYP4Z1
DHX32	DHCR7	DDR2	TGM1	ATE1	CYP51A1
DHX33	DHFR	DDX23	TIMM22	ATF7IP2	DACT1
DHX37	DHFRL1	DEFA1B	TIPIN	ATP12A	DAK
DHX40	DHH	DGKQ	TLR9	ATP6V1G2	DAPK1
DHX40P	DHRS3	DHFR	TMEM144	ATXN3L	DARC
DIAPH1	DHX30	DHFRL1	TMEM161A	AZI1	DBF4B
DLEC1	DHX32	DHRS3	TMEM176A	B3GNT1	DCAMKL3
DLG1	DHX37	DHX30	TMPRSS11B	B4GALNT4	DCUN1D1
DLG2	DHX40	DHX32	TMUB2	B4GALT7	DCXR
DLL1	DHX40P	DHX33	TP53BP1	BACH1	DDA1
DMGDH	DIAPH1	DHX37	TPP2	BAG4	DDAH1
DNAH17	DLEC1	DHX40	TPPP3	BAK1	DDHD1
DNAH9	DLL1	DHX40P	TRPC2	BANF2	DDO
DNAJA1	DLX3	DHX9	TRPV5	BBC3	DDR2
DNAJC27	DMGDH	DIAPH1	TSPAN11	BCAN	DDX23
DNCL1	DNAH17	DKK4	TSPAN33	BCL7C	DEFA1B
DNM1	DNAH3	DLEC1	TSTD2	BCR	DGKQ
DNM2	DNAH5	DLG1	TWISTNB	BEND3	DHRS3
DNMT3A	DNAH9	DLG2	TWSG1	BEND6	DHX30
DNMT3B	DNAJA1	DLL1	TXNDC9	BMPR1B	DHX32
DNPEP	DNAJB14	DMGDH	UBE2L6	BRCA2	DHX33
DOK6	DNAJB4	DNAH17	UBQLN2	BRCC3	DHX37
DOK7	DNAJB7	DNAH9	UNKL	BRD1	DHX40
DOPEY1	DNAJC27	DNAJA1	VMO1	BRD8	DHX40P
DPCR1	DNAJC3	DNAJB14	WBP2	BREA2	DIAPH1
DPM1	DNM1	DNAJC27	WDR20	BTB	DLEC1
DPP7	DNMT3A	DNCL1	WDR45L	C1D	DLG1
DPY19L1	DOC2A	DNM1	WHAMML1	C1QL4	DLG2
DPY19L3	DOK3	DNM2	WHSC2	C1QTNF3	DLL1
DR1	DOK6	DNMT3A	XYLT1	C3	DMGDH
DSE	DPCR1	DNMT3B	ZAN	C5	DNAH17
DSEL	DPY19L1	DOC2A	ZCRB1	CABIN1	DNAH8
DUOXA2	DR1	DOK3	ZDHHC24	CADM1	DNAH9
DUSP11	DSE	DOK6	ZDHHC9	CADM3	DNAJA1
DUSP3	DUOXA2	DOK7	ZNF167	CALU	DNAJC27
DUXAP3	DUS2L	DOPEY1	ZNF276	CAP2	DNCL1
DYNC1LI2	DUSP11	DPCR1	ZNF473	CARKD	DNM1
EBPL	DUSP19	DPM1	ZNF573	CASC1	DNM2
ECHDC1	DUSP9	DPY19L1	AADACL4	CASQ1	DNMT3A
ECM1	DYNC1LI2	DPY19L3	AASDH	CATSPER1	DNMT3B
EDG7	DYNC2LI1	DR1	ABAT	CATSPER3	DNPEP

EFCAB7	DZIP1	DSE	ABCD2	CBLC	DOC2A
EFHB	EBPL	DUOXA2	ABCG5	CBS	DOK3
EGFLAM	ECM1	DUSP11	ABP1	CCDC106	DOK6
EGLN1	ECOP	DUSP19	ACBD3	CCDC24	DOK7
EHD4	ECT2L	DUXAP3	ACBD6	CCDC25	DOPEY1
EIF2AK3	EFHB	DYNC1LI2	ACCN1	CCDC7	DPCR1
EIF2B5	EGFLAM	EBPL	ACCN5	CCDC75	DPM1
EIF2S3	EGLN1	ECHDC1	ACCSL	CCDC82	DPP7
EIF4EBP1	EHD4	ECM1	ACO1	CCHCR1	DPY19L1
ELFN2	EHMT1	ECOP	ACOX3	CCM2	DPY19L3
ELK1	EIF2A	EDG7	ACSM2A	CCNA2	DR1
ELL2	EIF2AK3	EFCAB7	ACTG1	CCND1	DSE
ELSPBP1	EIF2B5	EFHB	ADAMTS16	CCNT1	DSEL
ENDOD1	EIF4A3	EGFLAM	ADAMTS8	CCR5	DTX1
ENKUR	EIF5A2	EGLN1	ADAMTSL3	CCR7	DUOXA2
ENTPD5	ELFN2	EHD4	ADCY9	CD1C	DUSP11
EPHX1	ELK1	EHMT1	ADRB1	CD1D	DYNC1LI2
EPN2	ELL2	EIF2A	ADRBK2	CD200	DYRK1A
EPYC	EMCN	EIF2AK3	AES	CD24	EBPL
ERCC3	EMILIN2	EIF2B5	AFF4	CD274	ECHDC1
ERG	ENKUR	EIF2S3	AHCTF1	CD302	ECM1
ERI1	EPB41	ELFN2	AKR1CL1	CD69	EDG7
ESPNP	EPB41L4A	ELK1	ALAS2	CD79A	EFCAB7
ETV5	EPC2	ELL2	ALDH1L2	CD86	EFHB
EXD3	EPHX1	ELSPBP1	ALG1L	CD99L2	EGFLAM
EXOC3L	EPN2	ENDOD1	ALKBH4	CDC42	EGLN1
EXOC3L2	EPS8L1	ENKUR	ALMS1	CENPM	EHD4
EXTL1	EPYC	ENTPD5	ALPK3	CENTD2	EIF1AX
EYA3	ERCC3	EPB41	ALS2CR4	CES2	EIF2AK3
EZR	ERG	EPHX1	AMACR	CFC1	EIF2B5
F10	EVC	EPN2	AMELY	CGI-96	ELFN2
F8	EXD3	EPYC	ANAPC1	CHMP6	ELK1
FAAH2	EXOC3L2	ERCC3	ANKK1	CHRD1	ELL2
FABP5L7	EYA3	ERG	ANKRD13D	CHRNE	ELSPBP1
FABP9	EZR	ERI1	ANKRD19	CHST14	ENDOD1
FARS2	F10	EVC	ANKRD58	CHUK	ENKUR
FASLG	F8A1	EXD3	ANO2	CIRBP	ENTPD5
FBXL12	FAAH2	EXOC3L	ANP32C	CISH	EPHX1
FBXL2	FABP5L7	EXOC3L2	ANTXR1	CKM	EPN2
FBXL3	FASLG	EXTL1	ANTXR2	CLCN1	EPYC
FBXO24	FASN	EYA3	ANXA4	CLEC5A	ERCC3
FBXO27	FBXL14	EZR	AOC3	CLEC7A	ERG
FCHSD2	FBXO24	F10	AP1M2	CLK2P	ERI1
FCN1	FBXO32	F8	AP2B1	CLU	ESPNP
FCN2	FBXW11	FAAH2	APLF	CMTM8	EXD3
FCRL3	FCHSD2	FABP5L7	APOA4	CNNM2	EXOC3L
FEM1A	FCN1	FASLG	APOH	CNOT8	EXOC3L2
FEN1	FCRL3	FBXL12	APTX	CNR2	EXTL1
FER1L4	FDPSL2A	FBXL2	AQP6	COBLL1	EYA3
FGF1	FEM1A	FBXO24	AQP7	COL20A1	EZR
FGF20	FEN1	FBXO27	ARFIP2	COL2A1	F10

FGF5	FGF1	FCHSD2	ARGFXP2	COL4A1	FAAH2
FGFBP1	FGF20	FCN1	ARHGEF10L	COL6A2	FABP5L7
FGFBP2	FGF5	FCN2	ART1	COL9A3	FABP9
FGFR2	FGFBP1	FCRL3	ASB14	COMMD6	FAM113A
FHL2	FGFBP2	FEM1A	ASPRV1	COQ2	FAM131A
FIS1	FGFR2	FEN1	ASPSCR1	COQ5	FAM134A
FKBP14	FHL2	FER1L4	ASXL1	COX4NB	FAM135A
FMNL3	FJX1	FGF1	ASXL3	COX5B	FAM136A
FNDC1	FKBP14	FGF20	ATE1	COX8C	FAM13A
FOSL2	FMNL3	FGF5	ATF7IP2	CPAMD8	FAM14B
FOXA3	FMO9P	FGFBP1	ATP12A	CPVL	FAM156B
FOXD3	FOLR2	FGFBP2	ATP6V1G2	CPZ	FAM171B
FOXE3	FOXA3	FGFBP3	ATXN3L	CRABP1	FAM173B
FRAT2	FRMD1	FGFR2	AZI1	CRB2	FAM194A
FREM3	FSCB	FHL2	B3GNT1	CRISP2	FAM22F
FRK	FSCN2	FIS1	B4GALNT4	CRISP3	FAM36A
FRMD1	FST	FKBP14	B4GALT7	CROCC	FAM40A
FRMD7	FTSJ3	FMNL3	BACH1	CRTAP	FAM49A
FRMPD1	FUCA1	FOLR2	BAG4	CSAG3	FAM58B
FSCB	FURIN	FOSL2	BAK1	CSDA	FAM62C
FST	GAB3	FOXA3	BANF2	CSN1S2A	FAM65B
FTHL8	GAB4	FOXE3	BBC3	CSRP2	FAM72A
FTSJ3	GABRA3	FREM3	BCAN	CTDP1	FAM75A6
FUZ	GABRP	FRMD1	BCL7C	CTDSP1	FAM78A
GAB3	GAD1	FRMD7	BCR	CTSH	FAM7A1
GAB4	GALC	FRMPD1	BEND3	CTSL2	FAM83D
GABBR2	GALM	FSCB	BEND6	CTTN	FAM90A12
GALC	GALNT9	FSCN2	BMPR1B	CTXN1	FAM90A8
GALM	GAN	FST	BRCA2	CUZD1	FAM92A1
GALNT14	GANC	FTSJ3	BRCC3	CX3CL1	FAM92B
GALNT9	GDA	FURIN	BRD1	CXCL10	FARS2
GALNTL2	GDF1	G6PC2	BRD8	CXCL14	FASLG
GAN	GDF5	GAB3	BREA2	CXCL6	FBXL12
GANAB	GDPD2	GAB4	BTD	CYB5R4	FBXL2
GANC	GEMIN7	GABBR2	C1D	CYP11B2	FBXL3
GBA	GGA1	GABRA3	C1QL4	CYP27B1	FBXO24
GBP1	GGN	GABRP	C1QTNF3	CYP4F2	FBXO27
GBP3	GHRHR	GAD1	C3	CYP4Z1	FCHSD2
GBP6	GIMAP8	GALC	C5	CYP51A1	FCN1
GDF1	GJA1	GALM	CABIN1	DACT1	FCN2
GDF5	GJA5	GALNT14	CADM1	DAK	FCRL3
GDPD2	GJB3	GALNT9	CADM3	DAPK1	FEM1A
GEMIN7	GJB6	GALNTL2	CALU	DARC	FEN1
GFER	GLCC11	GAN	CAP2	DBF4B	FER1L4
GGA1	GLDC	GANC	CARKD	DCAMKL3	FGF1
GGCT	GLRA3	GBA	CASC1	DCUN1D1	FGF20
GGN	GlyBP	GBP1	CASQ1	DCXR	FGF5
GHRHR	GNB5	GBP6	CATSPER1	DDA1	FGFBP1
GJA1	GNRH2	GDF1	CATSPER3	DDAH1	FGFBP2
GJC2	GOLPH3L	GDF5	CBLC	DDHD1	FGFBP3
GLCC11	GORASP2	GDPD2	CBS	DDO	FGFR2

GLRA3	GPD1	GEMIN7	CCDC106	DDR2	FHL2
GNAL	GPM6B	GFER	CCDC24	DDX23	FIS1
GNB5	GPR116	GGA1	CCDC25	DEFA1B	FIT1
GNG7	GPR125	GGCT	CCDC7	DGKQ	FKBP14
GNPDA1	GPR139	GGN	CCDC75	DHX30	FKBP7
GNRH2	GPR50	GHRHR	CCDC82	DHX32	FMNL3
GOLPH3L	GPR62	GIMAP8	CCHCR1	DHX33	FNIP1
GORASP2	GPRASP1	GJA1	CCM2	DHX40	FOLR3
GPR116	GRASP	GJA5	CCNA2	DHX40P	FOSL2
GPR125	GRID2	GJB3	CCND1	DIAPH1	FOXA3
GPR139	GRIP1	GJB6	CCNT1	DLEC1	FOXD3
GPR157	GRLF1	GJC2	CCR5	DLG1	FOXE3
GPR50	GRM2	GLCCI1	CCR7	DLG2	FOXS1
GPR62	GRSF1	GLRA3	CD1C	DLL1	FREM3
GPRASP1	GRXCR1	GlyBP	CD1D	DMGDH	FRK
GRASP	GSN	GNAL	CD200	DNAH17	FRMD1
GRB7	GSTA2	GNB5	CD24	DNAH9	FRMD7
GRHPR	GSTK1	GNG7	CD274	DNAJA1	FRMPD1
GRIP1	GTF2E1	GNRH2	CD302	DNAJC27	FSCB
GRSF1	GTF2H5	GOLPH3L	CD69	DNCL1	FST
GRXCR1	GUCY1B2	GORASP2	CD79A	DNM2	FTSJ3
GSN	GZMK	GPR116	CD86	DNMT3A	FUZ
GSTA2	H2BFM	GPR125	CD99L2	DNMT3B	FZR1
GTF2A1	HACL1	GPR139	CDC42	DOK6	G6PC2
GTF2E1	HAPLN1	GPR50	CENPM	DPCR1	GAB3
GTF3C4	HAUS6	GPR62	CENTD2	DPM1	GAB4
GUCY1B2	HCG27	GPRASP1	CES2	DPP7	GABBR2
GYPA	HCG2P7	GRASP	CFC1	DPY19L1	GALC
GZMK	HCP5	GRB7	CGI-96	DSEL	GALM
HACL1	HDAC2	GRHPR	CHMP6	DUOXA2	GALNT14
HAPLN1	HDC	GRIP1	CHRD1	DUSP11	GALNT9
HAUS4	HDDC2	GRSF1	CHRNE	DYNC1LI2	GALNTL2
HAUS6	HELLS	GRXCR1	CHST14	EBPL	GAN
HCG2P7	HELZ	GSN	CHUK	ECM1	GANAB
HCN2	HERC3	GSTA2	CIRBP	EDG7	GANC
HCP5	HES4	GTF2A1	CISH	EFHB	GBA
HDAC2	HIF3A	GTF2E1	CKM	EGFLAM	GBP1
HDC	HIP2	GTF2H5	CLCN1	EGLN1	GBP6
HDDC2	HIST1H2AB	GTF3C4	CLEC5A	EHD4	GDF1
HDGFRP3	HIST1H2AE	GUCY1B2	CLEC7A	EIF2AK3	GDF10
HDHD2	HIST1H2BF	GZMK	CLK2P	EIF2B5	GDF5
HEATR6	HIST1H4H	H2BFM	CLU	ELFN2	GDPD2
HEBP2	HKR1	HACL1	CMTM8	ELK1	GEMIN7
HECTD2	HLA-DMA	HAPLN1	CNNM2	ELL2	GFER
HELLS	HLA-DQB1	HAUS6	CNOT8	ELSPBP1	GGA1
HELZ	HLA-DRB4	HCG27	CNR2	ENDOD1	GGCT
HERC3	HMCN1	HCG2P7	COBLL1	ENKUR	GGN
HES3	HNRNPA1	HCN2	COL20A1	ENTPD5	GHRHR
HES4	HNRNPAB	HCP5	COL2A1	EPHX1	GHSR
HIF3A	HNRNPD	HDAC2	COL4A1	EPYC	GJA1
HIP2	HOXA5	HDC	COL6A2	ERCC3	GJB6

HIRIP3	HOXB3	HDDC2	COL9A3	ERG	GJC2
HIST1H2AD	HOXB8	HDGFRP3	COMMD6	ERI1	GLCCI1
HIST1H2AE	HOXC9	HDHD2	COQ2	ESPNP	GLRX5
HIST1H2BF	HS3ST4	HEATR6	COQ5	EXOC3L	GNAL
HIST1H4H	HSD11B1	HEBP2	COX4NB	EXOC3L2	GNB5
HIVEP1	HSD17B14	HECTD2	COX5B	EXTL1	GNG7
HJURP	HSN2	HELLS	COX8C	EYA3	GNRH2
HLA-DMA	HSP90B3P	HELZ	CPAMD8	EZR	GOLPH3L
HLA-DRB4	HSPD1	HERC3	CPVL	F10	GORASP2
HMG1	HSPG2	HES4	CPZ	F8	GPD1
HNRNPA1	HTR4	HIF3A	CRABP1	FABP5L7	GPR116
HNRNPAB	HYAL4	HIP2	CRB2	FABP9	GPR125
HNRNPK	IBTK	HIRIP3	CRISP2	FARS2	GPR139
HNRNPU	ICA1	HIST1H2AD	CRISP3	FASLG	GPR50
HOXA5	ID2	HIST1H2AE	CROCC	FBXL12	GPR62
HOXB8	IDE	HIST1H2BF	CRTAP	FBXO24	GPRASP1
HOXC9	IDI1	HIST1H4H	CSAG3	FBXO27	GRASP
HS3ST3B1	IFI44L	HJURP	CSDA	FCHSD2	GRB7
HS3ST4	IFIH1	HLA-DMA	CSN1S2A	FCN1	GRHPR
HS6ST3	IFITM1	HLA-DQB1	CSRP2	FCN2	GRIP1
HSN2	IFITM2	HLA-DRB4	CTDP1	FCRL3	GRSF1
HSP90B3P	IFITM5	HMCN1	CTDSP1	FEM1A	GRXCR1
HSPBP1	IFNA13	HMG1	CTSH	FEN1	GSN
HSPCAL3	IFNE1	HNRNPA1	CTSL2	FGF1	GSTA2
HSPG2	IFT122	HNRNPAB	CTTN	FGF20	GSTK1
HTR4	IGF2	HNRNPU	CTXN1	FGF5	GTF2A1
HTRA2	IGFBP6	HOXA5	CUZD1	FGFBP1	GTF2E1
HYAL4	IGHMBP2	HOXB8	CX3CL1	FGFBP2	GTF2H5
HYLS1	IKZF1	HOXC9	CXCL10	FGFR2	GTF3C4
IBTK	IL12A	HS3ST3B1	CXCL14	FHL2	GUCY1B2
ID2	IL19	HS3ST4	CXCL6	FIS1	GYPA
IDI1	IL1RL1	HS6ST3	CYB5R4	FKBP14	GZMK
IFIH1	IL1RL2	HSD11B1	CYP11B2	FMNL3	H2BFM
IFITM1	IL25	HSN2	CYP27B1	FOSL2	HACL1
IFNE1	IL2RB	HSP90B3P	CYP4F2	FOXA3	HAPLN1
IGF2	IL6	HSPBP1	CYP4Z1	FOXE3	HAUS4
IGFBP6	INO80E	HSPCAL3	CYP51A1	FREM3	HAUS6
IGHMBP2	INPP4A	HSPG2	DACT1	FRK	HCG2P7
IL12A	INPP5F	HTR4	DAK	FRMD7	HCN2
IL18R1	INPPL1	HTRA2	DAPK1	FRMPD1	HCP5
IL18RAP	INTS10	HYAL4	DARC	FSCB	HDAC2
IL1RL1	INTS5	HYLS1	DBF4B	FST	HDC
IL20RA	INTS7	IBTK	DCAMKL3	FTSJ3	HDDC2
IL23A	IP6K3	ID2	DCUN1D1	FUZ	HDGFRP3
IL25	IPPK	IDI1	DCXR	GAB3	HDHD2
IL2RB	IQUB	IFIH1	DDA1	GAB4	HEATR6
INHA	IRF2	IFITM1	DDAH1	GABBR2	HEBP2
INHBA	ISLR	IFITM5	DDHD1	GALC	HECTD2
INO80E	ITGA2	IFNE1	DDO	GALM	HELLS
INPP4A	ITGA5	IGF2	DDR2	GALNT9	HELZ
INPP5A	ITGAL	IGFBP6	DDX23	GALNTL2	HERC3

INPP5F	ITM2B	IGHMBP2	DEFA1B	GAN	HES3
INPPL1	ITSN2	IL12A	DGKQ	GANAB	HES4
INTS10	JAZF1	IL18R1	DHX30	GANC	HIF3A
INTS5	JMJD2B	IL18RAP	DHX32	GBA	HIP2
INTS7	JMJD6	IL1RL1	DHX33	GBP1	HIRIP3
IP6K3	JPH2	IL25	DHX40	GBP6	HIST1H2AD
IPPK	JUB	IL2RB	DHX40P	GDF1	HIST1H2AE
IQCK	KATNAL1	INHA	DIAPH1	GDF5	HIST1H2BF
IQUB	KATNB1	INHBA	DLEC1	GDPD2	HIST1H4H
IRAK4	KBTBD2	INO80E	DLG1	GEMIN7	HIVEP1
IRF2	KBTBD8	INPP4A	DLG2	GFER	HJURP
ITGA5	KCMF1	INPP5F	DLL1	GGA1	HLA-DMA
ITGAL	KCNA10	INPPL1	DMGDH	GGCT	HLA-DRB4
ITGAM	KCND3	INTS10	DNAH17	GGN	HMGN1
ITM2B	KCNH4	INTS5	DNAH9	GJA1	HMMR
JAZF1	KCNJ15	INTS7	DNAJA1	GJC2	HNRNPA1
JMJD2B	KCNJ2	IP6K3	DNAJC27	GLCCI1	HNRNPC
JMJD5	KCNMB1	IPPK	DNCL1	GNAL	HNRNPK
JMJD6	KCTD2	IQCK	DNM2	GNB5	HNRNPU
JPH2	KCTD3	IQUB	DNMT3A	GNG7	HOXA5
KATNAL1	KHK	IRF2	DNMT3B	GNRH2	HOXB8
KATNB1	KIF15	ITGA5	DOK6	GOLPH3L	HOXC9
KBTBD10	KIF26B	ITGAL	DPCR1	GORASP2	HOXD1
KBTBD2	KIF3A	ITM2B	DPM1	GPR116	HS3ST3B1
KBTBD8	KIF3C	ITSN2	DPP7	GPR125	HS3ST4
KCNF1	KIRREL	JAZF1	DPY19L1	GPR139	HS6ST3
KCNH4	KLC4	JMJD2B	DSEL	GPR62	HSD11B1
KCNK1	KLHL1	JMJD5	DUOXA2	GPRASP1	HSN2
KCTD2	KLHL12	JMJD6	DUSP11	GRASP	HSP90B3P
KCTD3	KLHL34	JPH2	DYNC1LI2	GRHPR	HSPBP1
KCTD9	KLHL36	KATNAL1	EBPL	GRIP1	HSPCAL3
KGFLP1	KLHL8	KATNB1	ECM1	GRSF1	HSPG2
KHK	KLK14	KBTBD10	EDG7	GRXCR1	HTR4
KIF20A	KLK3	KBTBD2	EFHB	GSN	HYAL4
KIF3A	KLK4	KBTBD8	EGFLAM	GSTA2	HYLS1
KIF3C	KLRA1	KCNA10	EGLN1	GTF2A1	IBTK
KISS1R	KLRF1	KCND3	EHD4	GTF2E1	ID2
KLC4	KNDC1	KCNH4	EIF2AK3	GTF3C4	IDI1
KLHL1	KPNA3	KCNJ15	EIF2B5	GUCY1B2	IDO2
KLHL12	KPNA6	KCNK1	ELFN2	GYPA	IFIH1
KLHL34	KRT1	KCTD13	ELK1	GZMK	IFITM1
KLHL36	KRT23	KCTD2	ELL2	HACL1	IFNE1
KLHL8	KRT33B	KCTD3	ELSPBP1	HAPLN1	IFT172
KLK4	KRT5	KCTD9	ENDOD1	HAUS4	IGF2
KLRF1	KRT75	KGFLP1	ENKUR	HAUS6	IGFBP6
KMO	KRT9	KHK	ENTPD5	HCG2P7	IGHMBP2
KNDC1	KRTAP10-12	KIF15	EPHX1	HCN2	IL12A
KPNA3	KRTAP19-7	KIF3A	EPYC	HCP5	IL13RA2
KPNB1	KRTAP23-1	KIF3C	ERCC3	HDC	IL18R1
KRT23	KRTAP4-3	KIRREL	ERG	HDDC2	IL18RAP
KRT5	KRTAP4-8	KLC4	ERI1	HDGFRP3	IL1F10

KRT86	KRTAP5-9	KLHL1	ESPNP	HDHD2	IL1RL1
KRT9	LALBA	KLHL12	EXOC3L	HEATR6	IL20RA
KRTAP10-12	LAMB4	KLHL34	EXOC3L2	HECTD2	IL25
KRTAP10-5	LASS1	KLHL36	EXTL1	HELLS	IL2RB
KRTAP19-7	LBP	KLHL8	EYA3	HERC3	INO80E
KRTAP22-1	LBR	KLK4	EZR	HES3	INPP4A
KRTAP23-1	LCAP	KLRF1	F10	HES4	INPP5F
KRTAP4-3	LCN2	KNDC1	F8	HIF3A	INPPL1
KRTAP4-8	LEAP-2	KPNA3	FABP5L7	HIP2	INTS10
KRTAP5-10	LEFTY2	KPNB1	FABP9	HIST1H2AD	INTS5
KSR1	LETM2	KRT23	FARS2	HIST1H2AE	INTS7
LAG3	LGALS1	KRT5	FASLG	HIST1H4H	IPPK
LALBA	LGALS14	KRT75	FBXL12	HJURP	IQCK
LAMB4	LGI1	KRT86	FBXO24	HLA-DMA	IQUB
LBP	LHCGR	KRT9	FBXO27	HLA-DRB4	IRAK4
LBR	LHX4	KRTAP10-12	FCHSD2	HMGNI	IRF2
LCAP	LHX6	KRTAP10-5	FCN1	HNRNPA1	ITGA5
LCE2A	LILRP2	KRTAP19-7	FCN2	HNRNPAB	ITGAL
LCN2	LMBRD2	KRTAP23-1	FCRL3	HNRNPK	ITGAM
LDLRAP1	LMO1	KRTAP4-3	FEM1A	HNRNPU	ITIH2
LEFTY2	LMO3	KRTAP4-8	FEN1	HoxA5	ITM2B
LGTN	LONP2	KRTAP5-9	FGF1	HOXB8	JAZF1
LHCGR	LONRF3	KSR1	FGF20	HOXC9	JMJD2B
LHFPL2	LPP	LAG3	FGF5	HS3ST3B1	JMJD5
LHX4	LPPR5	LALBA	FGFBP1	HS3ST4	JMJD6
LINS1	LRG1	LAMB4	FGFBP2	HS6ST3	JPH2
LITAF	LRRC3	LASS1	FGFR2	HSP90B3P	KATNAL1
LMBRD2	LRRC33	LBP	FHL2	HSPCAL3	KATNB1
LMO3	LRRC4	LBR	FIS1	HSPG2	KBTBD10
LNPEP	LRRC42	LCAP	FKBP14	HTR4	KBTBD2
LONP2	LRRC45	LCN2	FMNL3	HYAL4	KBTBD8
LONRF3	LRRC59	LEFTY2	FOSL2	HYLS1	KCNA10
LPP	LRRN1	LETM2	FOXA3	IBTK	KCNH4
LPPR1	LRRN2	LGALS1	FOXEO3	ID2	KCNJ15
LPPR5	LSM12	LHCGR	FREM3	IDI1	KCNK1
LRRC3	LYN	LHFPL2	FRK	IFIH1	KCTD3
LRRC33	MAB21L1	LHX4	FRMD7	IFITM1	KCTD9
LRRC4	MAFK	LILRA4	FRMPD1	IGF2	KGFLP1
LRRC42	MAGEA2	LIM2	FSCB	IGHMBP2	KHK
LRRC45	MAGEB16	LINS1	FST	IL12A	KIF15
LRRC8D	MAGEB18	LITAF	FTSJ3	IL18R1	KIF20A
LRRN1	MAGEB5	LMBRD2	FUZ	IL18RAP	KIF24
LRRN4CL	MAGEL2	LMO3	GAB3	IL1RL1	KIF3A
LSM12	MAP2K7	LNPEP	GAB4	IL25	KIF3C
LYN	MAP4K5	LONP2	GABBR2	IL2RB	KIF5B
MAF1	MAPK10	LONRF3	GALC	INO80E	KLHL1
MAFK	MAST4	LPP	GALM	INPP4A	KLHL12
MAGEA2	MAT2B	LPPR5	GALNT9	INPP5F	KLHL34
MAGEB16	MAX	LRRC3	GALNTL2	INPPL1	KLHL36
MAGEB5	MBD6	LRRC33	GAN	INTS10	KLHL8
MAGED2	MBNL1	LRRC4	GANAB	INTS5	KLK4

MAGEL2	MBOAT7	LRRC42	GANC	IPPK	KLRF1
MAP2K5	MCART6	LRRC45	GBA	IQUB	KMO
MAP2K7	MCHR2	LRRC59	GBP1	IRF2	KNDC1
MAP4K5	MCTP2	LRRC8D	GBP6	ITGA5	KPNA3
MAPK10	MED22	LRRN1	GDF1	ITGAL	KPNB1
MARS2	MEFV	LRRN2	GDF5	ITGAM	KRT23
MAX	MEI1	LSM11	GDPD2	ITM2B	KRT5
MAZ	MEIS3	LSM12	GEMIN7	JMJD2B	KRT86
MBD6	MEOX1	LXN	GFER	JMJD5	KRT9
MBOAT7	MEP1B	LYN	GGA1	JMJD6	KRTAP10-5
MCHR1	METTL2A	MAF1	GGCT	JPH2	KRTAP19-7
MCHR2	MFGE8	MAFK	GGN	KATNAL1	KRTAP22-1
MCTP2	MGAM	MAGEA2	GJA1	KATNB1	KRTAP23-1
MED22	MGC15763	MAGEB16	GJC2	KBTBD2	KRTAP26-1
MEI1	MGC22014	MAGEB18	GLCCI1	KBTBD8	KRTAP4-3
MEIS3	MGC24103	MAGED2	GNAL	KCNK1	KRTAP4-8
MEOX1	MGC27348	MAGEL2	GNB5	KCTD3	KRTAP5-10
MESDC2	MGC3032	MAP2K5	GNG7	KGFLP1	KSR1
METTL3	MGC39584	MAP2K7	GNRH2	KHK	LAG3
MFAP5	MGC39900	MAP4K5	GOLPH3L	KIF3A	LALBA
MFGE8	MGC5457	MAPK10	GORASP2	KIF3C	LAMB4
MGC27348	MGC70870	MAT2B	GPR116	KLHL1	LBR
MGC3032	MGC87042	MAX	GPR125	KLHL12	LCAP
MGC34829	MGEA5	MBD6	GPR139	KLHL34	LCN2
MGC39584	MGMT	MBOAT7	GPR62	KLHL36	LDLRAP1
MGC39900	MICB	MCHR1	GPRASP1	KLHL8	LEFTY2
MGEA5	MIP	MCHR2	GRASP	KLK4	LGALS14
MGMT	MIPEP	MCTP2	GRHPR	KLRF1	LGTN
MICB	MLX	MED22	GRIP1	KMO	LHFPL2
MID1IP1	MLYCD	MED24	GRSF1	KNDC1	LHX4
MIP	MMP1	MEI1	GRXCR1	KPNA3	LILRA2
MIPEP	MMP3	MEIS3	GSN	KPNB1	LIM2
MKRN3	MMRN1	MEOX1	GSTA2	KRT23	LINS1
MLX	MOBKL2B	MEP1B	GTF2A1	KRT5	LIPF
MLYCD	MOBKL2C	METTL3	GTF2E1	KRT86	LITAF
MMP1	MOBKL3	MFF	GTF3C4	KRT9	LMBRD2
MMP3	MON1A	MFGE8	GUCY1B2	KRTAP10-5	LMCD1
MMRN1	MRO	MGC15763	GYP A	KRTAP22-1	LMO3
MOBKL2B	MRPL11	MGC22014	GZMK	KRTAP4-3	LNPEP
MON1A	MRPL18	MGC27348	HACL1	KRTAP4-8	LONP2
MORF4	MRPL27	MGC3032	HAPLN1	KRTAP5-10	LONRF3
MORF4L2	MRPL32	MGC34829	HAUS4	KSR1	LPP
MRO	MRPS18A	MGC39584	HAUS6	LAG3	LPPR5
MRPL11	MRPS36	MGC39900	HCG2P7	LAMB4	LRP5
MRPL32	MSLNL	MGC70870	HCN2	LBP	LRRC3
MRPL34	MTG1	MGEA5	HCP5	LBR	LRRC33
MRPL45	MTMR10	MGMT	HDC	LCAP	LRRC4
MRPS36	MTRR	MICB	HDDC2	LDLRAP1	LRRC45
MRPS7	MUC13	MID1IP1	HDGFRP3	LEFTY2	LRRC6
MS4A6A	MUC7	MIP	HDHD2	LGTN	LRRC8D
MSC	MVD	MIPEP	HEATR6	LHX4	LRRN1

MSLNL	MVK	MKRN3	HECTD2	LINS1	LSM11
MST1R	MYF5	MLX	HELLS	LITAF	LSM12
MT1M	MYL6	MLYCD	HERC3	LMBRD2	LY6E
MTA1	MYO1B	MMP1	HES3	LNPEP	LYN
MTG1	MYO1D	MMP3	HES4	LONP2	LYPD5
MTIF3	MYO5A	MMRN1	HIF3A	LONRF3	MAF1
MTM	MYO6	MOBKL2B	HIP2	LPP	MAFK
MTRR	MYST1	MON1A	HIST1H2AD	LPPR5	MAGEA2
MVD	N4BP2L2	MORF4	HIST1H2AE	LRRC3	MAGEB16
MYBL2	NAALAD2	MORF4L2	HIST1H4H	LRRC33	MAGEB5
MYF5	NAB2	MRO	HJURP	LRRC4	MAGED2
MYH10	NALCN	MRPL11	HLA-DMA	LRRC42	MAGEL2
MYH11	NARG1	MRPL27	HLA-DRB4	LRRN1	MAK
MYL6	NBPF4	MRPL32	HMGN1	LSM12	MAP2K5
MYO1B	NCDN	MRPL34	HNRNPA1	LYN	MAP4K5
MYO1D	NCKAP5	MRPL45	HNRNPAB	MAF1	MAPK10
MYO5A	NCOA6	MRPS18A	HNRNPK	MAFK	MARS2
MYO6	NCRNA00219	MRPS36	HNRNPU	MAGEA2	MAX
MYOCD	NDFIP1	MRPS7	HOXA5	MAGEB16	MAZ
MYST1	NDNL2	MSC	HOXB8	MAGED2	MBD2
NAAA	NDUFAF2	MSLNL	HOXC9	MAP2K5	MBD6
NAALAD2	NDUFB1	MST1R	HS3ST3B1	MAP2K7	MBOAT7
NAB2	NEK2	MT1M	HS3ST4	MAP4K5	MCHR1
NARG1	NETO2	MTA1	HS6ST3	MAX	MCHR2
NBL1	NEUROG2	MTG1	HSP90B3P	MBD6	MCTP2
NCAPG	NFAT5	MTM	HSPCAL3	MBOAT7	MED22
NCDN	NFATC2IP	MTRR	HSPG2	MCHR1	MEI1
NCF4	NFKB1	MVD	HTR4	MCHR2	MEOX1
NCKAP5	NFKBIA	MVK	HYAL4	MCTP2	MESDC2
NCOA1	NGDN	MYF5	HYLS1	MED22	METTL3
NCRNA00219	NHLRC4	MYL6	IBTK	MEI1	MFAP5
NDE1	NIPAL1	MYO1B	ID2	MEOX1	MFF
NDNL2	NKG7	MYO1D	IDI1	MESDC2	MGC22014
NEK2	NKX1-2	MYO5A	IFIH1	METTL3	MGC27348
NFE2L2	NKX2-3	MYO6	IFITM1	MFAP5	MGC3032
NGDN	NLGN1	MYOCD	IGF2	MFGE8	MGC34829
NIPA2	NMBR	MYST1	IGHMBP2	MGC27348	MGC39584
NIPAL1	NMNAT2	NAAA	IL12A	MGC3032	MGC39900
NKX1-2	NMRAL1	NAALAD2	IL18R1	MGC39584	MGC57346
NKX2-3	NMT2	NAB2	IL18RAP	MGC39900	MGC71993
NLGN1	NOB1	NARG1	IL1RL1	MGEA5	MGEA5
NMRAL1	NOC2L	NCAPG	IL25	MGMT	MGMT
NMT2	NOSIP	NCDN	IL2RB	MIP	MICB
NOB1	NOTCH1	NCF4	INO80E	MIPEP	MIP
NOC4L	NOTCH2NL	NCKAP5	INPP4A	MKRN3	MIPEP
NOL8	NOTUM	NCOA1	INPP5F	MLX	MKRN3
NOP14	NOVA1	NCOA6	INPPL1	MLYCD	MLL
NOSIP	NPFF	NCRNA00219	INTS10	MMP1	MLYCD
NOTUM	NPPA	NDNL2	INTS5	MMP3	MMD2
NOVA1	NPR2	NDUFAF2	IPPK	MMRN1	MMP3
N-PAC	NPTX1	NEK2	IQUB	MOBKL2B	MMRN1

NPPA	NPY	NETO2	IRF2	MON1A	MOBK2B
NPY	NR2F1	NEUROG2	ITGA5	MORF4	MON1A
NR2F2	NR2F2	NFAT5	ITGAL	MORF4L2	MORF4
NR4A1	NRIP1	NFE2L2	ITGAM	MRO	MORF4L2
NRG1	NSMAF	NFKB1	ITM2B	MRPL11	MRO
NRG4	NSUN5C	NFKBIA	JMJD2B	MRPL32	MRPL11
NRP1	NT5C	NGDN	JMJD5	MRPL34	MRPL32
NT5M	NT5M	NHLRC4	JMJD6	MRPS36	MRPL34
NTNG2	NUDCD2	NIPAL1	JPH2	MRPS7	MRPL45
NUDCD2	NUDT19	NKG7	KATNAL1	MSC	MRPS18A
NUDT19	NUDT21	NKX1-2	KATNB1	MSLNL	MRPS36
NUDT21	NUP160	NKX2-3	KBTBD2	MST1R	MRPS7
NUDT3	NUPL1	NLGN1	KBTBD8	MT1M	MS4A6A
NUPL1	NXNL2	NMBR	KCNK1	MTA1	MSC
NXNL2	NXPH2	NMRAL1	KCTD3	MTRR	MSLNL
NXPH2	NXT2	NMT2	KGFLP1	MVD	MST1R
NXT2	OCEL1	NOB1	KHK	MYF5	MT1M
OCEL1	ODF3B	NOC4L	KIF3A	MYH11	MTA1
ODF4	ODF4	NOD2	KIF3C	MYL6	MTIF2
OLFM3	OLFM3	NOL8	KLHL1	MYO1D	MTRR
OLIG3	OLIG3	NOSIP	KLHL12	MYO5A	MVD
OMA1	OPHN1	NOTCH2NL	KLHL34	MYO6	MYBL2
OPHN1	OPN1SW	NOTUM	KLHL36	MYST1	MYF5
OPN1SW	OR10A4	NOVA1	KLHL8	NAAA	MYH10
OR10J5	OR10J5	N-PAC	KLK4	NAALAD2	MYH11
OR10K1	OR10K1	NPPA	KLRF1	NAB2	MYL6
OR10Q1	OR10R2	NPY	KMO	NARG1	MYO1B
OR10R2	OR11L1	NR2F1	KNDC1	NCAPG	MYO1D
OR11L1	OR13C2	NR2F2	KPNA3	NCDN	MYO5A
OR13D1	OR13D1	NRG1	KPNB1	NCF4	MYO6
OR1E2	OR1J1	NRG4	KRT23	NCKAP5	MYOCD
OR1J1	OR1N1	NRP1	KRT5	NCOA1	MYST1
OR1J4	OR2A1	NSMAF	KRT86	NCRNA00219	N4BP2L2
OR1N1	OR2AG1	NSUN5C	KRT9	NDE1	NAAA
OR1N2	OR2AG2	NT5M	KRTAP10-5	NDNL2	NAALAD2
OR2AG2	OR2H2	NTNG2	KRTAP22-1	NFE2L2	NAB2
OR2D2	OR2T3	NUDCD2	KRTAP4-3	NFKB1	NARG1
OR2H2	OR2Y1	NUDT19	KRTAP4-8	NGDN	NBL1
OR2T10	OR4K1	NUDT21	KRTAP5-10	NIPA2	NBPF4
OR2Y1	OR51A4	NUDT3	KSR1	NIPAL1	NCAPG
OR4A16	OR51S1	NUPL1	LAG3	NKX1-2	NCDN
OR4D9	OR52W1	NXNL2	LAMB4	NLGN1	NCF4
OR4K1	OR5AS1	NXPH2	LBP	NMRAL1	NCKAP5
OR51A4	OR5AU1	NXT2	LBR	NMT2	NCOA1
OR51S1	OR5AY1	OCEL1	LCAP	NOB1	NCOA6
OR52I1	OR5B12	ODF4	LDLRAP1	NOD2	NCRNA00219
OR52K2	OR5B2	OLIG3	LEFTY2	NOSIP	NCSTN
OR52W1	OR5H14	OMA1	LGTM	NOTUM	NDE1
OR56B4	OR5K4	OPHN1	LHX4	NOVA1	NDNL2
OR5AU1	OR5T2	OPN1SW	LINS1	NPPA	NDRG4
OR5AY1	OR6C76	OPN3	LITAF	NPY	NEK2

OR5B12	OR6K3	OR10J5	LMBRD2	NR2F2	NFAT5
OR5B2	OR6M1	OR10K1	LNPEP	NRG4	NFATC3
OR5B21	OR8A1	OR10Q1	LONP2	NRP1	NFE2L2
OR5K4	OR8G5	OR10R2	LONRF3	NT5M	NGDN
OR6A2	OR9K2	OR11L1	LPP	NUDCD2	NIPA2
OR6K3	ORC5L	OR13D1	LPPR5	NUDT19	NIPAL1
OR8G5	OSGEP	OR1E2	LRRC3	NUDT21	NKX1-2
OR9I1	OSM	OR1J1	LRRC33	NUDT3	NKX2-3
OTOF	OTOF	OR1J4	LRRC4	NUPL1	NLGN1
OVCA2	OVCA2	OR1N1	LRRC42	NXPH2	NMBR
P2RY4	P2RY4	OR2AG2	LRRN1	OCEL1	NMNAT2
P2RY6	P2RY6	OR2D2	LSM12	ODF4	NMRAL1
P4HTM	P4HA1	OR2H2	LYN	OLIG3	NMT2
PAGE3	P4HTM	OR2T10	MAF1	OMA1	NOB1
PAK7	PAGE3	OR2T3	MAFK	OPHN1	NOC4L
PAQR4	PAGE5	OR2Y1	MAGEA2	OPN1SW	NOD2
PAQR7	PAK7	OR4A16	MAGEB16	OR10J5	NOL8
PARP10	PALLD	OR4D9	MAGED2	OR10K1	NOP14
PARP3	PAQR4	OR4K1	MAP2K5	OR10Q1	NOSIP
PARP9	PAQR7	OR51A4	MAP2K7	OR11L1	NOTUM
PARS2	PARP10	OR51S1	MAP4K5	OR13D1	NOVA1
PAX6	PBX2	OR52I1	MAX	OR1E2	NPPA
PBX2	PBX3	OR52K2	MBD6	OR1J1	NPY
PBX3	PC	OR52W1	MBOAT7	OR1N1	NR2F1
PCBD1	PCBD1	OR5AS1	MCHR1	OR1N2	NR2F2
PCDH1	PCDH18	OR5AU1	MCHR2	OR2D2	NR4A1
PCDH17	PCDHA2	OR5AY1	MCTP2	OR2Y1	NR6A1
PCDH18	PCDHA4	OR5B12	MED22	OR4A16	NRG1
PCDHA2	PCDHA6	OR5B2	MEI1	OR4K1	NRG4
PCDHA7	PCDHA7	OR5K4	MEOX1	OR51A4	NRP1
PCDHGA9	PCDP1	OR6A2	MESDC2	OR52K2	NRXN3
PCDP1	PCSK7	OR6K3	METTL3	OR52W1	NSMAF
PCGF5	PCYOX1	OR6M1	MFAP5	OR5AU1	NSUN5C
PCID2	PDCD2	OR8G5	MFGE8	OR5AY1	NT5C1B
PCSK7	PDCD6	OR9I1	MGC27348	OR5B12	NT5M
PCYOX1	PDE12	OR9K2	MGC3032	OR5B2	NTNG2
PDCD2	PDGFC	ORC5L	MGC39584	OR6A2	NUDCD2
PDCD6	PDILT	OSM	MGC39900	OR8G5	NUDT19
PDE12	PDP2	OTOF	MGEA5	OR9I1	NUDT21
PDGFC	PER1	OVCA2	MGMT	OTOF	NUDT3
PDP2	PEX12	P2RY4	MIP	OVCA2	NUPL1
PDXP	PEX5L	P2RY6	MIPEP	P2RY4	NXNL2
PER1	PFN4	P4HTM	MKRN3	P2RY6	NXPH2
PEX12	PGAM5	PAGE3	MLX	P4HTM	OCEL1
PFKFB3	PGK1	PAK7	MLYCD	PAGE3	ODF4
PFN4	PGLYRP4	PAQR4	MMP1	PAQR4	OLFM3
PGAM5	PHC3	PAQR7	MMP3	PAQR7	OLIG3
PHC1	PHF14	PARP10	MMRN1	PARP10	OMA1
PHC3	PHF21A	PARP3	MOBKL2B	PARS2	OPHN1
PHF14	PHKG2	PARS2	MON1A	PAX6	OPN1SW
PHKG2	PHLPP1	PAX6	MORF4	PBX3	OR10J5

PHLPP1	PHTF1	PBX2	MORF4L2	PCBD1	OR10K1
PHTF1	PHYH	PBX3	MRO	PCDH1	OR10Q1
PHYH	PHYHIP	PC	MRPL11	PCDH18	OR11L1
PHYHIP	PIGB	PCBD1	MRPL32	PCDHA2	OR13C4
PIGB	PIK3R1	PCDH18	MRPL34	PCDHA7	OR13D1
PIK3R1	PIK3R2	PCDHA2	MRPS36	PCDHGA9	OR1E2
PIKFYVE	PIN4	PCDHA6	MRPS7	PCDP1	OR1J1
PIP5K1B	PIP4K2C	PCDHA7	MSC	PCGF5	OR1J4
PITPNM2	PIP5K1B	PCDHB2	MSLNL	PCID2	OR1N1
PIWIL3	PITPNM2	PCDHB8	MST1R	PCSK7	OR1N2
PLAC8L1	PIWIL3	PCDHGA9	MT1M	PCYOX1	OR2D2
PLEK2	PLA1A	PCDP1	MTA1	PDCD2	OR2T10
PLEKHF1	PLA2G15	PCID2	MTRR	PDCD6	OR2Y1
PLEKHG4	PLCG1	PCSK7	MVD	PDE12	OR4A16
PLGLB1	PLCL1	PCYOX1	MYF5	PDGFC	OR4D9
PLK3	PLEK2	PDCD2	MYH11	PDP2	OR4K1
PML	PLEKHG2	PDCD6	MYL6	PDXP	OR51A4
PMM2	PLEKHG4	PDE12	MYO1D	PER1	OR51B5
PMP2	PLGLB1	PDGFC	MYO5A	PEX12	OR52E5
PMP22	PLXDC1	PDILT	MYO6	PFKFB3	OR52I1
PMPCB	PML	PDP2	MYST1	PFN4	OR52K2
PNRC1	PMM2	PDXP	NAAA	PGAM5	OR52W1
POFUT1	PMPCB	PER1	NAALAD2	PHC1	OR5AS1
POLDIP3	PNRC1	PEX12	NAB2	PHC3	OR5AU1
POLR3H	POFUT1	PEX5L	NARG1	PHLPP1	OR5AY1
POLRMT	POLDIP3	PFKFB3	NCAPG	PHTF1	OR5B12
POLS	POLR3F	PFN4	NCDN	PHYHIP	OR5B2
POP5	POLR3H	PGAM5	NCF4	PIGB	OR5B21
POU5F1	POLS	PHC1	NCKAP5	PIK3R1	OR5C1
PPIE	POMZP3	PHC3	NCOA1	PIKFYVE	OR5K4
PPM1H	POP5	PHF14	NCRNA00219	PIN4	OR5P2
PPM1M	POT1	PHKG2	NDE1	PIP5K1B	OR6A2
PPOX	PPEF2	PHLPP1	NDNL2	PITPNM2	OR6K3
PPP1R14B	PPIE	PHTF1	NFE2L2	PIWIL3	OR8G5
PPP1R15A	PPM1H	PHYH	NFKB1	PLEK2	OR9I1
PPP1R1B	PPM1M	PHYHIP	NGDN	PLEKHF1	ORC5L
PPP1R1C	PPOX	PIGB	NIPA2	PLEKHG4	OSTalpha
PPP1R3D	PPP1R12B	PIK3R1	NIPAL1	PLGLB1	OTOF
PPP1R3E	PPP1R13B	PIN4	NKX1-2	PLK3	OVCA2
PPP1R7	PPP1R15A	PIP4K2C	NLGN1	PML	P2RY4
PPP2R5C	PPP1R1B	PIP5K1B	NMRAL1	PMM2	P2RY6
PPP3CA	PPP1R1C	PITPNM2	NMT2	PMP22	P4HTM
PPP4R1	PPP1R3B	PIWIL3	NOB1	PMPCB	PAK7
PRDM16	PPP1R3D	PLA1A	NOD2	POFUT1	PAMR1
PRDM7	PPP1R3E	PLA2G15	NOSIP	POLDIP3	PAQR4
PREB	PPP1R7	PLEK2	NOTUM	POLR3H	PAQR7
PRH1	PPP3CA	PLEKHF1	NOVA1	POLRMT	PARP10
PRKG1	PRDM15	PLEKHG4	NPPA	POP5	PARP2
PRKRIP1	PRDM16	PLGLB1	NPY	PPM1M	PARP3
PRKRIR	PREB	PLN	NR2F2	PPOX	PARP9
PRL	PRH1	PLOD2	NRG4	PPP1R14B	PARS2

PRMT8	PRKG1	PLSCR1	NRP1	PPP1R15A	PAX6
PRPF18	PRKRIR	PLXDC1	NT5M	PPP1R1B	PBLD
PRPF31	PRL	PML	NUDCD2	PPP1R1C	PBX3
PRPF4B	PRLH	PMM2	NUDT19	PPP1R3D	PCBD1
PRPH	PRPF18	PMP22	NUDT21	PPP1R3E	PCDH1
PRPSAP1	PRPF31	PMPCB	NUDT3	PPP1R7	PCDH17
PRR4	PRPF4B	PNRC1	NUPL1	PPP3CA	PCDH18
PRSS7	PRPH	POFUT1	NXPH2	PRDM16	PCDHA2
PSKH2	PRR16	POLDIP3	OCEL1	PRDM7	PCDHA7
PSMA6	PRRT1	POLR3H	ODF4	PRH1	PCDHB8
PSMB7	PRY2	POLRMT	OLIG3	PRKG1	PCDHGA9
PSMD8	PSG11	POLS	OMA1	PRKRIP1	PCDP1
PSORS1C2	PSKH2	POMZP3	OPHN1	PRKRIR	PCGF5
PTBP1	PSMB6	POP5	OPN1SW	PRL	PCID2
PTDSS1	PSMB7	PPM1H	OR10J5	PRMT8	PCSK7
PTER	PSMD8	PPM1M	OR10K1	PRPF31	PCYOX1
PTK2	PSORS1C2	PPOX	OR10Q1	PRPH	PDCD2
PTN	PSPN	PPP1R13B	OR11L1	PRR4	PDCD6
PTP4A1	PTBP1	PPP1R15A	OR13D1	PRSS7	PDE12
PTPDC1	PTDSS1	PPP1R1B	OR1E2	PSMA6	PDGFC
PTPRH	PTN	PPP1R1C	OR1J1	PSMB7	PDP2
PTPRJ	PTP4A1	PPP1R3B	OR1N1	PSMD8	PDXP
PTPRV	PTPRJ	PPP1R3D	OR1N2	PSORS1C2	PER1
PUS7L	PTPRV	PPP1R3E	OR2D2	PTBP1	PEX12
PZP	PUM1	PPP1R7	OR2Y1	PTDSS1	PEX5L
QPRT	PYCR2	PPP3CA	OR4A16	PTER	PFN4
QRICH1	QPRT	PRDM16	OR4K1	PTK2	PGAM5
QSOX1	RAB25	PRDM7	OR51A4	PTN	PHC1
RAB11FIP5	RAB43	PREB	OR52K2	PTP4A1	PHC3
RAB43	RAB6A	PRH1	OR52W1	PTPRV	PHKG2
RAB8A	RAB8A	PRKG1	OR5AU1	PUS7L	PHLPP1
RAD51AP1	RAB9A	PRKRIP1	OR5AY1	PZP	PHTF1
RAG1AP1	RAC3	PRKRIR	OR5B12	QPRT	PHYH
RANBP3L	RAD50	PRL	OR5B2	QSOX1	PHYHIP
RAPGEF6	RAD51AP1	PRLH	OR6A2	RAB43	PI3
RARS2	RAD9B	PRMT8	OR8G5	RAD51AP1	PIGB
RBM17	RAG1AP1	PRPF18	OR9I1	RAG1AP1	PIK3R1
RBM35A	RALYL	PRPF31	OTOF	RAPGEF6	PIP4K2C
RBM6	RANBP3L	PRPF4B	OVCA2	RARS2	PIP5K1B
RBPMs	RBM11	PRPH	P2RY4	RBM35A	PITPNM2
RBX1	RBM23	PRR16	P2RY6	RBM6	PIWIL3
RC3H1	RBM35A	PRR4	P4HTM	RBPMs	PLA2G15
RCVRN	RBM6	PRSS7	PAGE3	RCVRN	PLAC8L1
RD3	RBPMs	PSG11	PAQR4	RD3	PLAGL1
RDH8	RC3H1	PSKH2	PAQR7	RELA	PLD6
RELA	RCVRN	PSMA6	PARP10	REST	PLEK2
REST	RD3	PSMB6	PARS2	RET	PLEKHF1
RET	RDH14	PSMB7	PAX6	RFC1	PLEKHG4
RFC1	RECQL5	PSMD8	PBX3	RFPL1S	PLGLB1
RFC3	RELA	PSORS1C2	PCBD1	RFX1	PLN
RFPL1S	REN	PTBP1	PCDH1	RFX2	PLOD2

RFX1	REST	PTDSS1	PCDH18	RGL1	PML
RFX2	RFC1	PTER	PCDHA2	RGS14	PMM2
RGL1	RFPL1S	PTK2	PCDHA7	RGS16	PMP22
RGS14	RGNEF	PTN	PCDHGA9	RGS19	PMPCB
RGS16	RGS14	PTP4A1	PCDP1	RHBDF2	PNRC1
RGS19	RGS16	PTPRJ	PCGF5	RHO	POFUT1
RHBDF2	RGS19	PTPRV	PCID2	RHOQ	POLDIP3
RHO	RGS4	PTS	PCSK7	RHOT1	POLR3H
RHOQ	RGSL1	PUM1	PCYOX1	RHPN2	POLRMT
RHOT1	RHO	PUS7L	PDCD2	RNASE1	POMZP3
RLTPR	RHOBTB3	PZP	PDCD6	RNASEL	POP5
RNASE1	RHOQ	QPRT	PDE12	RNF150	PPIE
RNASE9	RHOT1	QRICH2	PDGFC	RNF185	PPM1M
RNASEL	RHOXF2B	QSOX1	PDP2	RNF212	PPOX
RND1	RHPN2	RAB22A	PDXP	RNF24	PPP1R13B
RNF13	RING1	RAB43	PER1	RNF5	PPP1R15A
RNF135	RMI1	RAB8A	PEX12	RNF5P1	PPP1R1B
RNF150	RNASE1	RAB9A	PFKFB3	RNH1	PPP1R1C
RNF168	RNASE9	RAD51AP1	PFN4	ROCK1	PPP1R3D
RNF185	RNASEL	RAG1AP1	PGAM5	ROM1	PPP1R3E
RNF212	RND1	RAMP2	PHC1	RPF1	PPP1R7
RNF24	RNF128	RANBP3L	PHC3	RPL10L	PPP2R5C
RNF5	RNF13	RAPGEF6	PHLPP1	RPL13	PPP3CA
RNF5P1	RNF166	RARS2	PHTF1	RPL27	PPP4R1
RNH1	RNF185	RBM11	PHYHIP	RPL28	PRDM16
ROCK1	RNF38	RBM23	PIGB	RPL37A	PRDM7
ROM1	RNF5	RBM35A	PIK3R1	RPLP2	PRH1
RP2	RNF5P1	RBM6	PIKFYVE	RPN2	PRKG1
RPF1	RNF6	RBPMS	PIN4	RPP30	PRKRIP1
RPL10	RNH1	RBX1	PIP5K1B	RPPH1	PRKRIR
RPL10L	ROM1	RC3H1	PITPNM2	RPS11	PRL
RPL13	RPF1	RCVRN	PIWIL3	RPS27A	PRLH
RPL27	RPL10	RD3	PLEK2	RPS6KA2	PRMT8
RPL37A	RPL10L	RDH14	PLEKHF1	RRAD	PRPF18
RPL6	RPL13	RELA	PLEKHG4	RRAGB	PRPF31
RPLP2	RPL27	REST	PLGLB1	RRP9	PRPF4B
RPN2	RPL37A	RET	PLK3	RSBN1L	PRPH
RPP30	RPP30	RFC1	PML	RSP01	PRR16
RPPH1	RPP40	RFPL1S	PMM2	RTEL1	PRR4
RPS11	RPPH1	RFX1	PMP22	RUNX1T1	PRSS7
RPS27A	RPS11	RGL1	PMPCB	RYR2	PSG11
RPS4X	RPS6KA2	RGNEF	POFUT1	RYR3	PSMA6
RPS6KA2	RPS6KB2	RGS14	POLDIP3	S100A13	PSMB7
RRAD	RRAD	RGS16	POLR3H	S100A2	PSMD8
RRAGB	RRAGB	RGS19	POLRMT	S100A3	PSORS1C2
RRM2B	RSBN1L	RGSL1	POP5	S1PR4	PTBP1
RRP9	RSC1A1	RHBDF2	PPM1M	SAG	PTDSS1
RSBN1L	RSP01	RHO	PPOX	SAMD7	PTER
RSP01	RUSC1	RHOBTB3	PPP1R14B	SAP18	PTK2
RTEL1	RYR3	RHOQ	PPP1R15A	SATB2	PTN
RUNX1T1	S100A13	RHOT1	PPP1R1B	SATL1	PTP4A1

RYR2	S100A2	RHOXF2B	PPP1R1C	SBF2	PTPDC1
RYR3	S100A3	RHPN2	PPP1R3D	SC5DL	PTPRB
S100A13	S100A5	RING1	PPP1R3E	SCARF2	PTPRJ
S100A2	S1PR4	RMI1	PPP1R7	SCT	PTPRV
S100A3	SAMD5	RNASE1	PPP3CA	SDC1	PUM1
S1PR4	SAMD7	RNASE9	PRDM16	SDF2	PUS7L
SAG	SAP18	RNASEL	PRDM7	SDF2L1	PZP
SALL1	SAT2	RND1	PRH1	SDF4	QPRT
SAMD7	SATB2	RNF128	PRKG1	SDS	QSOX1
SAP18	SC5DL	RNF13	PRKRIP1	SDSL	RAB22A
SATB2	SCARF2	RNF150	PRKRIR	SEC14L1	RAB43
SATL1	SCFD1	RNF166	PRL	SEC14L3	RAB8A
SBF2	SDF2	RNF168	PRMT8	SEC24D	RAD51AP1
SC5DL	SDF2L1	RNF185	PRPF31	SELS	RAG1AP1
SCARF2	SDF4	RNF212	PRPH	SF3A3	RANBP3L
SCFD1	SDS	RNF24	PRR4	SF3B3	RAPGEF6
SCG3	SDSL	RNF5	PRSS7	SFRS7	RARS2
SCML4	SEC11C	RNF5P1	PSMA6	SFXN2	RBM11
SCT	SEC14L1	RNF6	PSMB7	SH3BGR	RBM17
SDC1	SEC24B	RNH1	PSMD8	SH3BGRL	RBM35A
SDCCAG3	SEC24D	ROM1	PSORS1C2	SH3KBP1	RBM47
SDF2	SEC61G	RP2	PTBP1	SH3TC2	RBM6
SDF2L1	SELS	RPF1	PTDSS1	SHOX	RBX1
SDF4	SEMA4B	RPL10	PTER	SHOX2	RC3H1
SDS	SEMA4F	RPL10L	PTK2	SIGIRR	RCVRN
SDSL	SEPP1	RPL13	PTN	SIN3B	RD3
SEC14L1	SERPINA2	RPL13L	PTP4A1	SIRPA	RELA
SEC14L3	SF3B3	RPL15	PTPRV	SIRPD	REST
SEC24D	SFRS7	RPL27	PUS7L	SIRT5	RET
SEC61G	SFXN2	RPL28	PZP	SIX4	RFC1
SELS	SH3BGR	RPL37A	QPRT	SLAIN1	RFC3
SEMA4B	SH3KBP1	RPL6	QSOX1	SLC13A1	RFPL1S
SEPP1	SHOX2	RPN2	RAB43	SLC17A5	RFX1
SF3A3	SIGIRR	RPP30	RAD51AP1	SLC20A2	RFX2
SF3B3	SILV	RPP40	RAG1AP1	SLC22A9	RGL1
SFRS7	SIN3B	RPPH1	RAPGEF6	SLC24A1	RGS14
SFXN2	SIRPA	RPS11	RARS2	SLC25A1	RGS16
SH2D5	SIRPD	RPS27A	RBM35A	SLC25A3	RGS19
SH3BGR	SIRT5	RPS6KA2	RBM6	SLC27A3	RHBDF2
SH3BGRL	SLC12A8	RRAD	RBPMs	SLC2A4	RHO
SH3KBP1	SLC13A1	RRAGB	RCVRN	SLC2A8	RHOBTB3
SH3TC2	SLC16A1	RRM2B	RD3	SLC2A9	RHOQ
SHOX	SLC17A5	RRP9	RELA	SLC30A1	RHOT1
SHOX2	SLC20A2	RSBN1L	REST	SLC30A2	RHPN2
SIGIRR	SLC22A9	RSC1A1	RET	SLC32A1	RMI1
SIN3B	SLC24A1	RSPO1	RFC1	SLC35A1	RNASE1
SIRPA	SLC25A1	RTEL1	RFPL1S	SLC35C1	RNASE9
SIRPD	SLC25A2	RUNDC3A	RFX1	SLC35E3	RNASEL
SIRT5	SLC25A35	RUSC1	RFX2	SLC36A2	RNF13
SIX4	SLC2A4	RYR2	RGL1	SLC37A4	RNF135
SLAIN1	SLC2A8	RYR3	RGS14	SLC40A1	RNF150

SLC13A1	SLC2A9	S100A13	RGS16	SLC4A4	RNF168
SLC16A1	SLC30A1	S100A2	RGS19	SLC5A12	RNF185
SLC17A5	SLC30A2	S100A3	RHBDF2	SLC5A6	RNF212
SLC17A9	SLC32A1	S1PR4	RHO	SLC7A2	RNF24
SLC20A2	SLC35C1	SAG	RHOQ	SLC7A6OS	RNF5
SLC22A9	SLC35F2	SAMD7	RHOT1	SLC7A9	RNF5P1
SLC24A1	SLC36A2	SAP18	RHPN2	SLC9A3R1	RNH1
SLC25A1	SLC37A4	SASS6	RNASE1	SLC9A6	ROCK1
SLC25A3	SLC38A3	SATB2	RNASEL	SLITRK2	ROM1
SLC27A3	SLC39A11	SATL1	RNF150	SLMAP	RPF1
SLC2A12	SLC46A1	SBF2	RNF185	SMAP2	RPL10
SLC2A4	SLC4A4	SC5DL	RNF212	SMARCA4	RPL10L
SLC2A8	SLC5A12	SCARF2	RNF24	SMCHD1	RPL13
SLC2A9	SLC5A6	SCFD1	RNF5	SMCR7	RPL27
SLC30A1	SLC7A1	SCT	RNF5P1	SMYD3	RPL28
SLC30A2	SLC7A11	SDCCAG3	RNH1	SNAP25	RPL37A
SLC32A1	SLC7A13	SDF2	ROCK1	SNAPC3	RPL6
SLC34A2	SLC7A2	SDF2L1	ROM1	SNED1	RPLP2
SLC35A1	SLC7A6OS	SDF4	RPF1	SNIP	RPN2
SLC35C1	SLC7A9	SDHAF1	RPL10L	SNORA7B	RPP30
SLC35E3	SLC9A3R1	SDS	RPL13	SNORD16	RPPH1
SLC36A2	SLCO4C1	SDSL	RPL27	SNORD18C	RPS11
SLC37A4	SLFN5	SEC14L1	RPL28	SNORD42B	RPS27A
SLC39A11	SLIT1	SEC14L3	RPL37A	SNRPE	RPS4X
SLC40A1	SLMAP	SEC24B	RPLP2	SNRPF	RPS6KA2
SLC43A2	SMAD1	SEC24D	RPN2	SNTB2	RPS6KB2
SLC4A4	SMAD5	SEC61G	RPP30	SNX3	RRAD
SLC4A9	SMARCA4	SELS	RPPH1	SOX1	RRAGB
SLC5A12	SMARCA5	SEMA4B	RPS11	SPACA1	RRM2B
SLC5A6	SMCHD1	SEPP1	RPS27A	SPAG1	RRP9
SLC7A2	SMCR7	Septin	RPS6KA2	SPATA17	RSBN1L
SLC7A6OS	SNAP25	SF3A3	RRAD	SPATA21	RSPO1
SLC7A9	SNED1	SF3B3	RRAGB	SPG21	RTEL1
SLC9A3R1	SNIP	SFRS7	RRP9	SPINK5L3	RYR2
SLC9A6	SNORA7B	SFXN2	RSBN1L	SPINK7	RYR3
SLITRK2	SNORD42B	SH3BGR	RSPO1	SPRY3	S100A13
SLMAP	SNORD56B	SH3BGRL	RTEL1	SPRY4	S100A2
SMAP2	SNORD83A	SH3KBP1	RUNX1T1	SPSB2	S100A3
SMARCA4	SNRPE	SH3TC2	RYR2	SPTBN1	S100A9
SMCHD1	SNRPF	SHFM1	RYR3	SRCAP	S1PR4
SMCR7	SNTB2	SHOX	S100A13	SRPK2	SAA2
SMYD3	SNX3	SHOX2	S100A2	SSBP3	SAG
SNAP25	SOCs7	SIGIRR	S100A3	SSBP4	SAMD13
SNAPC3	SORCS2	SILV	S1PR4	SSH2	SAMD7
SNED1	SOSTDC1	SIN3B	SAG	SSPN	SAP18
SNIP	SOX1	SIRPA	SAMD7	SSX5	SATB2
SNORA7B	SOX7	SIRPD	SAP18	ST7OT2	SATL1
SNORD16	SPATA17	SIRT5	SATB2	STAB2	SBF2
SNORD18C	SPATA21	SIX4	SATL1	STAC3	SCARF2
SNORD42B	SPC25	SLC13A1	SBF2	STATH	SCG3
SNRPE	SPG21	SLC16A1	SC5DL	STK39	SCN4A

SNRPF	SPINK7	SLC17A5	SCARF2	STK4	SCT
SNTB2	SPN	SLC20A2	SCT	STRADA	SDCCAG3
SNX3	SPOCD1	SLC22A9	SDC1	STS-1	SDF2
SOX1	SPRR1B	SLC24A1	SDF2	STX3	SDF2L1
SPACA1	SPRR2B	SLC25A1	SDF2L1	SUDS3	SDF4
SPAG1	SPRY1	SLC27A3	SDF4	SUMO1P1	SDS
SPANXN4	SPRY3	SLC2A4	SDS	SUOX	SDSL
SPATA17	SPSB2	SLC2A8	SDSL	SUV39H2	SEC14L1
SPATA21	SPTBN1	SLC2A9	SEC14L1	SVOPL	SEC14L3
SPINK5L3	SRBD1	SLC30A1	SEC14L3	SYCN	SEC24D
SPINK7	SRL	SLC30A2	SEC24D	SYS1	SEC61G
SPN	SRXN1	SLC32A1	SELS	SYT4	SELS
SPOCD1	SSBP3	SLC35A1	SF3A3	TBXT	SEMA4B
SPRED3	SSBP4	SLC35C1	SF3B3	TAF10	SEPP1
SPRY3	SSH2	SLC35E3	SFRS7	TAPBP	Septin 9
SPRY4	ST18	SLC36A2	SFXN2	TARBP1	SF3A3
SPSB2	ST7OT2	SLC37A4	SH3BGR	TAS1R1	SF3B3
SPTBN1	STAC2	SLC39A11	SH3BGRL	TAS2R4	SFRS7
SRCAP	STAP2	SLC40A1	SH3KBP1	TBC1D16	SFXN2
SRGAP2	STATH	SLC4A4	SH3TC2	TBC1D20	SGPL1
SRPK2	STC1	SLC5A12	SHOX	TBKBP1	SH2D5
SSBP3	STIP1	SLC5A6	SHOX2	TBPL2	SH3BGR
SSBP4	STK39	SLC6A18	SIGIRR	TBX2	SH3BGRL
SSH2	STK4	SLC7A2	SIN3B	TCEAL2	SH3BP5
SSPN	STOX1	SLC7A6OS	SIRPA	TCEAL5	SH3KBP1
SSX4	STRADA	SLC7A9	SIRPD	TCEB2	SH3TC2
SSX5	STRN4	SLC9A3R1	SIRT5	TCF4	SHOX
ST18	STX3	SLC9A6	SIX4	TCFL5	SHOX2
ST7OT2	STX5	SLIT1	SLAIN1	TCHHL1	SIGIRR
STAB2	SUDS3	SLITRK2	SLC13A1	TCP10L	SIN3B
STAC2	SUMF2	SLMAP	SLC17A5	TDGF1	SIRPA
STAC3	SUMO1P1	SMAD5	SLC20A2	TECTB	SIRPD
STATH	SUOX	SMAP2	SLC22A9	TEF	SIRT5
STC1	SUSD1	SMARCA4	SLC24A1	TEKT4	SIX4
STK39	SV2B	SMARCD1	SLC25A1	TEX12	SLAIN1
STK4	SYCN	SMCHD1	SLC25A3	TEX13B	SLC13A1
STRADA	SYN1	SMCR7	SLC27A3	TGM7	SLC17A5
STS-1	SYS1	SMYD3	SLC2A4	THAP11	SLC17A9
STX3	SYT4	SNAP25	SLC2A8	THOC7	SLC20A2
STYK1	TAC1	SNAPC3	SLC2A9	THUMPD1	SLC22A9
SUDS3	TAF10	SNED1	SLC30A1	TIMM17A	SLC24A1
SULT1B1	TARBP1	SNIP	SLC30A2	TIMM17B	SLC25A1
SUMO1P1	TARBP2	SNORA7B	SLC32A1	TIMM8A	SLC25A3
SUOX	TAS1R1	SNORD101	SLC35A1	TIMP2	SLC2A12
SUV39H2	TAS2R19	SNORD16	SLC35C1	TIMP3	SLC2A4
SV2B	TAS2R4	SNORD42B	SLC35E3	TIMP4	SLC2A8
SVOPL	TAT	SNRPE	SLC36A2	TIRAP	SLC2A9
SYCN	TBC1D16	SNRPF	SLC37A4	TLN1	SLC30A1
SYN1	TBC1D20	SNTB2	SLC40A1	TMCO1	SLC30A2
SYS1	TBC1D8	SNX3	SLC4A4	TMEM143	SLC33A1
SYT4	TBKBP1	SOCS7	SLC5A12	TMEM163	SLC34A1

TBXT	TBPL2	SORCS2	SLC5A6	TMEM178	SLC35A1
TAF10	TBX2	SOSTDC1	SLC7A2	TMEM19	SLC35C1
TAPBP	TCEAL2	SOX1	SLC7A6OS	TMEM31	SLC35E3
TARBP1	TCEAL5	SP100	SLC7A9	TMEM56	SLC36A2
TAS1R1	TCEB2	SPACA1	SLC9A3R1	TMEM63C	SLC37A4
TAS2R4	TCF4	SPAG1	SLC9A6	TMEM82	SLC39A11
TBC1D16	TCFL5	SPATA17	SLITRK2	TMEM86A	SLC40A1
TBC1D20	TDGF1	SPATA21	SLMAP	TMPRSS7	SLC4A4
TBKBP1	TECTB	SPCS2	SMAP2	TNFAIP2	SLC5A12
TBPL2	TEF	SPG21	SMARCA4	TNIP1	SLC5A6
TBX2	TEKT4	SPINK5L3	SMCHD1	TNNT3	SLC5A8
TCEAL2	TESC	SPINK7	SMCR7	TOB2	SLC7A2
TCEAL5	TEX12	SPN	SMYD3	TOPBP1	SLC7A6OS
TCEAL7	TEX13B	SPOCD1	SNAP25	TOR1A	SLC7A9
TCF4	TGM1	SPRR1B	SNAPC3	TP53I3	SLC9A3R1
TCFL5	TGM7	SPRY1	SNED1	TPX2	SLC9A6
TCHHL1	THAP11	SPRY3	SNIP	TRADD	SLCO4C1
TCP10L	THEM4	SPRY4	SNORA7B	TRAM1L1	SLITRK2
TDGF1	THOC1	SPSB2	SNORD16	TRAP1	SLMAP
TECTB	THOC7	SPTBN1	SNORD18C	TRAT1	SMAGP
TEF	THUMPD1	SRGAP2	SNORD42B	TRDN	SMAP2
TEKT4	TIMM17A	SRL	SNRPE	TRIM2	SMARCA4
TEX12	TIMM17B	SRPK2	SNRPF	TRIM34	SMCHD1
TEX13B	TIMM22	SSBP3	SNTB2	TRIM43	SMCR7
TGM7	TIMM8A	SSBP4	SNX3	TRIM56	SMYD3
THAP11	TIMP4	SSH2	SOX1	TRIM59	SNAP25
THOC7	TINF2	SSPN	SPACA1	TRMT12	SNAPC3
THUMPD1	TLN1	SSX4	SPAG1	TRPC4	SNED1
TIMM17A	TLN2	SSX5	SPATA17	TRPC6	SNIP
TIMM17B	TMCO1	ST18	SPATA21	TRPM1	SNORA7B
TIMM8A	TMEM104	ST7OT2	SPG21	TRPM2	SNORD16
TIMP2	TMEM143	STAB2	SPINK5L3	TSGA10	SNORD18C
TIMP3	TMEM161A	STAC2	SPINK7	TSPAN4	SNORD42B
TIMP4	TMEM168	STAC3	SPRY3	TTC37	SNRPE
TIPIN	TMEM19	STAP2	SPRY4	TTLL4	SNRPF
TLN1	TMEM56	STATH	SPSB2	TUBA4	SNTB2
TLR9	TMEM63C	STC1	SPTBN1	TXNDC16	SNX3
TMCO1	TMEM82	STK39	SRCAP	TXNDC5	SOCS7
TMEM132D	TMEM86A	STK4	SRPK2	TXNL1	SOX1
TMEM143	TMUB2	STRADA	SSBP3	TXNL4B	SP2
TMEM161A	TNFAIP2	STS-1	SSBP4	UBAC1	SPACA1
TMEM163	TNFAIP6	STX3	SSH2	UBE2A	SPAG1
TMEM176A	TNFSF4	STX5	SSPN	UBE2H	SPANXN4
TMEM178	TNIP1	SUDS3	SSX5	UBE2L3	SPATA17
TMEM180	TNNT3	SULT1B1	ST7OT2	UBE2Z	SPATA21
TMEM19	TOR1A	SUMO1P1	STAB2	UBQLN4	SPCS2
TMEM31	TPRKB	SUMO2	STAC3	UGT1A1	SPINK7
TMEM56	TPX2	SUOX	STATH	UGT2A1	SPN
TMEM63C	TRADD	SUV39H2	STK39	UGT2B11	SPOCD1
TMEM82	TRAF7	SV2B	STK4	UHRF2	SPRY3
TMEM86A	TRAT1	SYCN	STRADA	ULK2	SPRY4

TMPRSS7	TRDN	SYN1	STS-1	UNC13B	SPSB2
TNFAIP2	TRIM34	SYS1	STX3	UQCRH	SRCAP
TNIP1	TRIM43	SYT4	SUDS3	USP1	SRGAP2
TNNT3	TRIM56	TBXT	SUMO1P1	USP47	SRPK2
TOB2	TRIM59	TAF10	SUOX	UTP14C	SSBP3
TOPBP1	TRIM61	TARBP1	SUV39H2	VAPB	SSBP4
TOR1A	TRIOBP	TAS1R1	SVOPL	VAX2	SSH2
TPP2	TRMT12	TAS2R19	SYCN	VCX3A	SSPN
TPPP3	TRPC4	TAS2R39	SYS1	VEGFA	SSX4
TPX2	TRPC6	TAS2R4	SYT4	VENTX	SSX5
TRADD	TRPM1	TBC1D16	TBXT	VIM	ST18
TRAM1L1	TRPM2	TBC1D20	TAF10	VKORC1	ST7OT2
TRAP1	TRPM4	TBKBP1	TAPBP	VPS13C	STAB2
TRAPPC9	TRPV1	TBPL2	TARBP1	VPS26	STAC3
TRAT1	TRPV5	TBX19	TAS1R1	WAC	STAP2
TRDN	TSEN54	TBX2	TAS2R4	WDR33	STAT5B
TRIM2	TSGA10	TCEAL2	TBC1D16	WDR51B	STATH
TRIM34	T-SP1	TCEAL5	TBC1D20	WDR79	STC1
TRIM43	TSPAN11	TCEB1	TBKBP1	WDR81	STK39
TRIM56	TSPAN4	TCEB2	TBPL2	WFDC13	STK4
TRIM59	TSPYL3	TCF25	TBX2	WIF1	STRADA
TRMT12	TSTD2	TCF4	TCEAL2	WISP3	STS-1
TRPC2	TTC13	TCFL5	TCEAL5	WNT9B	STX3
TRPC4	TTC21A	TCHHL1	TCEB2	XBP1	SUDS3
TRPC6	TTC24	TDGF1	TCF4	XIST	SULT1A2
TRPM1	TTC6	TECTB	TCFL5	YPEL1	SUMO1P1
TRPM2	TTC9C	TEF	TCHHL1	ZBTB16	SUNC1
TRPV5	TUBA3C	TEKT4	TCP10L	ZBTB25	SUOX
TSGA10	TUBA4	TEX12	TDGF1	ZBTB40	SUV39H2
TSPAN10	TWISTNB	TEX13B	TECTB	ZBTB6	SVOPL
TSPAN11	TXNDC16	TGM1	TEF	ZCCHC3	SYCN
TSPAN33	TXNDC5	TGM7	TEKT4	ZCCHC4	SYS1
TSPAN4	TXNL1	THAP11	TEX12	ZCCHC7	SYT4
TSTD2	TXNL4B	THEM4	TEX13B	ZFHX3	TBXT
TTLL4	UBE2H	THOC7	TGM7	ZFP14	TAF10
TUBA4	UBE2L3	THUMPD1	THAP11	ZFP36	TAPBP
TWISTNB	UBE2L6	TIMM17A	THOC7	ZFP90	TARBP1
TWSG1	UBE2Z	TIMM17B	THUMPD1	ZMAT2	TAS1R1
TXNDC16	UBE4A	TIMM22	TIMM17A	ZMYND11	TAS2R19
TXNDC5	UBQLN2	TIMM8A	TIMM17B	ZNF136	TAS2R4
TXNL1	UBQLN4	TIMP2	TIMM8A	ZNF165	TBC1D16
TXNL4B	UGT1A1	TIMP3	TIMP2	ZNF175	TBC1D20
UAP1L1	UGT2A1	TIMP4	TIMP3	ZNF205	TBC1D9B
UBAC1	UGT2B11	TIPIN	TIMP4	ZNF219	TBKBP1
UBASH3A	UHRF2	TIRAP	TIRAP	ZNF221	TBPL2
UBE2A	ULK2	TLN1	TLN1	ZNF263	TBX19
UBE2H	UNC119	TLR9	TMCO1	ZNF271	TBX2
UBE2L3	UNKL	TMCO1	TMEM143	ZNF287	TCEAL2
UBE2L6	UPP1	TMEM143	TMEM163	ZNF295	TCEAL5
UBE2Z	UQCRH	TMEM161A	TMEM178	ZNF32	TCEB1
UBE4A	UROD	TMEM168	TMEM19	ZNF322B	TCEB2

UBQLN2	USP1	TMEM176A	TMEM31	ZNF385C	TCF25
UBQLN4	USP47	TMEM178	TMEM56	ZNF410	TCF4
UGCGL2	USP6	TMEM180	TMEM63C	ZNF438	TCFL5
UGT1A1	VAMP5	TMEM19	TMEM82	ZNF484	TCHHL1
UGT2A1	VAV3	TMEM56	TMEM86A	ZNF498	TCP10L
UGT2B11	VEGFA	TMEM63C	TMPRSS7	ZNF556	TDGF1
UHRF2	VGLL2	TMEM82	TNFAIP2	ZNF626	TECTB
ULK2	VIP	TMEM86A	TNIP1	ZNF658B	TEF
UNC119	VKORC1	TMUB2	TNNT3	ZNF679	TEK
UNC13B	VPS26	TNFAIP2	TOB2	ZNF683	TEKT4
UNKL	VRK3	TNFAIP6	TOPBP1	ZNF687	TEX12
UPK1B	VSTM2L	TNFSF4	TOR1A	ZNF71	TEX13B
UQCRH	WAC	TNIP1	TP53I3	ZNF720	TGM1
UROD	WBP2	TNNT3	TPX2	ZNF764	TGM7
USP1	WBP5	TOR1A	TRADD	ZNF766	THAP11
USP47	WDR20	TP53I3	TRAM1L1	ZNF772	THBS4
UTP14C	WDR33	TPPP3	TRAP1	ZNF785	THEM4
VAPB	WDR51B	TPX2	TRAT1	ZNF829	THOC7
VAX2	WDR81	TRADD	TRDN	ZNHIT2	THUMPD1
VCX3A	WDR82	TRAF7	TRIM2	ZSCAN1	TIMM17A
VEGFA	WFDC13	TRAM1L1	TRIM34	ZSCAN12	TIMM17B
VENTX	WHAMML1	TRAP1	TRIM43	ZZEF1	TIMM8A
VIM	WHSC2	TRAPPC9	TRIM56		TIMP2
VKORC1	WISP3	TRAT1	TRIM59		TIMP3
VMO1	WNT1	TRDN	TRMT12		TIMP4
VPS13C	WNT2B	TRIM34	TRPC4		TIRAP
VPS26	WNT8A	TRIM43	TRPC6		TLL1
VPS26B	WNT9B	TRIM56	TRPM1		TLN1
WAC	XAGE1B	TRIM59	TRPM2		TLR9
WDR20	XBP1	TRIM61	TSGA10		TMCO1
WDR33	XYLT1	TRMT12	TSPAN4		TMEM143
WDR51B	YPEL1	TRPC4	TTC37		TMEM161A
WDR79	YPEL3	TRPC6	TTLL4		TMEM176A
WDR81	ZBED5	TRPM1	TUBA4		TMEM178
WFDC13	ZBTB24	TRPM2	TXNDC16		TMEM19
WHAMML1	ZBTB6	TRPM4	TXNDC5		TMEM31
WHSC1L1	ZCCHC3	TRPV5	TXNL1		TMEM63C
WIF1	ZCCHC7	TSEN54	TXNL4B		TMEM82
WISP3	ZCRB1	TSGA10	UBAC1		TMEM86A
WNT9B	ZDHHC20	TSPAN11	UBE2A		TMPRSS7
XAGE1B	ZDHHC24	TSPAN33	UBE2H		TMUB2
XBP1	ZFHX3	TSPAN4	UBE2L3		TMX1
XIST	ZFP14	TSTD2	UBE2Z		TNFAIP2
YPEL1	ZFP36	TTC21A	UBQLN4		TNFAIP6
ZBTB16	ZFP90	TTC30A	UGT1A1		TNFRSF11A
ZBTB25	ZFP91	TTLL4	UGT2A1		TNIP1
ZBTB40	ZFPM2	TUBA4	UGT2B11		TNNT3
ZBTB6	ZMAT2	TWISTNB	UHRF2		TOPBP1
ZCCHC3	ZNF136	TXNDC16	ULK2		TOR1A
ZCCHC4	ZNF175	TXNDC5	UNC13B		TOX4
ZCCHC7	ZNF205	TXNL1	UQCRH		TP53I3

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ZFP14	ZNF287	UBE2L3	VAX2	TRAPPC9
ZFP36	ZNF32	UBE2L6	VCX3A	TRAT1
ZFP90	ZNF321	UBE2Z	VEGFA	TRDN
ZMAT2	ZNF408	UBE4A	VENTX	TRIM2
ZMYND11	ZNF410	UBQLN2	VIM	TRIM34
ZNF136	ZNF420	UBQLN4	VKORC1	TRIM43
ZNF165	ZNF430	UGT1A1	VPS13C	TRIM56
ZNF167	ZNF439	UGT2A1	VPS26	TRIM59
ZNF175	ZNF44	UGT2B11	WAC	TRIOBP
ZNF205	ZNF473	UHRF2	WDR33	TRMT12
ZNF219	ZNF484	ULK2	WDR51B	TRPC2
ZNF221	ZNF498	UNC119	WDR79	TRPC4
ZNF263	ZNF524	UNC13B	WDR81	TRPC6
ZNF271	ZNF542	UNKL	WFDC13	TRPM1
ZNF287	ZNF550	UQCRH	WIF1	TRPM2
ZNF295	ZNF573	UROD	WISP3	TRPM4
ZNF32	ZNF626	USP1	WNT9B	TRPV5
ZNF322B	ZNF658B	USP47	XBP1	TSGA10
ZNF362	ZNF679	USP6	XIST	TSPAN10
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ZNF410	ZNF695	VAV3	ZBTB16	TSPAN4
ZNF438	ZNF700	VAX2	ZBTB25	TSTD2
ZNF484	ZNF71	VEGFA	ZBTB40	TTLL4
ZNF498	ZNF713	VENTX	ZBTB6	TUBA4
ZNF556	ZNF75D	VIM	ZCCHC3	TWSG1
ZNF626	ZNF764	VKORC1	ZCCHC4	TXNDC16
ZNF658B	ZNF766	VPS13C	ZCCHC7	TXNDC5
ZNF679	ZNF772	VPS26	ZFHX3	TXNL1
ZNF683	ZNF789	VRK3	ZFP14	TXNL4B
ZNF687	ZNHIT2	VSTM2L	ZFP36	UAP1L1
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ZNF764	ZZEF1	WDR20	ZMYND11	UBE2H
ZNF766		WDR33	ZNF136	UBE2L3
ZNF772		WDR45L	ZNF165	UBE2L6
ZNF785		WDR51B	ZNF175	UBE2R2
ZNF829		WDR55	ZNF205	UBE2Z
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		WNT9B	ZNF295	UGT2A1
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		XIST	ZNF385C	UGT2B28
		XYLT1	ZNF410	UHRF2

YPEL1	ZNF438	ULK2
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