

Supplementary file 3

AIRE_dependent_FEZF2_independent TRAs		
Gene ID	Gene symbol	mRNA Accession number
67082	1700011H14Rik	NM_025956.4
66732	4921530L21Rik	NM_001358241.1
319942	A530016L24Rik	NM_177039.4
239435	Aard	NM_175503.3
219033	Ang4	NM_177544.4
11998	Avp	NM_009732.2
212989	Best2	NM_001130194.1
12163	Bmp8a	NM_001256019.1
29866	Cabp2	NM_001160253.1
20297	Ccl20	NM_001159738.1
20307	Ccl8	NM_021443.3
386463	Cdsn	NM_001008424.2
71601	Ceacam20	NM_027839.2
109791	Clps	NM_001317065.1
12903	Crabp1	NM_001284507.1
208677	Creb3l3	NM_145365.3
13012	Cst8	NM_009978.2
55985	Cxcl13	NM_018866.2
13070	Cyp11a1	NM_001346787.1
13075	Cyp19a1	NM_001348171.1
13076	Cyp1a1	NM_001136059.2
13077	Cyp1a2	NM_009993.3
13087	Cyp2a5	NM_007812.4
68171	D730048I06Rik	NM_026593.3
13206	Ddx4	NM_001145885.1
50722	Dkk1	NM_015789.3
13386	Dlk1	NM_001190703.1
15572	Elavl4	NM_001038698.1
207393	Elfn2	NM_001358692.1
270162	Elmod1	NM_177769.4
75429	Fam183b	NM_001162878.2
229499	Fcrl1	NM_001136236.1
14170	Fgf15	NM_008003.2
14526	Gcg	NM_008100.4
14607	Gip	NM_008119.2
66283	Gkn1	NM_025466.1
66284	Gkn2	NM_025467.1
14765	Gpr50	NM_001308501.1
14916	Guca2b	NM_008191.2
14939	Gzmb	NM_013542.3
15162	Hck	NM_001172117.1
72927	Hepacam	NM_175189.4
101202	Hepacam2	NM_178899.5
15408	Hoxb13	NM_008267.4

15492	Hsd3b1	NM_001304800.1
72413	Kcnmb2	NM_028231.2
19144	Klk6	NM_001164696.1
23993	Klk7	NM_011872.3
16644	Kng1	NM_001102411.1
433619	Kprp	NM_028629.1
406220	Krt77	NM_006521140.1
332131	Krt78	NM_212487.4
328789	Lhfp15	NM_026571.2
17182	Matn3	NM_010770.4
50997	Mpp2	NM_001356324.1
14126	Ms4a2	NM_001276328.1
17771	Mtl5	NM_001039657.2
18133	Nov	NM_010930.4
23958	Nr2e3	NM_013708.4
67405	Nts	NM_024435.2
100535	Oas1d	NM_133893.3
21906	Otop1	NM_172709.3
109820	Pgc	NM_025973.3
53906	Phgr1	NM_001145644.1
18976	Pomc	NM_001278581.1
22264	Prap1	NM_009475.2
69814	Prss32	NM_027220.2
19259	Ptpn5	NM_001163565.1
19662	Rbp4	NM_001159487.1
19694	Reg3a	NM_011259.1
18489	Reg3b	NM_011036.1
19695	Reg3g	NM_011260.2
67709	Reg4	NM_026328.2
67792	Rgs8	NM_001347115.1
19752	Rnase1	NM_011271.2
104582	Rprml	NM_001033212.2
380683	Sec14l3	NM_001029937.2
20706	Serpib9b	NM_011452.2
210027	Slc35f3	NM_001363500.1
209837	Slc38a5	NM_172479.3
28250	Slco1a4	NM_001355577.1
57277	Slurp1	NM_020519.1
20754	Sprr1b	NM_009265.3
20604	Sst	NM_009215.1
56362	Sult1b1	NM_001356943.1
72003	Synpr	NM_001163032.1
21334	Tac2	NM_001199971.1
21338	Tacr3	NM_021382.6
21786	Tff3	NM_011575.2
208613	Tmem212	NM_001164437.1
50930	Tnfsf14	NM_019418.3
329278	Tnn	NM_177839.3

195359	Trim40	NM_001033235.3
76670	Ttc18	NM_001163638.1
242800	Ttc34	NM_172878.3
192653	Ttc36	NM_138951.1

FEZF2_dependent_AIRE_independent TRAs		
Gene ID	Gene symbol	mRNA Accession number
108956	Apol7c	NM_175391.4
68891	Cd177	NM_026862.3
12565	Cdh9	NM_009869.1
12140	Fabp7	NM_021272.3
54713	Fezf2	NM_080433.3
71520	Grap	NM_027817.3
72585	Lypd1	NM_001311089.1
17287	Mep1a	NM_008585.2
319211	Nol4	NM_001161483.1
246313	Prokr2	NM_144944.3
19711	Resp18	NM_009049.2
246709	Rgs13	NM_153171.4
72902	Spock3	NM_001252620.1
69083	Sult1c2	NM_026935.4
241556	Tspan18	NM_183180.2

AIRE_dependent_FEZF2_dependent TRAs		
Gene ID	Gene symbol	mRNA Accession number
78354	2210407C18Rik	NM_144544.2
230163	Aldob	NM_144903.3
11806	Apoa1	NM_009692.4
11808	Apoa4	NM_007468.2
11813	Apoc2	NM_001277944.1
12319	Car8	NM_007592.3
268663	Cdhr2	NM_001033364.3
13009	Csrp3	NM_001198841.1
21884	Fabp9	NM_011598.3
78354	Myh3	NM_144544.2
243262	Oas1f	NM_145153.3
18478	Pah	NM_008777.3
20208	Saa1	NM_001357493.
20210	Saa3	NM_011315.3
66198	Them5	NM_025416.3
226654	Tstd1	NM_001164525.1

AIRE_independent_FEZF2_independent TRAs		
Gene ID	Gene symbol	mRNA Accession number
71775	1300017J02Rik	NM_027918.2
72301	1810041L15Rik	NM_001163145.1
70291	2510049J12Rik	NM_001101431.1
69865	A1cf	NM_001081074.1

100705	Acacb	NM_133904.2
11423	Ache	NM_001290010.1
11474	Actn3	NM_013456.2
231821	Adap1	NM_006504669.2
432530	Adcy1	NM_009622.1
11548	Adra1b	NM_001284380.1
11689	Alox5	NM_009662.2
68737	Angel1	NM_144524.2
71872	Aox4	NM_023631.2
56380	Arid3b	NM_019689.2
17172	Ascl1	NM_008553.5
67855	Asprv1	NM_026414.2
11567	Avil	NM_009635.3
93961	B3galt5	NM_001122993.1
12022	Barx1	NM_007526.4
12038	Bche	NM_009738.3
12169	Bmx	NM_009759.4
207777	Bzrap1	NM_172449.2
72709	C1qtnf6	NM_001204152.1
12287	Cacna1b	NM_001042528.2
12292	Cacna1s	XM_006529106.2
27062	Cadps	NM_001042617.1
12310	Calca	NM_001033954.3
116903	Calcb	NM_054084.2
80796	Calm4	NM_020036.4
434778	Ccdc160	NM_001034059.1
24047	Ccl19	NM_011888.2
12467	Cct6b	NM_001291242.1
21939	Cd40	NM_011611.2
15985	Cd79b	NM_001313939.1
12564	Cdh8	NM_001039154.2
72040	Cdhr5	NM_001114322.1
12590	Cdx1	NM_009880.3
26366	Ceacam10	NM_007675.4
18636	Cfp	NM_008823.4
12647	Chat	NM_009891.2
229933	Clca2	XM_006501432.3
362053	Clca4	NM_201419.1
57255	Cldn13	NM_020504.4
212070	Clrn3	NM_178669.5
69700	Col22a1	NM_027174.1
11571	Crisp1	NM_009638.3
12944	Crp	NM_007768.4
54698	Crtam	NM_001281954.1
12971	Crym	NM_016669.2
12983	Csf2rb	NM_001358854.1
12991	Csn2	NM_001286020.1
73720	Cst6	NM_028623.5

68588	Cthrc1	NM_026778.2
15945	Cxcl10	NM_021274.2
17329	Cxcl9	NM_008599.4
13074	Cyp17a1	NM_007809.3
13370	Dio1	NM_007860.4
239133	Dleu7	NM_173419.2
54485	Dll4	NM_019454.3
269109	Dpp10	NM_199021.3
13510	Dsg1a	NM_010079.2
103551	E130012A19Rik	NM_175332.3
242705	E2f2	NM_001305399.1
268780	Egflam	NM_001289496.1
112407	Egln3	NM_028133.2
13807	Eno2	NM_001302642.1
71920	Epgn	NM_053087.2
56226	Espn	NM_019585.3
69627	Fam89a	NM_001081120.1
80891	Fcrls	NM_030707.3
14159	Fes	NM_010194.2
59083	Fetub	NM_001083904.1
73191	Fezf1	NM_028462.1
232237	Fgd5	NM_172731.3
14169	Fgf14	NM_010201.4
56636	Fgf21	NM_020013.4
15223	Foxj1	NM_008240.3
14344	Fut2	NM_001271993.1
210710	Gab3	NM_181584.4
228858	Gdap1l1	NM_144891.2
83408	Gimap3	NM_031247.3
14695	Gnb3	NM_013530.1
64337	Gng13	NM_001357782.1
238377	Gpr68	NM_001177673.1
15109	Hal	NM_010401.4
15114	Hap1	NM_001359052.1
15464	Hrc	NM_010473.2
330723	Htra4	NM_001081187.3
16005	Igfals	NM_001364895.1
16159	Il12a	NM_001159424.2
16178	Il1r2	NM_001360800.1
53626	Insm1	NM_016889.3
27056	Irf5	NM_001252382.1
16429	Itln1	NM_010584.3
57339	Jph1	NM_020604.2
60613	Kcnq4	NM_001081142.2
242721	Klhdc7a	NM_173427.2
50928	Klrg1	NM_016970.1
76484	Kndc1	NM_177261.4
66809	Krt20	NM_023256.2

75706	Krt24	NM_029393.2
15450	Lipc	NM_001324472.1
76113	Lpo	NM_080420.2
16970	Lrmp	NM_001281980.1
268747	Lrrc16b	NM_001024645.2
16992	Lta	NM_010735.2
17001	Ltc4s	NM_001313968.1
17005	Ltk	NM_008523.2
217721	Mfsd7c	NM_145447.2
17395	Mmp9	NM_013599.4
17922	Myo7b	NM_032394.3
17928	Myog	NM_031189.2
74513	Neto2	NM_001081324.2
269116	Nfasc	NM_001160316.1
217431	Nol10	NM_001008421.1
18126	Nos2	NM_001313921.1
18231	Nxph1	NM_008751.5
380924	Olfm4	NM_001351947.1
57757	Pglyrp2	NM_001271476.1
320207	Pik3r5	NM_177320.2
85031	Pla1a	XM_006522771.1
26971	Pla2g2f	NM_001360875.1
434128	Pnmal2	NM_001099636.2
18985	Pou2af1	NM_011136.2
56635	Prl2a1	NM_019991.1
71373	Prr16	NM_001081224.2
19227	Pthlh	NM_008970.4
20459	Ptk6	NM_001356304.1
56089	Ramp3	NM_019511.3
75141	Rasd2	NM_029182.1
320100	Relt	NM_001358914.1
51791	Rgs14	NM_001360714.1
56533	Rgs17	NM_001161822.1
20129	Rptn	NM_009100.2
72780	Rspo3	NM_028351.3
104001	Rtn1	NM_001007596.2
235281	Scn3b	NM_001083917.1
70061	Sdr9c7	NM_027301.3
68054	Serpina12	NM_026535.2
20720	Serpina7	NM_009255.4
71869	Serpina12	NM_001199213.2
11905	Serpinc1	NM_080844.4
20370	Sez6	NM_001291225.1
230613	Skint10	NM_177668.2
227659	Slc2a6	NM_001177627.1
239250	Slitrk6	NM_175499.4
276829	Smtnl2	NM_177776.3
20618	Sncg	NM_011430.3

223227	Sox21	NM_177753.3
272382	Spib	NM_019866.1
100689	Spon2	NM_133903.3
68792	Srpx2	NM_001083895.3
240119	St6gal2	NM_001347403.1
20897	Stra6	NM_001162475.1
20979	Syt1	NM_001252341.1
21384	Tbx15	NM_009323.2
57765	Tbx21	NM_019507.2
210417	Thsd7b	NM_172485.3
75604	Tm4sf5	NM_029360.3
18383	Tnfrsf11b	NM_008764.3
21956	Tnnt2	NM_001130174.2
21957	Tnnt3	NM_001163664.1
28240	Trpm2	NM_138301.2
208634	Tspan10	NM_145363.2
69737	Ttl	NM_027192.2
237858	Tusc5	NM_177709.3
24108	Ubd	NM_023137.3
212190	Ubxn10	NM_001285928.1
226841	Vash2	NM_144879.2
381677	Vgf	NM_001039385.1