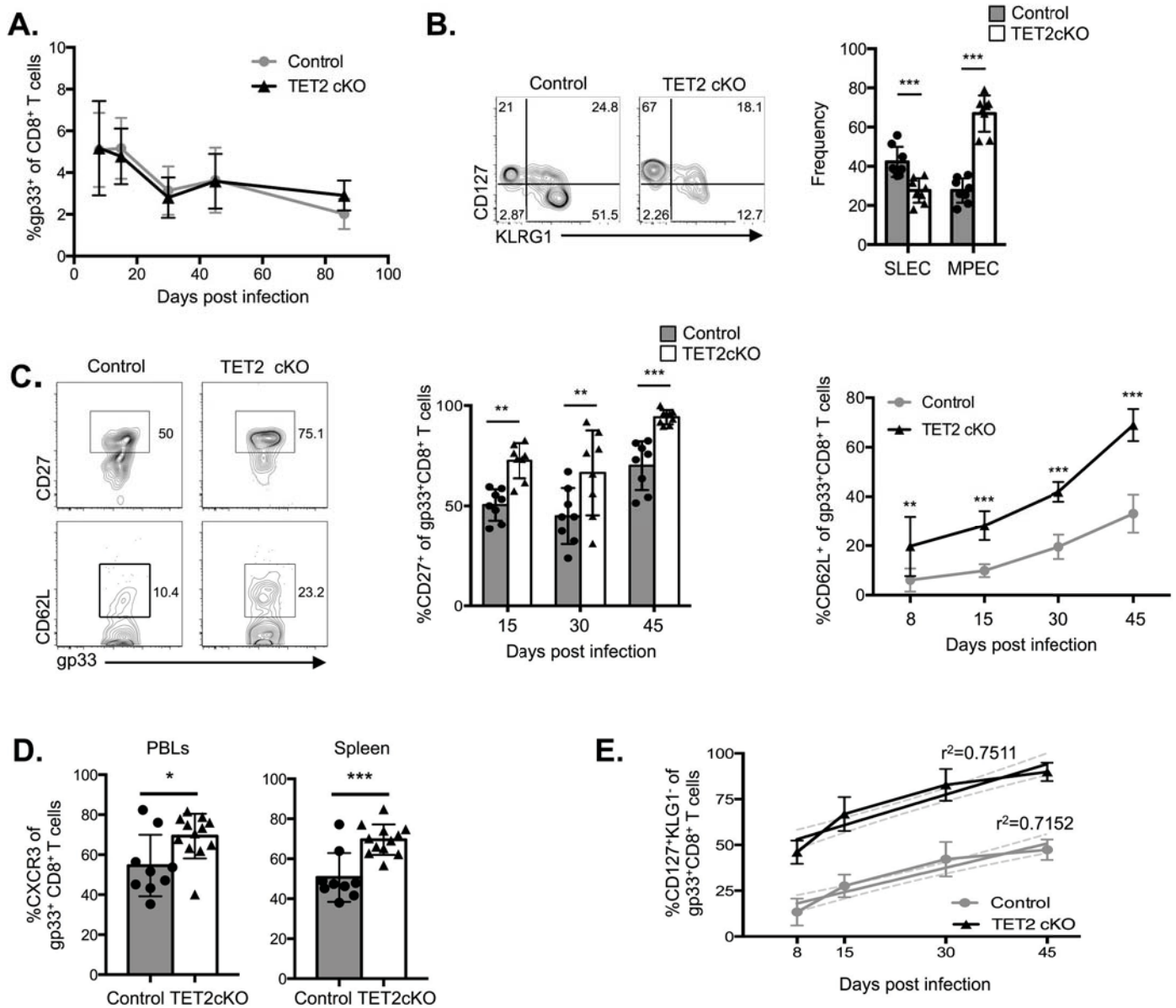
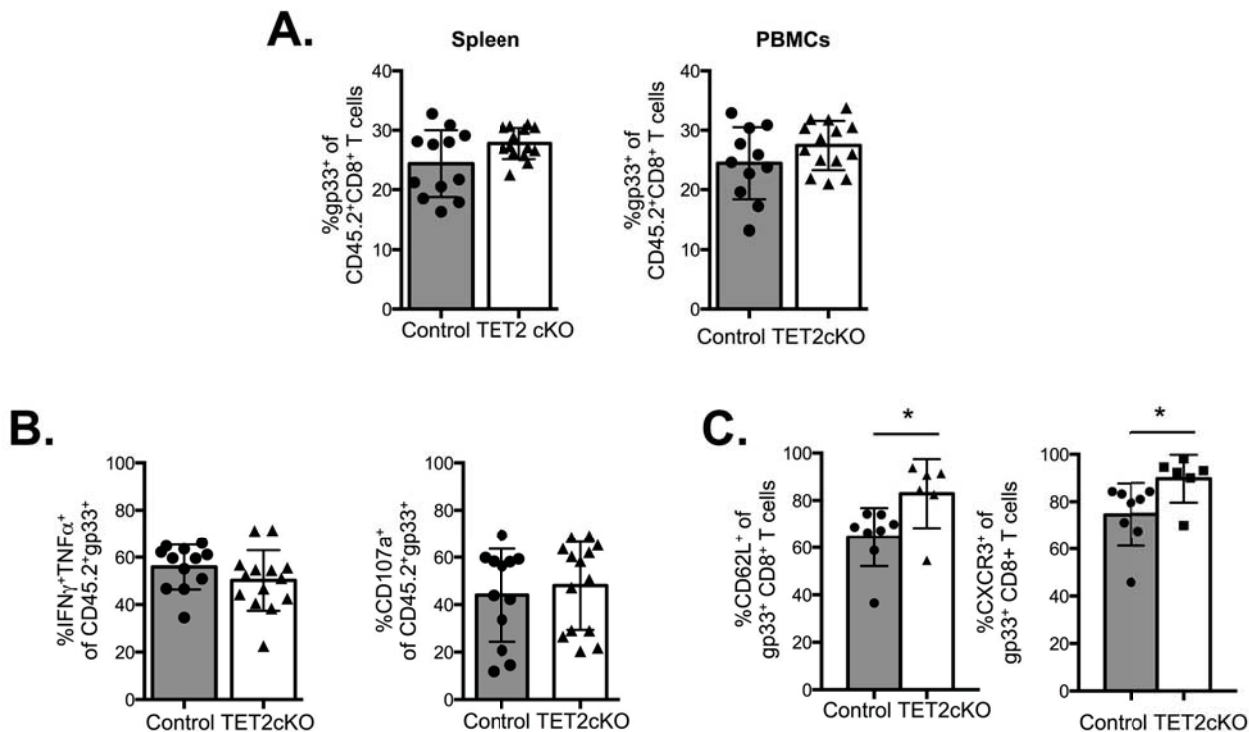


Supplementary Figure 1. TET2^{fl/fl} CD4Cre⁺ mice have intact thymic and peripheral T cell subsets. **A)** Expression of IDAX and CXXC5, relative to β -actin, in cDNA isolated from indicated WT tissues (IDAX) or T lymphocytes (IDAX, CXXC5). IDAX expression normalized to pancreatic cells and CXXC5 expression normalized to unstimulated T cells. n.d., not detected. **B) Left,** flow cytometric analysis of CD4 and CD8 expression on live thymocytes from control and TET2^{fl/fl} CD4Cre⁺ mice (TET2 cKO), aged 6-8wks. **Right,** Frequency and absolute numbers of thymocyte subsets among live thymocytes from control and TET2 cKO mice. **C)** Flow cytometric analysis of CD4 and CD8 expression on live TCR β ⁺ splenocytes from control and TET2 cKO mice, aged 6-8wks. **D) Left,** flow cytometric analysis of CD44 and CD62L expression on CD4⁺ and CD8⁺ TCR β ⁺ splenocytes; **right,** absolute number of indicated populations per spleen. **E)** Flow cytometric analysis of CD25, CD69 and intracellular Bcl-XL expression in CD4⁺ and CD8⁺ splenocytes stimulated overnight with 0.005mg/ml soluble anti-CD3. **F)** Representative flow cytometric analysis of CFSE dilution in CD4⁺ and CD8⁺ splenocytes stimulated with 0.1mg/ml soluble anti-CD3 for 3 days. ** $p < 0.01$, *** $p < 0.001$, two-way ANOVA with Dunnett's multiple comparisons. Data representative of $n=5$, 2 independent experiments (A), $n=5$ /genotype, 2 independent experiments (B-F).



Supplementary Figure 2 TET2 loss enhances memory CD8⁺ T cell differentiation. Control and TET2 cKO mice were infected with LCMV-Armstrong and the phenotype of gp33⁺ CD8⁺ T cells isolated from peripheral blood were serially monitored over time. **A)** Frequency of gp33⁺ among CD8⁺ T cells in PBMCs at indicated time points. **B) Left,** flow plots of KLRG1 and CD127 expression on gp33⁺CD8⁺TCRb⁺ PBMCs. **Right,** frequency of CD127⁺KLRG1⁻ population among gp33⁺CD8⁺TCRb⁺ PBMCs on day 15 p.i. **C) Left,** representative flow plots of CD27 and CD62L on gp33⁺CD8⁺TCRb⁺ PBMCs on D15p.i. **Middle,** frequency of CD27⁺ cells among gp33⁺CD8⁺TCRβ⁺ PBMCs on indicated days following LCMV-Armstrong infection. **Left,** frequency of CD62L⁺ cells among gp33⁺CD8⁺TCRβ⁺ PBMCs on indicated days. **D)** Frequency of CXCR3⁺ cells among gp33⁺ CD8⁺TCRβ⁺ PBMCs and splenocytes on D8 p.i. LCMV-Armstrong. **E)** Linear regression analysis of MPEC (CD127⁺KLRG1⁻) population among gp33⁺ CD8⁺ T cells in control and TET2 cKO mice following LCMV infection (p=0.15). Data representative of n=8/genotype, 2 independent experiments (A-C) or n=9/control and 12/TET2cKO, 3 independent experiments (D). *p<0.05, **p<0.01, ***p<0.001, unpaired t-test.



Supplementary Figure 3. TET2-deficient memory CD8⁺ T cells have functional recall responses. Equal numbers of gp33⁺CD8⁺ T cells from LCMV-Armstrong immune control and TET2cKO mice were transferred into congenic hosts, which were subsequently infected with LM-gp33. Gp33-specific memory responses were assessed five days later. **A)** Frequency of transferred gp33⁺ of CD8⁺TCR β ⁺ splenocytes and PBMCs. **B)** Frequency of indicated cell populations in CD8⁺ splenocytes stimulated *ex vivo* with gp33 peptide for 5hrs. **C)** Frequency of CD62L⁺ (*left*) or CXCR3⁺ (*right*) of gp33⁺ CD8⁺ TCR β ⁺ PBMCs on day>120 following LCMV infection, prior to adoptive transfer. Data representative of n=12/control, 14/TET2 cKO, 3 independent experiments (A-B) or n=8/control, 6/TET2 cKO, 2 independent experiments (C). *p<0.05, unpaired t-test.

Supplementary Table 1

Id	Start	Width	Gene Symbol	Mean Meth Diff	# of CpGs	# of DMCs	DMR.pvalue	DMR.qvalue
NM_001113487_intron_1_0_chr11_117152351_f	117152350	60393	Sept9	21.43590202	6	3	3.1001E-18	4.81787E-18
NM_001113486_intron_0_0_chr11_117061088_f	117061087	19102	Sept9	21.22728798	11	5	1.2198E-19	2.04141E-19
NM_001113486_intron_1_0_chr11_117080246_f	117080245	71467	Sept9	25.10459861	5	3	2.3816E-33	3.21486E-32
NM_001113486_intron_2_0_chr11_117152351_f	117152350	60393	Sept9	21.43590202	6	3	3.1001E-18	4.81787E-18
NM_001081005_up_5000_chr2_166883434_f	166883433	5001	1500012F01RIK	35.92695283	10	10	1.162E-27	3.94838E-27
NM_198000_intron_3_0_chr2_30653501_r	30653500	2744	1700001O22RIK	39.31940416	6	5	3.2677E-34	6.88387E-33
NR_028486_intron_3_0_chr2_30653501_r	30653500	2744	1700001O22RIK	39.31940416	6	5	3.2677E-34	6.88387E-33
NR_028487_intron_3_0_chr2_30653501_r	30653500	2744	1700001O22RIK	39.31940416	6	5	3.2677E-34	6.88387E-33
NM_001033176_cds_1_0_chr7_52541812_f	52541811	188	1700039E15RIK	25.10602453	12	6	1.1842E-20	2.13013E-20
NM_001033176_cds_2_0_chr7_52542252_f	52542251	203	1700039E15RIK	25.10602453	12	6	1.1842E-20	2.13013E-20
NM_001033176_intron_1_0_chr7_52541999_f	52541998	254	1700039E15RIK	25.10602453	12	6	1.1842E-20	2.13013E-20
NR_045501_intron_3_0_chr13_114256728_r	114256727	17999	4921509O07RIK	38.25741868	7	6	5.6068E-24	1.34564E-23
NM_028765_intron_13_0_chr2_127870192_f	127870191	31392	ACOXL	30.54042023	6	6	1.2088E-34	2.79499E-33
NM_009616_cds_15_0_chr11_45949750_f	45949749	215	ADAM19	20.72692789	12	3	2.8668E-17	4.22009E-17
NM_009616_intron_14_0_chr11_45948039_f	45948038	1712	ADAM19	20.72692789	12	3	2.8668E-17	4.22009E-17
NM_009616_intron_15_0_chr11_45949964_f	45949963	903	ADAM19	20.72692789	12	3	2.8668E-17	4.22009E-17
NM_130863_intron_19_0_chr19_4294927_r	4294926	10196	ADRBK1	29.22068422	6	4	4.3479E-32	4.52942E-31
NM_178803 utr5_0_0_chr6_140571184_f	140571183	397	AEBP2	44.6884413	6	5	1.2088E-34	2.79499E-33
NM_009637_up_5000_chr6_140567819_f	140567818	5001	AEBP2	44.6884413	6	5	1.2088E-34	2.79499E-33
NM_001005605_up_5000_chr6_140567210_f	140567209	5001	AEBP2	44.6884413	6	5	1.2088E-34	2.79499E-33
NM_001276288_intron_2_0_chr10_81026904_f	81026903	515	AES	28.96905985	5	4	1.0376E-20	1.89164E-20
NM_010347_intron_2_0_chr10_81026904_f	81026903	515	AES	28.96905985	5	4	1.0376E-20	1.89164E-20
NR_074087_intron_2_0_chr10_81026904_f	81026903	515	AES	28.96905985	5	4	1.0376E-20	1.89164E-20
NM_001002895_cds_1_0_chr17_27701094_r	27701093	107	AI413582	37.56802353	6	6	2.6993E-33	3.36699E-32
NM_001002895_intron_1_0_chr17_27701200_r	27701199	131	AI413582	37.56802353	6	6	2.6993E-33	3.36699E-32
NM_009672_intron_0_0_chr9_62189362_f	62189361	30166	ANP32A	39.92604683	9	8	5.515E-33	6.61804E-32
NM_009672 utr3_6_0_chr9_62225423_f	62225422	1188	ANP32A	36.6859258	6	6	3.1342E-22	6.34868E-22

NM_172725_cds_13_0_chr5_142951657_f	142951656	99	AP5Z1	22.12968178	6	3	4.5186E-17	6.58012E-17
NM_172725_cds_16_0_chr5_142953170_f	142953169	272	AP5Z1	28.09873483	11	7	8.3016E-30	4.54911E-29
NM_172725_intron_13_0_chr5_142951755_f	142951754	894	AP5Z1	22.12968178	6	3	4.5186E-17	6.58012E-17
NM_013476_cds_0_0_chrX_95345121_f	95345120	1554	AR	-26.0687053	6	4	9.7673E-15	1.23788E-14
NM_001039939_cds_10_0_chr2_153223112_f	153223111	626	ASXL1	51.51659352	7	7	1.6362E-35	8.19509E-34
NM_178662_intron_10_0_chr10_80681959_r	80681958	5211	ATCAY	22.70392042	8	4	2.5705E-27	8.2604E-27
NM_019835_intron_7_0_chr2_167138722_r	167138721	35697	B4GALT5	23.32296528	5	3	2.2361E-18	3.50272E-18
NM_001163270_cds_14_0_chr17_25383749_r	25383748	53	BAIAP3	39.42457613	5	4	2.5095E-33	3.21486E-32
NM_001163270_intron_13_0_chr17_25383634_r	25383633	116	BAIAP3	39.42457613	5	4	2.5095E-33	3.21486E-32
NM_021399_intron_0_0_chr12_109155625_r	109155624	72051	BCL11B	26.79149769	7	4	2.1497E-28	9.28071E-28
NM_021399_intron_0_0_chr12_109155625_r	109155624	72051	BCL11B	32.36413026	8	7	4.529E-36	3.30266E-34
NM_001079883_intron_0_0_chr12_109155625_r	109155624	48258	BCL11B	26.79149769	7	4	2.1497E-28	9.28071E-28
NM_001079883_intron_1_0_chr12_109204098_r	109204097	23578	BCL11B	32.36413026	8	7	4.529E-36	3.30266E-34
NM_009743_cds_1_0_chr2_152655163_r	152655162	565	BCL2L1	23.52001032	11	5	1.6805E-22	3.47078E-22
NM_080708_intron_14_0_chr5_97503763_f	97503762	12000	BMP2K	45.37825627	6	6	6.3058E-33	7.47242E-32
NM_030178_intron_0_0_chr6_113257332_f	113257331	2466	BRPF1	29.97322242	17	11	8.2838E-31	5.20071E-30
NM_175488_intron_7_0_chr10_93028691_f	93028690	1719	CCDC38	43.45451929	5	5	2.5095E-33	3.21486E-32
NM_001080808_intron_7_0_chr5_116174766_r	116174765	6366	CCDC64	24.80304427	7	4	7.0241E-28	2.41264E-27
NM_026681_intron_26_0_chr12_102222180_r	102222179	38325	CCDC88C	35.90067456	7	6	2.8401E-33	3.49662E-32
NM_007719_cds_0_0_chr11_99006272_r	99006271	1078	CCR7	30.0182427	11	9	1.8507E-23	4.19738E-23
NM_007719_utr3_0_0_chr11_99005513_r	99005512	760	CCR7	30.0182427	11	9	1.8507E-23	4.19738E-23
NM_009852_intron_11_0_chr19_10874903_r	10874902	29396	CD6	30.11949766	6	6	1.0059E-30	6.19216E-30
NM_001037801_intron_10_0_chr19_10874903_r	10874902	29396	CD6	30.11949766	6	6	1.0059E-30	6.19216E-30
NM_001123386_cds_1_0_chr13_35907778_f	35907777	668	CDYL	25.72753514	7	4	1.7583E-30	1.06849E-29
NM_009881_cds_4_0_chr13_35907778_f	35907777	668	CDYL	25.72753514	7	4	1.7583E-30	1.06849E-29
NM_001033419_cds_5_0_chr7_20446458_r	20446457	44	CEACAM16	21.43043412	5	3	3.6463E-18	5.62066E-18
NM_001033419_intron_4_0_chr7_20444288_r	20444287	2171	CEACAM16	21.43043412	5	3	3.6463E-18	5.62066E-18
NM_001033419_utr5_5_0_chr7_20446501_r	20446500	149	CEACAM16	21.43043412	5	3	3.6463E-18	5.62066E-18
NM_001033419_up_5000_chr7_20446649_r	20446648	5001	CEACAM16	21.43043412	5	3	3.6463E-18	5.62066E-18
NM_001277149_intron_3_0_chr4_8728613_f	8728612	3686	CHD7	39.00610582	5	5	2.5095E-33	3.21486E-32
NM_009601_up_5000_chr11_69609440_r	69609439	5001	CHRNB1	22.35937227	9	4	6.1165E-19	9.87808E-19
NM_029556_intron_0_0_chr14_122581004_f	122581003	129463	CLYBL	29.08136115	5	3	1.0802E-20	1.95807E-20

NM_001163262_intron_0_0_chr8_119781302_f	119781301	119674	CMIP	29.2644923	9	4	1.8825E-23	4.24904E-23
NM_001163262_intron_0_0_chr8_119781302_f	119781301	119674	CMIP	32.09297614	7	5	2.5808E-33	3.26214E-32
NM_001164804_intron_10_0_chr4_46575968_r	46575967	38722	CORO2A	26.82484934	11	4	2.0909E-32	2.30483E-31
NM_001025432_intron_14_0_chr16_4109219_r	4109218	5556	CREBBP	26.32870522	5	3	5.8765E-28	2.03318E-27
NM_201354_intron_2_0_chr18_75631675_r	75631674	47719	CTIF	35.15107892	5	4	1.3964E-27	4.66138E-27
NM_201354_intron_5_0_chr18_75724735_r	75724734	40548	CTIF	30.10544625	6	4	4.9299E-14	6.08539E-14
NM_198013_intron_0_0_chr11_87912846_f	87912845	70222	CUEDC1	54.63232614	10	10	3.4136E-36	3.30266E-34
NM_133687_intron_0_0_chr18_35989641_f	35989640	28407	CXXC5	20.67218774	9	4	1.0205E-13	1.24674E-13
NM_028061 utr3_0_0_chr3_107998689_r	107998688	3442	CYB561D1	23.46314398	8	4	1.0166E-21	1.98303E-21
NM_001081320 utr3_0_0_chr3_107998689_r	107998688	3442	CYB561D1	23.46314398	8	4	1.0166E-21	1.98303E-21
NM_001252438_cds_2_0_chr16_78547821_r	78547820	517	D16ERTD472E	33.08409355	8	7	4.529E-36	3.30266E-34
NM_001252440_cds_2_0_chr16_78547821_r	78547820	517	D16ERTD472E	33.08409355	8	7	4.529E-36	3.30266E-34
NM_001252439_cds_2_0_chr16_78547821_r	78547820	517	D16ERTD472E	33.08409355	8	7	4.529E-36	3.30266E-34
NM_025967_cds_2_0_chr16_78547821_r	78547820	517	D16ERTD472E	33.08409355	8	7	4.529E-36	3.30266E-34
NM_001033347 utr3_0_0_chr2_103983232_r	103983231	5707	D430041D05RIK	42.85727872	10	10	1.3699E-36	3.30266E-34
NR_045848 utr5_2_0_chr7_25941113_f	25941112	538	D930028M14RIK	22.11685157	9	3	8.4952E-24	1.98851E-23
NR_045847 utr5_2_0_chr7_25941113_f	25941112	538	D930028M14RIK	22.11685157	9	3	8.4952E-24	1.98851E-23
NM_198114_intron_14_0_chr19_10339586_r	10339585	4092	DAGLA	40.73150936	5	5	2.5095E-33	3.21486E-32
NM_011932_intron_5_0_chr3_137612742_r	137612741	11665	DAPP1	36.96739841	5	4	3.406E-26	9.93495E-26
NM_197982_cds_5_0_chr8_86245633_f	86245632	120	DDX39	23.69692555	16	7	3.367E-22	6.79138E-22
NM_197982_intron_4_0_chr8_86245040_f	86245039	594	DDX39	23.69692555	16	7	3.367E-22	6.79138E-22
NM_197982_intron_5_0_chr8_86245752_f	86245751	378	DDX39	23.69692555	16	7	3.367E-22	6.79138E-22
NM_016811_intron_22_0_chr10_128174201_r	128174200	6652	DGKA	24.48012105	6	3	8.1606E-17	1.16686E-16
NM_001081206_intron_23_0_chr6_37000253_r	37000252	7110	DGKI	27.29218343	6	3	3.5896E-27	1.13811E-26
NM_033374_intron_47_0_chr11_34545089_r	34545088	755	DOCK2	33.68460127	6	4	9.0309E-24	2.08811E-23
NM_134074_intron_17_0_chr14_121994831_r	121994830	2034	DOCK9	22.24663241	10	6	5.6923E-15	7.30218E-15
NM_001128307_intron_20_0_chr14_121994831_r	121994830	2034	DOCK9	22.24663241	10	6	5.6923E-15	7.30218E-15
NM_001128308_intron_18_0_chr14_121994831_r	121994830	2034	DOCK9	22.24663241	10	6	5.6923E-15	7.30218E-15
NM_001081039_intron_18_0_chr14_121994831_r	121994830	2034	DOCK9	22.24663241	10	6	5.6923E-15	7.30218E-15
NM_026854_intron_1_0_chr18_49860042_r	49860041	23235	DTWD2	46.96407306	6	6	1.2088E-34	2.79499E-33
NM_001170960_intron_1_0_chr18_49860042_r	49860041	27982	DTWD2	46.96407306	6	6	1.2088E-34	2.79499E-33
NM_022019_intron_1_0_chr1_185861532_f	185861531	31200	DUSP10	40.15178097	6	4	7.604E-24	1.78874E-23

NM_001085390_cds_2_0_chr19_53611947_f	53611946	221	DUSP5	38.3350557	5	5	6.496E-30	3.62245E-29
NM_007888_up_5000_chr11_69809128_f	69809127	5001	DVL2	45.57868731	5	5	2.4299E-33	3.21486E-32
NM_199307_intron_0_0_chr4_137418297_f	137418296	42689	ECE1	20.54134411	11	5	1.025E-16	1.45246E-16
NM_147151_up_5000_chr17_35030444_f	35030443	5001	EHMT2	25.35466925	30	14	1.0573E-16	1.49594E-16
NM_145830_up_5000_chr17_35030919_f	35030918	5001	EHMT2	25.35466925	30	14	1.0573E-16	1.49594E-16
NM_008813_cds_5_0_chr10_24371051_r	24371050	153	ENPP1	41.63910137	6	6	1.2088E-34	2.79499E-33
NM_001146045_intron_0_0_chr13_97837278_f	97837277	24496	FAM169A	28.84932688	11	7	6.3001E-27	1.9204E-26
NM_001100458_intron_0_0_chr13_97841667_f	97841666	20107	FAM169A	28.84932688	11	7	6.3001E-27	1.9204E-26
NM_001080708_intron_17_0_chr2_167820478_r	167820477	2267	FAM65C	21.23708026	10	3	6.3677E-29	3.17715E-28
NM_016925_intron_16_0_chr8_125810452_r	125810451	1510	FANCA	44.15146814	8	7	6.8517E-33	8.01908E-32
NM_001278075_cds_3_0_chr1_78451329_r	78451328	119	FARSB	30.05294333	6	4	1.4276E-27	4.74864E-27
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NM_001278075_intron_2_0_chr1_78440366_r	78440365	10964	FARSB	30.05294333	6	4	1.4276E-27	4.74864E-27
NM_001278075_intron_3_0_chr1_78451447_r	78451446	3694	FARSB	30.05294333	6	4	1.4276E-27	4.74864E-27
NM_011811_intron_1_0_chr1_78440366_r	78440365	10964	FARSB	30.05294333	6	4	1.4276E-27	4.74864E-27
NM_011811_intron_2_0_chr1_78451447_r	78451446	3694	FARSB	30.05294333	6	4	1.4276E-27	4.74864E-27
NR_102757_intron_1_0_chr1_78440366_r	78440365	10964	FARSB	30.05294333	6	4	1.4276E-27	4.74864E-27
NR_102757_intron_2_0_chr1_78451447_r	78451446	3694	FARSB	30.05294333	6	4	1.4276E-27	4.74864E-27
NR_102758_intron_1_0_chr1_78440366_r	78440365	10964	FARSB	30.05294333	6	4	1.4276E-27	4.74864E-27
NR_102758_intron_2_0_chr1_78451447_r	78451446	3694	FARSB	30.05294333	6	4	1.4276E-27	4.74864E-27
NR_102757_utr3_2_0_chr1_78451329_r	78451328	119	FARSB	30.05294333	6	4	1.4276E-27	4.74864E-27
NR_102758_utr3_2_0_chr1_78451329_r	78451328	119	FARSB	30.05294333	6	4	1.4276E-27	4.74864E-27
NM_175234_intron_0_0_chr4_21858977_f	21858976	4804	FAXC	46.37556752	6	6	1.2088E-34	2.79499E-33
NM_010198_cds_0_0_chr11_69611704_r	69611703	72	FGF11	22.35937227	9	4	6.1165E-19	9.87808E-19
NM_001177648_intron_15_0_chr2_30960878_r	30960877	36422	FNBP1	24.85697924	6	3	2.3102E-29	1.20996E-28
NM_001177649_intron_13_0_chr2_30960878_r	30960877	36422	FNBP1	24.85697924	6	3	2.3102E-29	1.20996E-28
NM_019406_intron_7_0_chr2_30960878_r	30960877	36422	FNBP1	24.85697924	6	3	2.3102E-29	1.20996E-28
NM_001038700_intron_13_0_chr2_30960878_r	30960877	36422	FNBP1	24.85697924	6	3	2.3102E-29	1.20996E-28
NM_145927_intron_1_0_chr12_77963538_f	77963537	10826	FNTB	51.74250655	6	6	1.2088E-34	2.79499E-33
NM_010235_cds_1_0_chr19_5450160_f	5450159	193	FOSL1	24.290317	6	3	6.4181E-10	6.93766E-10
NM_199068_intron_1_0_chr5_142911281_f	142911280	13361	FOXK1	38.64761536	9	7	2.1617E-33	3.21486E-32
NM_183186_intron_2_0_chr12_100529512_r	100529511	50121	FOXN3	40.61722784	7	6	1.0965E-33	2.16556E-32

NM_053202_intron_13_0_chr6_98966660_r	98966659	59189	FOXP1	33.88562611	5	4	8.4478E-26	2.3624E-25
NM_001197321_intron_13_0_chr6_98966660_r	98966659	59189	FOXP1	33.88562611	5	4	8.4478E-26	2.3624E-25
NM_001197322_up_5000_chr6_98978293_r	98978292	5001	FOXP1	33.88562611	5	4	8.4478E-26	2.3624E-25
NM_147221_intron_3_0_chr4_107241107_f	107241106	46471	GLIS1	27.37947402	10	6	1.2909E-25	3.54724E-25
NR_033332_intron_0_0_chr11_53599852_r	53599851	27227	GM12216	23.16945004	9	4	1.9739E-19	3.27714E-19
NM_181421_cds_72_0_chr5_121813752_f	121813751	165	GM15800	31.71473551	6	3	7.3128E-24	1.72451E-23
NM_001145637_intron_5_0_chr4_116888167_r	116888166	12733	GM1661	34.44416463	6	5	2.385E-32	2.59886E-31
NM_001033774_intron_0_0_chr4_116888167_r	116888166	12733	GM1661	34.44416463	6	5	2.385E-32	2.59886E-31
NR_045322_intron_0_0_chr19_47587498_f	47587497	256	GM19557	21.20165879	8	4	3.0796E-08	3.22241E-08
NR_045322_utr5_0_0_chr19_47587472_f	47587471	27	GM19557	21.20165879	8	4	3.0796E-08	3.22241E-08
NM_001004164_intron_1_0_chr10_87863483_f	87863482	11179	GNPTAB	35.12879632	8	7	2.0652E-35	9.78895E-34
NM_172768_up_5000_chr9_40263350_r	40263349	5001	GRAMD1B	27.81143528	6	4	1.2167E-27	4.11956E-27
NM_010365_intron_10_0_chr5_134721053_r	134721052	1328	GTF2I	28.65428021	6	4	1.2088E-34	2.79499E-33
NM_001080747_intron_10_0_chr5_134721053_r	134721052	1328	GTF2I	28.65428021	6	4	1.2088E-34	2.79499E-33
NM_001080746_intron_10_0_chr5_134721053_r	134721052	1328	GTF2I	28.65428021	6	4	1.2088E-34	2.79499E-33
NM_001080749_intron_10_0_chr5_134721053_r	134721052	1328	GTF2I	28.65428021	6	4	1.2088E-34	2.79499E-33
NM_001080748_intron_10_0_chr5_134721053_r	134721052	1328	GTF2I	28.65428021	6	4	1.2088E-34	2.79499E-33
NM_010368_cds_4_0_chr5_130473650_r	130473649	148	GUSB	22.7035974	11	4	1.0858E-14	1.37431E-14
NM_010368_cds_5_0_chr5_130473887_r	130473886	180	GUSB	22.7035974	11	4	1.0858E-14	1.37431E-14
NM_010368_intron_3_0_chr5_130471402_r	130471401	2249	GUSB	22.7035974	11	4	1.0858E-14	1.37431E-14
NM_010368_intron_4_0_chr5_130473797_r	130473796	91	GUSB	22.7035974	11	4	1.0858E-14	1.37431E-14
NM_001204278_intron_22_0_chr15_97642060_r	97642059	32478	HDAC7	28.43557368	7	4	1.2671E-22	2.65765E-22
NM_001204279_intron_22_0_chr15_97642060_r	97642059	32478	HDAC7	28.43557368	7	4	1.2671E-22	2.65765E-22
NM_001204280_intron_20_0_chr15_97642060_r	97642059	32478	HDAC7	28.43557368	7	4	1.2671E-22	2.65765E-22
NM_001204277_intron_23_0_chr15_97642060_r	97642059	19731	HDAC7	28.43557368	7	4	1.2671E-22	2.65765E-22
NM_001204276_intron_23_0_chr15_97642060_r	97642059	15107	HDAC7	28.43557368	7	4	1.2671E-22	2.65765E-22
NM_001204275_intron_23_0_chr15_97642060_r	97642059	32478	HDAC7	28.43557368	7	4	1.2671E-22	2.65765E-22
NM_019572_intron_22_0_chr15_97642060_r	97642059	19731	HDAC7	28.43557368	7	4	1.2671E-22	2.65765E-22
NM_001204281_up_5000_chr15_97645295_r	97645294	5001	HDAC7	28.43557368	7	4	1.2671E-22	2.65765E-22
NM_146001_intron_29_0_chr5_135936341_r	135936340	84467	HIP1	20.17295422	8	3	2.0192E-27	6.51097E-27
NM_010437_intron_0_0_chr10_13686504_f	13686503	99886	HIVEP2	36.85672551	6	5	1.8343E-31	1.60058E-30
NM_013820_intron_15_0_chr6_82699332_r	82699331	10767	HK2	25.04122233	8	4	3.2611E-28	1.15786E-27

NM_013820_intron_16_0_chr6_82710261_r	82710260	13652	HK2	45.75228057	6	6	1.1116E-34	2.79499E-33
NM_027521_cds_1_0_chr10_79483435_f	79483434	145	HMHA1	23.54619358	5	3	1.3715E-17	2.04752E-17
NM_001142701_cds_2_0_chr10_79483435_f	79483434	145	HMHA1	23.54619358	5	3	1.3715E-17	2.04752E-17
NM_027521_intron_1_0_chr10_79483579_f	79483578	118	HMHA1	23.54619358	5	3	1.3715E-17	2.04752E-17
NM_001142701_intron_2_0_chr10_79483579_f	79483578	118	HMHA1	23.54619358	5	3	1.3715E-17	2.04752E-17
NM_134109_intron_2_0_chr16_36709715_f	36709714	5873	ILDR1	21.30043139	10	4	3.5017E-31	2.27369E-30
NM_172161_cds_4_0_chr6_113622733_f	113622732	202	IRAK2	33.35923652	6	3	2.2631E-25	6.09485E-25
NM_172161_cds_5_0_chr6_113623017_f	113623016	66	IRAK2	33.35923652	6	3	2.2631E-25	6.09485E-25
NM_001113553_cds_3_0_chr6_113622733_f	113622732	202	IRAK2	33.35923652	6	3	2.2631E-25	6.09485E-25
NM_001113553_cds_4_0_chr6_113623017_f	113623016	66	IRAK2	33.35923652	6	3	2.2631E-25	6.09485E-25
NM_172161_intron_4_0_chr6_113622934_f	113622933	84	IRAK2	33.35923652	6	3	2.2631E-25	6.09485E-25
NM_172161_intron_5_0_chr6_113623082_f	113623081	2544	IRAK2	33.35923652	6	3	2.2631E-25	6.09485E-25
NM_001113553_intron_3_0_chr6_113622934_f	113622933	84	IRAK2	33.35923652	6	3	2.2631E-25	6.09485E-25
NM_001113553_intron_4_0_chr6_113623082_f	113623081	2544	IRAK2	33.35923652	6	3	2.2631E-25	6.09485E-25
NM_013674_cds_6_0_chr13_30849277_f	30849276	355	IRF4	29.00939085	12	5	1.409E-34	3.10628E-33
NM_019923_intron_5_0_chr6_146115194_r	146115193	4553	ITPR2	27.23532274	6	4	2.3011E-17	3.40317E-17
NM_010586_intron_5_0_chr6_146115194_r	146115193	4553	ITPR2	27.23532274	6	4	2.3011E-17	3.40317E-17
NM_021878_up_5000_chr13_44821143_f	44821142	5001	JARID2	25.37965112	6	4	2.0114E-16	2.80414E-16
NM_001205043_up_5000_chr13_44821640_f	44821639	5001	JARID2	25.37965112	6	4	2.0114E-16	2.80414E-16
NM_001205044_up_5000_chr13_44821143_f	44821142	5001	JARID2	25.37965112	6	4	2.0114E-16	2.80414E-16
NM_001003953_intron_15_0_chr5_123397890_r	123397889	1190	KDM2B	27.46986742	10	5	3.7346E-21	7.06658E-21
NM_001005866_intron_15_0_chr5_123397890_r	123397889	1190	KDM2B	27.46986742	10	5	3.7346E-21	7.06658E-21
NM_013571_intron_15_0_chr11_78860947_r	78860946	26902	KSR1	31.38465388	10	6	5.1264E-35	2.20901E-33
NM_013571_intron_16_0_chr11_78887989_r	78887988	71569	KSR1	24.57001854	6	3	3.5482E-25	9.44845E-25
NM_172950_intron_7_0_chr12_16560835_r	16560834	4381	LPIN1	43.93818603	7	6	7.2647E-31	4.59127E-30
NM_001130412_intron_7_0_chr12_16560835_r	16560834	4381	LPIN1	43.93818603	7	6	7.2647E-31	4.59127E-30
NM_015763_intron_7_0_chr12_16560835_r	16560834	4381	LPIN1	43.93818603	7	6	7.2647E-31	4.59127E-30
NM_001252132_intron_17_0_chr14_75257929_r	75257928	89263	LRCH1	47.71766807	5	5	2.4987E-33	3.21486E-32
NM_001033439_intron_18_0_chr14_75257929_r	75257928	89263	LRCH1	47.71766807	5	5	2.4987E-33	3.21486E-32
NM_008377_intron_17_0_chr6_94613993_r	94613992	35464	LRIG1	21.340668	8	3	2.2021E-09	2.35085E-09
NM_010749_up_5000_chr6_122254028_f	122254027	5001	M6PR	41.65318613	6	6	9.9514E-35	2.79499E-33
NM_172295_up_5000_chr3_101640147_r	101640146	5001	MAB21L3	25.63075866	5	4	6.9517E-28	2.39643E-27

NM_008634_cds_2_0_chr13_100199167_r	100199166	6491	MAP1B	23.74859584	6	3	1.1916E-11	1.34325E-11
NM_016896_cds_11_0_chr11_103100246_r	103100245	622	MAP3K14	21.88071127	9	4	1.2822E-12	1.50619E-12
NM_016896_cds_12_0_chr11_103100946_r	103100945	212	MAP3K14	21.88071127	9	4	1.2822E-12	1.50619E-12
NM_016896_intron_11_0_chr11_103100867_r	103100866	80	MAP3K14	21.88071127	9	4	1.2822E-12	1.50619E-12
NM_016896_intron_12_0_chr11_103101157_r	103101156	1195	MAP3K14	21.88071127	9	4	1.2822E-12	1.50619E-12
NM_177461_intron_14_0_chr15_78962530_f	78962529	901	MICALL1	21.75903531	6	3	1.8472E-27	6.03832E-27
NM_013603_up_5000_chr8_96671507_f	96671506	5001	MT3	30.16768818	6	4	5.5637E-25	1.46918E-24
NM_029581_cds_2_0_chr5_147770401_r	147770400	452	MTIF3	30.19134807	9	5	3.6441E-24	8.85788E-24
NM_001256101_cds_2_0_chr5_147770401_r	147770400	452	MTIF3	30.19134807	9	5	3.6441E-24	8.85788E-24
NM_001256100_cds_2_0_chr5_147770401_r	147770400	452	MTIF3	30.19134807	9	5	3.6441E-24	8.85788E-24
NM_001256102_cds_2_0_chr5_147770401_r	147770400	452	MTIF3	30.19134807	9	5	3.6441E-24	8.85788E-24
NM_001039546_intron_18_0_chr9_80121769_f	80121768	2347	MYO6	31.01984598	5	3	1.8421E-28	8.68799E-28
NM_007789_intron_3_0_chr8_72624215_r	72624214	1586	NCAN	20.24347907	7	3	1.5986E-11	1.78709E-11
NM_021605_intron_7_0_chr1_140440921_r	140440920	17360	NEK7	56.80730767	6	6	1.2088E-34	2.79499E-33
NM_008718_intron_1_0_chr7_17044630_r	17044629	1526	NPAS1	30.76324799	6	4	2.0011E-24	4.9921E-24
NM_175360_intron_2_0_chr19_47584948_r	47584947	3354	OBFC1	21.20165879	8	4	3.0796E-08	3.22241E-08
NM_172416_utr3_5_0_chr10_42420345_f	42420344	1925	OSTM1	38.37731849	6	6	3.0866E-33	3.75145E-32
NM_001100395_cds_17_0_chr5_30682897_r	30682896	164	OTOF	23.55267006	13	5	2.4364E-15	3.20341E-15
NM_031875_cds_18_0_chr5_30682897_r	30682896	164	OTOF	23.55267006	13	5	2.4364E-15	3.20341E-15
NM_001100395_intron_17_0_chr5_30683060_r	30683059	126	OTOF	23.55267006	13	5	2.4364E-15	3.20341E-15
NM_031875_intron_18_0_chr5_30683060_r	30683059	126	OTOF	23.55267006	13	5	2.4364E-15	3.20341E-15
NM_016768_intron_4_0_chr2_34060436_r	34060435	8337	PBX3	31.87620421	6	4	5.4487E-23	1.19017E-22
NM_172293_cds_5_0_chr15_97214513_f	97214512	1303	PCED1B	41.7077887	5	5	2.5095E-33	3.21486E-32
NM_172293_intron_4_0_chr15_97204581_f	97204580	9879	PCED1B	22.3753293	9	4	2.0686E-12	2.40913E-12
NM_172293_intron_4_0_chr15_97204581_f	97204580	9879	PCED1B	36.82793315	7	6	8.9012E-24	2.07329E-23
NM_145488_cds_1_0_chr17_46850857_f	46850856	165	PEX6	47.74824125	6	6	1.2088E-34	2.79499E-33
NM_001195083_cds_1_0_chr4_128420648_f	128420647	154	PHC2	28.57030251	11	7	1.865E-28	8.75267E-28
NM_001195130_cds_9_0_chr4_128420598_f	128420597	204	PHC2	28.57030251	11	7	1.865E-28	8.75267E-28
NM_018774_cds_9_0_chr4_128420598_f	128420597	204	PHC2	28.57030251	11	7	1.865E-28	8.75267E-28
NM_001195083_intron_1_0_chr4_128420801_f	128420800	1446	PHC2	28.57030251	11	7	1.865E-28	8.75267E-28
NM_001195130_intron_9_0_chr4_128420801_f	128420800	1446	PHC2	28.57030251	11	7	1.865E-28	8.75267E-28
NM_018774_intron_9_0_chr4_128420801_f	128420800	1446	PHC2	28.57030251	11	7	1.865E-28	8.75267E-28

NM_001195083 utr5_1_0_chr4_128420598_f	128420597	51	PHC2	28.57030251	11	7	1.865E-28	8.75267E-28
NM_030064 utr3_4_0_chr11_69812955_f	69812954	560	PHF23	45.57868731	5	5	2.4299E-33	3.21486E-32
NM_031376 intron_14_0_chr19_41406836_r	41406835	43501	PIK3AP1	40.22865556	7	6	3.128E-31	2.04506E-30
NM_001077495 intron_11_0_chr13_102472796_r	102472795	6080	PIK3R1	21.66959333	7	4	1.0681E-22	2.26526E-22
NM_054051 intron_0_0_chr11_97580254_r	97580253	791	PIP4K2B	29.98539497	5	3	8.1687E-33	9.44376E-32
NM_032398 utr3_0_0_chr8_74021652_r	74021651	647	PLVAP	23.48628234	5	3	5.557E-22	1.10442E-21
NM_019938 utr3_20_0_chr8_112066305_f	112066304	239	PMFBP1	24.74051015	6	4	3.0142E-29	1.56146E-28
NM_008898 intron_0_0_chr5_136165123_f	136165122	26620	POR	33.22133301	7	6	4.0835E-26	1.17308E-25
NM_145610 cds_4_0_chr9_20694215_f	20694214	172	PPAN	49.88906827	13	13	6.0595E-36	4.10316E-34
NM_145610 intron_3_0_chr9_20694129_f	20694128	87	PPAN	49.88906827	13	13	6.0595E-36	4.10316E-34
NM_145610 intron_4_0_chr9_20694386_f	20694385	698	PPAN	49.88906827	13	13	6.0595E-36	4.10316E-34
NM_001110218 intron_0_0_chr10_122116487_f	122116486	102753	PPM1H	25.89502883	11	5	3.0643E-12	3.53406E-12
NM_176919 intron_0_0_chr10_122116487_f	122116486	102753	PPM1H	25.89502883	11	5	3.0643E-12	3.53406E-12
NR_027957 intron_1_0_chr2_173407615_r	173407614	4884	PPP4R1L-PS	20.83034754	5	3	1.137E-09	1.22483E-09
NM_028999 intron_21_0_chr19_3526935_r	3526934	17174	PPP6R3	41.27853759	6	6	1.2088E-34	2.79499E-33
NM_001164159 intron_20_0_chr19_3526935_r	3526934	48707	PPP6R3	41.27853759	6	6	1.2088E-34	2.79499E-33
NM_029456 intron_20_0_chr19_3526935_r	3526934	17174	PPP6R3	41.27853759	6	6	1.2088E-34	2.79499E-33
NM_007548 cds_3_0_chr10_44166598_r	44166597	254	PRDM1	23.89968816	10	5	1.4287E-20	2.54114E-20
NM_007548 intron_3_0_chr10_44166851_r	44166850	3075	PRDM1	23.89968816	10	5	1.4287E-20	2.54114E-20
NM_177782 intron_32_0_chr2_166438761_r	166438760	4573	PREX1	23.16967074	5	3	9.9499E-26	2.76614E-25
NM_008923 intron_4_0_chr5_139526771_r	139526770	11738	PRKAR1B	27.5400957	5	4	3.1591E-15	4.12509E-15
NM_001253890 intron_4_0_chr5_139526771_r	139526770	11738	PRKAR1B	27.5400957	5	4	3.1591E-15	4.12509E-15
NM_172661 intron_0_0_chr2_32006812_f	32006811	31167	PRRC2B	41.20768364	8	8	4.529E-36	3.30266E-34
NM_001159634 intron_0_0_chr2_32006812_f	32006811	31167	PRRC2B	41.20768364	8	8	4.529E-36	3.30266E-34
NM_011201 up_5000_chr2_167752827_f	167752826	5001	PTPN1	46.91433422	6	6	1.2019E-34	2.79499E-33
NM_177375 cds_7_0_chr17_24669157_r	24669156	112	RAB26	32.30855714	7	6	4.1732E-35	1.88392E-33
NM_177375 intron_6_0_chr17_24667773_r	24667772	1385	RAB26	32.30855714	7	6	4.1732E-35	1.88392E-33
NM_001166399 cds_3_0_chr8_73281037_f	73281036	126	RAB3A	23.10455081	6	3	1.8692E-24	4.6878E-24
NM_009001 cds_3_0_chr8_73281037_f	73281036	126	RAB3A	23.10455081	6	3	1.8692E-24	4.6878E-24
NM_001166399 intron_2_0_chr8_73280465_f	73280464	573	RAB3A	23.10455081	6	3	1.8692E-24	4.6878E-24
NM_009001 intron_2_0_chr8_73280465_f	73280464	573	RAB3A	23.10455081	6	3	1.8692E-24	4.6878E-24
NM_009014 intron_6_0_chr12_80428392_f	80428391	330420	RAD51B	46.63149098	5	5	2.5095E-33	3.21486E-32

NM_009014_intron_6_0_chr12_80428392_f	80428391	330420	RAD51B	43.07937632	6	6	1.2088E-34	2.79499E-33
NM_001252562_intron_6_0_chr12_80428392_f	80428391	180305	RAD51B	46.63149098	5	5	2.5095E-33	3.21486E-32
NM_175211_intron_11_0_chr2_33030069_r	33030068	85930	RALGPS1	34.03611536	5	5	2.2932E-33	3.21486E-32
NM_011267_utr3_4_0_chr1_155590986_f	155590985	1614	RGS16	25.95462807	5	4	2.4987E-33	3.21486E-32
NM_172572_intron_17_0_chr11_116471794_r	116471793	16252	RHBDF2	39.53606838	7	5	1.2364E-27	4.17112E-27
NM_001167680_intron_17_0_chr11_116471794_r	116471793	13699	RHBDF2	39.53606838	7	5	1.2364E-27	4.17112E-27
NM_011882_up_5000_chr1_155591556_f	155591555	5001	RNASEL	25.95462807	5	4	2.4987E-33	3.21486E-32
NM_133933_cds_6_0_chr6_88050623_f	88050622	140	RPN1	20.27949241	10	4	2.6835E-15	3.52352E-15
NM_028244_cds_10_0_chr17_32192050_f	32192049	21	RRP1B	27.2405407	7	4	8.1668E-22	1.60959E-21
NM_001163734_cds_7_0_chr17_32192050_f	32192049	21	RRP1B	27.2405407	7	4	8.1668E-22	1.60959E-21
NM_028244_intron_9_0_chr17_32190900_f	32190899	1151	RRP1B	27.2405407	7	4	8.1668E-22	1.60959E-21
NM_028244_intron_10_0_chr17_32192070_f	32192069	787	RRP1B	27.2405407	7	4	8.1668E-22	1.60959E-21
NM_001163734_intron_6_0_chr17_32190900_f	32190899	1151	RRP1B	27.2405407	7	4	8.1668E-22	1.60959E-21
NM_001163734_intron_7_0_chr17_32192070_f	32192069	787	RRP1B	27.2405407	7	4	8.1668E-22	1.60959E-21
NM_025290_up_5000_chr17_31414302_r	31414301	5001	RSPH1	31.71783439	5	4	5.6674E-19	9.16847E-19
NM_019732_cds_2_0_chr4_134711197_f	134711196	158	RUNX3	31.23313249	14	7	3.101E-26	9.12953E-26
NM_019732_intron_2_0_chr4_134711354_f	134711353	7793	RUNX3	31.23313249	14	7	3.101E-26	9.12953E-26
NM_019732_intron_2_0_chr4_134711354_f	134711353	7793	RUNX3	41.28871469	7	7	1.6362E-35	8.19509E-34
NM_001205083_intron_4_0_chr5_125774535_r	125774534	3062	SCARB1	44.98867954	6	6	1.2088E-34	2.79499E-33
NM_001205082_intron_5_0_chr5_125774535_r	125774534	3062	SCARB1	44.98867954	6	6	1.2088E-34	2.79499E-33
NM_016741_intron_6_0_chr5_125774535_r	125774534	3062	SCARB1	44.98867954	6	6	1.2088E-34	2.79499E-33
NM_020052_intron_19_0_chr7_117001161_r	117001160	6459	SCUBE2	33.65747876	5	5	2.5095E-33	3.21486E-32
NM_011352_cds_3_0_chr9_57802332_f	57802331	94	SEMA7A	39.02742474	11	9	1.3637E-34	3.07804E-33
NM_011352_cds_4_0_chr9_57802631_f	57802630	89	SEMA7A	39.02742474	11	9	1.3637E-34	3.07804E-33
NM_011352_cds_5_0_chr9_57802867_f	57802866	112	SEMA7A	39.02742474	11	9	1.3637E-34	3.07804E-33
NM_011352_intron_3_0_chr9_57802425_f	57802424	207	SEMA7A	39.02742474	11	9	1.3637E-34	3.07804E-33
NM_011352_intron_4_0_chr9_57802719_f	57802718	149	SEMA7A	39.02742474	11	9	1.3637E-34	3.07804E-33
NM_026175_cds_10_0_chr11_4076484_f	4076483	247	SF3A1	27.79549337	5	3	2.5896E-12	3.00116E-12
NM_144539_intron_5_0_chr1_173571399_r	173571398	7606	SLAMF7	25.71210301	5	3	8.5133E-29	4.18166E-28
NM_009201_intron_0_0_chr7_17367825_f	17367824	3201	SLC1A5	33.25915385	7	6	3.7843E-32	3.98609E-31
NM_009320_intron_0_0_chr6_91634303_f	91634302	14681	SLC6A6	24.38213876	5	4	3.8823E-26	1.11868E-25
NM_007513_intron_11_0_chr5_149176828_r	149176827	34478	SLC7A1	31.16304727	5	3	8.4498E-15	1.07378E-14

NR_028540_up_5000_chr2_166885793_f	166885792	5001	SNORD12	35.92695283	10	10	1.162E-27	3.94838E-27
NM_175407_intron_0_0_chr10_42724221_r	42724220	16568	SOBP	23.57454272	9	4	2.7325E-16	3.78716E-16
NM_175407_utr3_0_0_chr10_42722306_r	42722305	1916	SOBP	23.57454272	9	4	2.7325E-16	3.78716E-16
NM_013673_intron_10_0_chr1_87577715_f	87577714	10836	SP100	37.42051483	5	5	4.2967E-27	1.33549E-26
NM_001109909_up_5000_chr5_137748903_r	137748902	5001	SRRT	34.18134386	5	5	1.9722E-31	1.60058E-30
NM_031405_up_5000_chr5_137748903_r	137748902	5001	SRRT	34.18134386	5	5	1.9722E-31	1.60058E-30
NM_001109910_up_5000_chr5_137748903_r	137748902	5001	SRRT	34.18134386	5	5	1.9722E-31	1.60058E-30
NM_011176_cds_1_0_chr9_30897987_r	30897986	138	ST14	25.29664668	5	3	4.3525E-16	5.95403E-16
NM_011176_intron_0_0_chr9_30897613_r	30897612	375	ST14	25.29664668	5	3	4.3525E-16	5.95403E-16
NM_011176_intron_1_0_chr9_30898124_r	30898123	799	ST14	25.29664668	5	3	4.3525E-16	5.95403E-16
NM_009176_intron_8_0_chr4_117704488_r	117704487	22768	ST3GAL3	29.46631966	5	3	1.264E-27	4.24904E-27
NM_001161774_intron_8_0_chr4_117704488_r	117704487	22768	ST3GAL3	29.46631966	5	3	1.264E-27	4.24904E-27
NM_001005510_intron_0_0_chr12_76919466_f	76919465	35543	SYNE2	21.07614517	8	3	1.3193E-16	1.84742E-16
NM_031395_intron_6_0_chr17_6910368_f	6910367	3079	SYTL3	27.20988035	5	3	2.2863E-14	2.85558E-14
NM_183368_intron_0_0_chr17_6910368_f	6910367	3079	SYTL3	27.20988035	5	3	2.2863E-14	2.85558E-14
NM_183370_intron_4_0_chr17_6910368_f	6910367	3079	SYTL3	27.20988035	5	3	2.2863E-14	2.85558E-14
NM_198100_cds_4_0_chr11_97007769_r	97007768	177	TBKBP1	27.18294875	13	7	4.5682E-30	2.62462E-29
NM_198100_intron_4_0_chr11_97007945_r	97007944	743	TBKBP1	27.18294875	13	7	4.5682E-30	2.62462E-29
NM_019507_intron_4_0_chr11_96963413_r	96963412	12552	TBX21	24.63445689	8	3	4.4854E-22	8.95192E-22
NM_019507_up_5000_chr11_96976646_r	96976645	5001	TBX21	20.80916926	12	5	1.2119E-24	3.08014E-24
NM_001039153_intron_3_0_chr5_122696635_r	122696634	907	TCTN1	35.81025735	7	6	1.5917E-35	8.19509E-34
NM_026486_intron_12_0_chr5_125070235_f	125070234	2782	TCTN2	32.12924115	5	5	2.5095E-33	3.21486E-32
NM_173396_intron_0_0_chr2_156665975_f	156665974	3918	TGIF2	25.90833286	9	5	7.5565E-32	7.54054E-31
NM_009373_intron_9_0_chr2_157960106_r	157960105	4338	TGM2	20.15759722	9	3	6.8153E-13	8.10654E-13
NM_001122998_intron_0_0_chr17_3326727_f	3326726	85906	TIAM2	24.57057763	6	3	1.7284E-20	3.05118E-20
NM_025667_cds_4_0_chr4_132826878_r	132826877	86	TMEM222	27.2243301	6	4	7.5474E-17	1.08362E-16
NM_025667_intron_3_0_chr4_132825725_r	132825724	1154	TMEM222	27.2243301	6	4	7.5474E-17	1.08362E-16
NM_025667_intron_4_0_chr4_132826963_r	132826962	6484	TMEM222	27.2243301	6	4	7.5474E-17	1.08362E-16
NM_011612_intron_0_0_chr4_150294370_f	150294369	9561	TNFRSF9	33.33750065	5	4	4.2851E-27	1.33549E-26
NM_001077508_intron_0_0_chr4_150294370_f	150294369	9561	TNFRSF9	33.33750065	5	4	4.2851E-27	1.33549E-26
NM_001077509_up_5000_chr4_150297108_f	150297107	5001	TNFRSF9	33.33750065	5	4	4.2851E-27	1.33549E-26
NM_178242_intron_11_0_chr5_143538485_r	143538484	10329	TNRC18	30.0593329	6	4	6.2464E-25	1.63579E-24

NM_001122730_intron_14_0_chr5_143538485_r	143538484	10329	TNRC18	30.0593329	6	4	6.2464E-25	1.63579E-24
NM_153792_up_5000_chr17_24664884_r	24664883	5001	TRAF7	32.30855714	7	6	4.1732E-35	1.88392E-33
NM_001172113_up_5000_chr17_24664884_r	24664883	5001	TRAF7	32.30855714	7	6	4.1732E-35	1.88392E-33
NM_001172114_up_5000_chr17_24664884_r	24664883	5001	TRAF7	32.30855714	7	6	4.1732E-35	1.88392E-33
NM_133977_intron_2_0_chr9_103114327_r	103114326	3197	TRF	26.74884476	9	5	8.8519E-21	1.62627E-20
NM_145377_cds_0_0_chr11_48620747_r	48620746	603	TRIM41	31.44907921	7	5	5.6657E-25	1.49198E-24
NM_011639_cds_1_0_chr5_137751513_r	137751512	122	TRIP6	34.18134386	5	5	1.9722E-31	1.60058E-30
NM_011639_intron_0_0_chr5_137751403_r	137751402	111	TRIP6	34.18134386	5	5	1.9722E-31	1.60058E-30
NM_024187_cds_1_0_chr17_31784948_r	31784947	94	U2AF1	34.81961267	5	4	5.1342E-31	3.28865E-30
NM_001163769_cds_1_0_chr17_31784948_r	31784947	94	U2AF1	34.81961267	5	4	5.1342E-31	3.28865E-30
NM_024187_intron_0_0_chr17_31784301_r	31784300	648	U2AF1	34.81961267	5	4	5.1342E-31	3.28865E-30
NM_001163769_intron_0_0_chr17_31784301_r	31784300	648	U2AF1	34.81961267	5	4	5.1342E-31	3.28865E-30
NM_026861_cds_6_0_chr14_122393447_f	122393446	247	UBAC2	29.88544374	6	5	2.7898E-34	6.01084E-33
NM_026861_intron_6_0_chr14_122393693_f	122393692	14321	UBAC2	29.88544374	6	5	2.7898E-34	6.01084E-33
NM_001112721_intron_57_0_chr15_37977905_r	37977904	30215	UBR5	27.3911779	6	4	1.0073E-19	1.69614E-19
NM_001081359_intron_57_0_chr15_37977905_r	37977904	30215	UBR5	27.3911779	6	4	1.0073E-19	1.69614E-19
NM_009464_intron_1_0_chr7_107628102_f	107628101	494	UCP3	26.42931536	6	4	2.638E-24	6.52951E-24
NM_175352_intron_0_0_chr5_115575510_r	115575509	1511	UNC119B	22.52303423	6	3	6.6988E-17	9.66582E-17
NM_146168_intron_2_0_chr6_57724783_r	57724782	15189	VOPP1	25.02291617	5	3	3.2158E-21	6.14641E-21
NM_016862_intron_6_0_chr19_55573795_f	55573794	124513	VTI1A	36.50183786	6	6	2.7593E-24	6.7707E-24
NM_172864_cds_8_0_chr3_145726245_r	145726244	203	WDR63	24.8758141	11	5	4.1096E-14	5.09269E-14
NM_172864_intron_8_0_chr3_145726447_r	145726446	1849	WDR63	24.8758141	11	5	4.1096E-14	5.09269E-14
NM_153138_intron_6_0_chr2_73285995_r	73285994	81390	WIPF1	39.7443956	9	9	2.083E-36	3.30266E-34
NM_028816_intron_22_0_chr7_133317763_r	133317762	25651	XPO6	38.55019552	5	5	2.5095E-33	3.21486E-32
NM_198886_cds_1_0_chr17_35032186_f	35032185	1381	ZBTB12	25.35466925	30	14	1.0573E-16	1.49594E-16
NM_198886_utr3_1_0_chr17_35033566_f	35033565	225	ZBTB12	25.35466925	30	14	1.0573E-16	1.49594E-16
NM_172785_cds_1_0_chr10_7559633_f	7559632	315	ZC3H12D	20.8649361	11	6	1.4971E-09	1.60727E-09
NM_172785_intron_0_0_chr10_7552361_f	7552360	7203	ZC3H12D	20.8649361	11	6	1.4971E-09	1.60727E-09
NM_172785_utr5_1_0_chr10_7559563_f	7559562	71	ZC3H12D	20.8649361	11	6	1.4971E-09	1.60727E-09
NM_001017968_cds_5_0_chr4_133171095_r	133171094	151	ZDHHC18	39.48161928	5	5	2.5095E-33	3.21486E-32
NM_001017968_intron_4_0_chr4_133169854_r	133169853	1242	ZDHHC18	39.48161928	5	5	2.5095E-33	3.21486E-32
NM_153802_cds_3_0_chr7_13475345_f	13475344	1431	ZFP128	40.06710514	5	5	2.2966E-33	3.21486E-32

NM_029888_cds_2_0_chr1_74616253_r	74616252	2906	ZFP142	46.31074542	8	7	1.9094E-31	1.60058E-30
NM_183149_cds_9_0_chr17_24817569_f	24817568	176	ZFP598	22.56197207	7	4	2.874E-15	3.76313E-15
NM_183149_cds_10_0_chr17_24817826_f	24817825	152	ZFP598	22.56197207	7	4	2.874E-15	3.76313E-15
NM_183149_intron_9_0_chr17_24817744_f	24817743	83	ZFP598	22.56197207	7	4	2.874E-15	3.76313E-15
NM_001033196_cds_12_0_chr2_166885532_r	166885531	62	ZNFX1	35.92695283	10	10	1.162E-27	3.94838E-27
NM_001033196_intron_11_0_chr2_166882442_r	166882441	3091	ZNFX1	35.92695283	10	10	1.162E-27	3.94838E-27
NM_001033196_intron_12_0_chr2_166885643_r	166885642	2368	ZNFX1	35.92695283	10	10	1.162E-27	3.94838E-27
NM_001033196_utr5_12_0_chr2_166885593_r	166885592	51	ZNFX1	35.92695283	10	10	1.162E-27	3.94838E-27