

Supplemental Table 1. Primer sequences used to create a tiling array across the 300 kb IFNG locus for ChIP assays.

IFNG locus primers		IFNG locus primers	
FORWARD	REVERSE	FORWARD	REVERSE
1 GAAGTGAGGACTGGAGTGTCTG	TGTGTCTCCCATAGCATTTC	51 GAGCCTCATGACTCAGACTGG	TGAGGAGAGGAGAGGGAAGAG
2 TTTGTGTTGAGGACAGGAACC	TTGGGCTCCTACGGATTTACT	52 TGCATTACACACCATGCATCTT	TTGGGCATCCTGTAAGTTG
3 GAGAAATGCCAGCAAAAAGT	AATGTTCTCACCCCTCGTTGTG	53 AGAGAAAAGCCAGGCCTAAGTG	CCCTTCTCTTGTGATTCTCC
4 AGTGCTGAGGGATTTAGACA	GTA AAAAGCCCCAGAACCTTG	54 CTGGTAAAATGGAAGCACAT	ATGGAGTCGCTATCTGGAGT
5 CACAGAATGCCCAGTTTCATTG	GTAGGAGATCCCCACAACAT	55 CCCTTCTCTTCTCAAGCTGTT	GGTGGCATCTAGTCCTTTTG
6 TGCCAGAAAAGAAAAGAACGAG	AATTGGCTCACAATTGACCCAC	56 CAATAAATGAGGCGGCATAAA	TCAGGATATCTTGTGGCCTGT
7 GCGTGAGTCAGTGAACCTCTC	TATGCACGTGTGTGCTCTCTC	57 TCGTGGTTTTATTTGTCCAG	CCATCGTGACAGACTTCCAAT
8 CCGAGGCTATGTTGGTTTGT	CAACTGCAATCGAGATCCCTA	58 CCCGCAATTTGACTACAAGCTC	GGCTATGCAGTGGTTGTCAT
9 AACTTGTCTGGATGCTTGAAT	TCTTCCACTCTTTCCCATC	59 CAGCATCTGACTCCTTTTTCGA	TGTCCAACGCAAAGCAATAC
10CCATCATTTTTCCAGTTTCAA	GGAAGGCAGCATGTTATGAGA	60 GGCACCACTGGATTAGAAACA	TGCCTCTCACTCCTCTCATGT
11CATTTCATTTCAGGGGAGTTA	TGCCTTCTTTGTTGAGGCTAA	61 GTGGTTGGGAACAAGTAAAA	TCTTTCTTGGCTTTCTGGTCA
12AGCACATTTGAGAAGAAAGGAAG	GCCTGCATTGTGAGCTAAAAAG	62 CCCGCAATTTGACTCATAAAA	TGAACCACTCCTCAAAAATGG
13TAGAAGCCCACTAAGTCTAA	CCCTTCAAAGACTTTCCCAAC	63 TCTTGCTGTCCGGAGACTTTAC	TTGGGCCACAAAGTATCAAA
14TCCTTTGCTCTTACCAAGAA C	TTCATGGGTGAGTTTTCCA	64 AAATCTGGATTTGGCTCCAGT	AGCACTGTGGCAGCTGTTAAT
15CAATGGCTTCTCATTCTCTGA	TGGTGGGAGTTGCTAGAGGT	65 AAAGAACCCAAGAATGGGAAA	CCACAGGCCAATAGAACAGAA
16ATCAGAGGTGAATGCATTTGGT	GCTCTGGCATGAGTAGAAT	66 GGCATCTGCTGGCAGCAAT	CCCTATGGATTTTGGGTTCAAT
17CCTGACACACGTCATCTTGAA	CAAACATTCCGAAGCCATTTA	67 TCAGAGAATCCAGAGCAGGAA	TGTGCACAGAAAAGTGGAGATG
18CCTACCTGAGCCAGCTCCTAT	GGTAGAGGGGAAAAACAGCAG	68 CACTTTTCACCCACCTTTGAA	ATACCAGATGGGAAACATCC
19GCAGTTTTGGTGGGATAGACA	CTCACTGCCACCATATCCACT	69 ATGGGGAGAAAAGTTCCACAC	TGGAGTTTACGCTCCACAAAAC
20ATAGCAGGTGAATGCATTTGGT	ACATATCAGATGAGCCCTGAG	70 AGGCATCTGCTGGCCATTTT	GGGAATAATTTTGGGTTCAAT
21AGTGAGCAGAGGTTTACAGAGA	TCCCCAAAGCAGGCTATAAAT	71 GCGAGAATCATCTCAAAAACA	CATGCAGCAGAAGTTTTGTCA
22CTCCTGGGAACTCCTGCTTT	GTGCTTAGAGGTGCAGACCAG	72 CTGCAAGAATGTGCTGATGAA	ACTCAATTGCTAGGGCCATTT
23AGCCTCCTTAAATGGCTTTACAA	TGGCATTGGGGAATAGAAA	73 GTGAGTGTGCTTTTCGTCCTT	TAACCTGCCACAGATACCAG
24GAACCAAGGACTCAGACAACA	CTTTTCTGCTGTGTGGAGAG	74 TCAAGCACAAAAACTGTGC	TCACCATCGTGAAAAATCA
25ATCTCTTTCCCCCTTCAA G	CCCATGTAATCACAGCAGTT	75 GTGCCCTTGGCAGCTGCTTACT	ATCTGCCATCTTACTGGACCT
26ATGTTGAGCCATCTTTCATCC	TGAACATGCATCCAGGAAC	76 TTCCTGCCTTAAAACTCTGGT	AAGGAAGGGTATCTGCCTGAA
27GCAGTTGTGTGGTGTGAGTG	AGACTCCTCAGCAAAATGCAAA	77 TGATGGCTAAAGCAAAAATGG	CTTTGACTCCACTGGACTTCG
28AATCTGTGCAGCTCTGTGGTT	GCCTGAGAAATTTGTGCTTTTG	78 TGGTCAAACCTGCTCTGTTCCA	GGGGCATACTCAGAACAACT
29CTCTGGAGAAGCCCAAGAAAG	TCATCTCTCATCTCCCCACAC	79 CCACCATGCTCAGCCTATTTATT	CTGACCTTGTGATCCATCC
30GCCACTTAAGGAGCGAAAAC	GGTGGTGGTCTTACACATCT	80 GGGAAATCCAGTCTTTGGAG	TCTAAGGTACCTGCCTTTTGG
31GGCATCAAATCAAAGAGCAAA	GCTTGAAAAGCTTCCCTCAGT	81 AGGTGGATAGGACCAGTTGCT	CACCAGCCCACTATTGAACAT
32TGTGTGAAGCTCTGTACGTC	GGTCCAGCTAGTCTGATCCT	82 AATTTGGGTTACGGAGCACTT	GGCATCATGGTCACTGAGACT
33TTTGTGGGGGTTCTCTTTCT T	AAAAAGGATGGTGGCCTCTT	83 GGGGGCTGTGTCATAAATTTTC	CCATTTCTACCCCTTGTTA
34AGTTGTTTGGATTGGCTGTTGT	TCCATACCCAACAATGTGGT	84 CTCTCTGATGGCCAGTGTAG	AAAAAGCGGTGTCACTGAAGA
35CACTCAATCTCAGGCTTGTCC	ACATGCACACAAGCACACACT	85 TTCCTCTTAGCCAGCAAAA	AACACTCTTAGGGCAGCAAAA
36TGTGCTCATGTGAAGTCAGC	AGCCAGAAATTTCCAATGTTT	86 TCTAAGCCCAAAAGTCAGCAAA	CTCCTTCTTCTCAGCCCTTA
37TTTCGTGTGCTTGTCTTTCT	CCACAGATTTTGAACCTGGA	87 ATCCCATAGAAACGGAATGC	ACCGAGGAGATTCACTGGATT
38TGATAGTGGGGTAGTGTTG	CAAACGTGTGCATGACAGGAA	88 TGGAGACTCATTTGGAAAAGG	ATGCTGAGAGGCCTGATGTT
39TTCCTGGAGCACATCAAATTCG	GCATTCTCTGTGGTTTGTGT	89 AGTGGATGATTGCCATGAGAG	CATGCAAGCCCAATACTTGAT
40ATCAGAGGCAGGAGAGGGTAG	ACCCTCCAACCTGGTTCCATAA	90 TGAAGATGAACCCCTTTTCT	GCTGTGTTTTGGGGAGTCATA
41GGAGAATTTTGGGACTTCTCTG	CCCTTTATCCTCTGCTCCATC	91 ACAAGAGAACTGGGCTTCAACA	AAAAAGCGTTTCTTCTGAGC
42GGATCAAACAGACAAGCAAGC	TAGTGTGCGGCAGCTAAGTTT	92 TAGCCCCCAGGATACTGACTT	TGTGGTGGTTAGGTCGTTCTC
43GGCAGGAGCATAAGGAAACTC	GTCTCCATCCATTTCTGGTT	93 ACAGTGCCTGGCATATAGTGG	AGAATGCATTTCCAGTCATGG
44CAATTTGAAAAGCCATGCAAT	ATCAAGGGAGAAAACAGGAGGA	94 CCGTGATTCTTGGTGTGTCT	CGTGAGGGTGTAGCAAAATGTT
45CACATCCTGAAGGAAAGACCA	TGGCTCTTCTCTCAAACAAA	95 GCTTCTTCTCTGCTCAGTTT	ATGTCCTGGGTTTTGTCCA
46TTGGCCTCAGTTGTATTACGG	AAATAGACCTCTGCCCTCTG	96 GAGCAAAAACCATGGAATGAAA	AAGGTGGAGGCTGAGAAGAAG
47TTTGAGGATTTGGAAGCTTGA	CTGGAAAGCAACTGACCAGAG	97 GGCAACAGAGTGAGATTCTGC	GAGGGTCAGGATAGGGTTGAG
48CACTATCCATCCAGTGGCCTA	AAATAAGCAAAGGAGGCCAAA	98 GCCATTGATGGTAGAACAGA	AGGGCCATATCTTTTGCAGTT
49TATAAGACAGGCCCTGGTGGTG	ATTGCCTGGTAAAGCTGTCTT	99 GGACACAGACCAAGAAGTCA	TTTCGACACCTTCAATCCATC
50CCAATGGGTTTTGGTATGTTGG	CTCCTGAATGACCAGTGAAG	100 AACGAAAATGAAAAGCCATGTG	GTGCTGGGATTATAGGCATGA
		101 CTCTATCGGCTCAGACACAGG	GGCAGTTTATCTCAACCACA
		102 GTGTGCATGTGAGTGAGGCTA	TCACACGGGATTAATTTGCTC

Supplemental Table 2: Primer sequences used to determine expression levels of the indicated genes and novel lncRNA loci.

ID	FORWARD	REVERSE				
GAPDH	AGCCACATCGCTCAGACAC	GCCAATACGACCAATCC				
IFNG-AS1-1	ATACACGTTTCGAGCATGGGG	CGGGAAAATTGCCAGTGTGC				
IFNG-AS1-2	TGTGGGTCCAATGTGAAAAACAC	TCCAGCTGGTTGTTAGCAGT				
IFNG-AS1-3	GTGCTCTCTGATGGTGGGAA	TGATTCAGGGCACAACCCAT				
ID	FORWARD	REVERSE	CHR	START	STOP	
BACH2-lncRNA-1	GAGCTCTCTTCAGTGGTGGT	GTGTTGGGCTGTTGTGCTAT	chr6	90697099	90697834	
BACH2-lncRNA-2	AATCACACCACAGCAATCGG	CTTCCCATTCGCGATTACACA	chr6	90791372	90792598	
BACH2-lncRNA-3	GTGACTGCTGGTTTGATGCT	GGGAGAGGAAAGTAAGGGCT	chr6	90793946	90794392	
BACH2-lncRNA-4	GACAAAGTGGCAAAGAGGGG	CACCTCTCCACACACACCTA	chr6	90813143	90814020	
BACH2-lncRNA-5	GTGGGTGGCGCTGATTAAT	TTCCTCTGGTTGCCCTGTAG	chr6	90816308	90817377	
BACH2-lncRNA-6	CCTCCTGACACAGCCAACTA	GAGAAGTGTAGCCGAGGGTT	chr6	90844729	90845780	
BACH2-lncRNA-7	CCAGTGAAGCCAGGAAGAGA	TGACATGCAGTGGAGGGATT	chr6	90846651	90848027	
BACH2-lncRNA-8	ATAAGTCAGGGCAAGCAGT	ATGGACTGCACCCCTTCTCA	chr6	90848147	90850657	
BACH2-lncRNA-9	TGTGCAGCATCCAGAGAGAA	CCTTTGGCTCTGCACTTTGT	chr6	90865580	90867122	
BACH2-lncRNA-10	ATCTCTCTGTGCACGTGAGG	CAGCCACACATGCACATAC	chr6	90868552	90870150	
BACH2-lncRNA-11	AAATTCTCAGTGTGGGGCG	TCTCTGAGAATCGGCTAGCC	chr6	90884515	90885507	
BACH2-lncRNA-12	TCTGACACCATTGCCTACGT	GCAGAACCAGAAACCCCATG	chr6	90886819	90887907	
BACH2-lncRNA-13	GAGAGTGTGCCCTAATCCA	GGACTGTGAGGCAAGGATCT	chr6	90899886	90903313	
IFNG-locus-lncRNA-1	TTCTGCTCCCACTCATTTCC	GAGCAATGGACAACACTGGTT	chr12	68390041	68390726	
IFNG-locus-lncRNA-2	CAAGCATAAAGACCCAATGAAA	TTTTATGTGGCCACTCGTCA	chr12	68391234	68391743	
IFNG-locus-lncRNA-3	AATGGGAGAGAAGGGAAAGC	TGCCAGACTGCTCCACTGTA	chr12	68392820	68394049	
IFNG-locus-lncRNA-4	AGAGACCCAAAGGGGTTGAG	TTGTGATCTGAGGGCACACT	chr12	68419260	68420217	
IFNG-locus-lncRNA-5	GGCCATTTGCACTAAGTGGT	TGAATGTGGATGAGGCTGA	chr12	68420019	68422688	
IFNG-locus-lncRNA-6	ACACACACACACGGCAAAT	TTCTACTTCTGGCTGCAGAT	chr12	68423989	68424632	
IFNG-locus-lncRNA-7	GAGGCATAGGAATGGTGGAG	CATTTTGGGGGAATACAGTTG	chr12	68427403	68427873	
IFNG-locus-lncRNA-8	CTCAACACCTCCCAGAGAGC	GGGTGATGGGAGACAATGAC	chr12	68437140	68438022	
IFNG-locus-lncRNA-9	TTCTGTGGTTGTTGGTTGGA	AAGACTTTGGCAGCAACACA	chr12	68459426	68460006	
IFNG-locus-lncRNA-10	TGCCTCAAGCTGAACACAAA	CAAGCATGCCTGTACTTGTGA	chr12	68465400	68465978	
IFNG-locus-lncRNA-11	GGCTCATTCTGGATTCTCA	TGCAATGATAGCCAACCAAG	chr12	68481171	68481617	
IFNG-locus-lncRNA-12	TTCAGATGCAAAGAGGCAAG	CACCTTTGTCAGGAGGAGGA	chr12	68504068	68504288	
IFNG-locus-lncRNA-13	GTAGAATGACTTTGGAAGTATTCC	GAAAAAATGAACAAATTCCTAG	chr12	68522144	68522384	
IFNG-locus-lncRNA-14	GCCCAGTTCCTGCAGAGTAG	AGACATGGCAACAGGTCTCC	chr12	68549554	68551487	
IFNG-locus-lncRNA-15	AAGGAGACAATTTGGCTCTGCATT	GTGAATATTGTACATCTGAGTT	chr12	68551834	68552138	
IFNG-locus-lncRNA-16	TGAATGAGTTCCCACCACAA	GGCAGTCATTTTGTGATTTGG	chr12	68552711	68553271	
IFNG-locus-lncRNA-17	CATGGCCAAGCACAGAATTA	TTGATAGATTGGGGATGGA	chr12	68555523	68557219	
IFNG-locus-lncRNA-18	TTATGTCCCATGTGCCCTTT	CCAGTGTCTGGTTGCTCTGTA	chr12	68562339	68563325	
IFNG-locus-lncRNA-19	TGAGGATCCTGTCTTCTTTGAGA	GGAGCCTGGACTCAAACCTCA	chr12	68570241	68570791	
IFNG-locus-lncRNA-20	AGCTTTAAGGGGAAGGCAAA	AAGCAGGATTGTGGGATCAG	chr12	68590084	68590683	
IFNG-locus-lncRNA-21	GTCTCTCAACCCTGCTGAGG	ATGTTTTGTCTGGCCGTCTC	chr12	68592719	68593898	
IFNG-locus-lncRNA-22	AATGCCTCTGCTTTGGTTTG	CCCATGTTTTGAACGTCCTT	chr12	68620439	68621987	
IFNG-locus-lncRNA-23	AACCATTGTCATCCCACAGAAA	TTAAAGGTGGGATGCGTGA	chr12	69060771	69061321	
IFNG-locus-lncRNA-24	GAGAACATTTGCAGGGGAAC	TGACATGTTTTGGCTCTGTC	chr12	68478586	68478959	
IFNG-locus-lncRNA-25	GGATTTAGCGAGGGCTCTTC	AGAAACGCCTTCAAATGTGG	chr12	68590993	68591368	
IFNG-locus-lncRNA-26	CTCCCCTCTCCCTGCTACTT	GCTCCAGAACAATTGCCAAA	chr12	68614771	68615283	

Supplemental Table 3. Sample data and calculations used to construct figures 2 and 3

NAIVE			FPKM (mean)			Genes next door	STRAND +/-	R	P	genes away	kb away
Gene id	gene name	locus	Tm	Tem	Tem						
ENSG00000259062	ACTN1-AS1	14:69,446,399-69,454,180	1.33	0.04	0.00	ZFP36L1	-	0.11	NS	1	184
						ACTN1	-	0.87	0.0003	0	0
						DCAF5	-	0.87	0.0003	1	71
						EXD2	-	0.26	NS	2	212
ENSG00000234773	CTD-2666L21	19:12,305,830-12,318,512	2.08	0.11	0.29	ZNF433	-	0.48	0.04	5	160
						ZNF844	+	0.53	0.04	4	118
						ZNF20	-	0.07	NS	3	55
						ZNF44	-	0.11	NS	0	0
						ZNF563	-	0.72	0.003	1	122
						ZNF442	-	0.5	0.03	2	170
						ZNF799	-	0	NS	3	194
ENSG00000259863	SH3RF3-AS1	2:109,743,783-109,745,386	0.52	0.08	0.05	EDAR	+	0.79	0.001	1	139
						SH3RF3	-	0.91	<0.0001	0	0
ENSG00000246859	STARD4-AS1	5:110831730-111353006	0.53	0.03	0.11	CAMK4	+	0.48	0.04	1	12
						STARD4	-	0.08	NS	0	0
						NREP	-	0.96	<0.0001	0	0
ENSG00000257495	RP11-641A6.2	12:53,005,072-53,007,846	2.92	0.53	0.33	KRT72	-	0.8	0.001	0	0
						KRT73	-	0.9	<0.0001	0	0
						KRT2	-	0.88	0.0002	1	33
ENSG00000236703	MYB-AS1	6:135,516,221-135,517,133	0.63	0.07	0.14	HBS1L	+	0.19	NS	1	145
						MYB	-	0.7	0.005	0	0
						AHI1	+	0.22	NS	1	89
ENSG00000224533	TMLHE-AS1	X:154,576,450-154,603,823	1.47	0.19	0.32	BRCC3	-	0.05	NS	3	225
						VBP1	-	0.39	NS	2	108
						F8A1	-	0.67	0.007	1	130
						F8A3	+	0.73	0.003	2	155
						F8A2	-	0.73	0.003	3	162
ENSG00000249236	CTD-2227I18.1	5:55,354,877-55,363,199	1.40	0.20	0.29	IL6ST	-	0.78	0.002	1	124
						ANKRD55	-	0.89	0.0001	0	0
ENSG00000268496	CTD-2587H19	19:54,945,363-54,945,845	0.67	0.10	0.16	RPS9	+	0.78		2	230
						LAIR1	-	0.82	0.0008	1	63
						TTYH1	+	0.67	0.007	0	0
						LENG8	+	0.85	0.0004	1	15
ENSG00000232021	LEF1-AS1	4:108968700-109177992	21.17	6.12	3.92	CYP2U1	+	0.4	NS	2	95
						HADH	+	0.82	0.0009	1	13
						LEF1	-	0.98	<0.0001	0	0
MEMORY			FPKM (mean)			Genes next door	STRAND +/-	R	P	genes away	kb away
Gene id	gene name	locus	Tm	Tem	Tem						
ENSG00000224950	RP5-1086K13	1:116966345-117113661	0.05	0.19	0.72	ATP1A1	-	0.1	NS	1	20
						CD58	+	0.69	0.006	0	0
						CD2	-	0.44	0.049	1	184
ENSG00000236213	AC006369.2	2:37827278-37965611	0.06	0.88	2.04	CDC42EP3	-	0.82	0.0008	0	4
ENSG00000230747	AC021188.4	2:96973000-96987469	0.16	0.70	1.99	DUSP2	+	0.44	0.04	5	161
						STARD7	-	0.5	0.03	4	70
						TMEM127	+	0.41	0.04	3	41
						CIAO1	-	0.09	NS	2	34
						ITPRIPL1	-	0.83	0.0006	0	0
ENSG00000238057	ZEB2-AS1	2:145,277,181-145,278,465	0.04	0.02	0.76	GTDC1	+	46	0.03	1	225
						ZEB2	+	0.98	<0.0001	0	0
ENSG00000253519	AC106801.1	5:156,992,972-156,996,106	0.02	0.60	1.21	CYFIP2	+	0.45	0.04	2	171
						FNDC9	-	0.68	0.006	1	221
						ADAM19	-	0.78	0.002	0	0
ENSG00000272053	RP11-367G6.3	6:25,015,180-25,042,398	0.22	1.95	2.59	FAM65B	-	0.6	0.01	0	211
						CMAHP	-	0.48	0.02	1	39
ENSG00000269919	RP1-134E15.3	6:106,548,015-106,548,468	0.71	5.11	12.03	PRDM1	-	0.8	0.001	0	0
						ATG5	-	0	NS	1	22
ENSG00000273038	RP11-479G22	10:33,176,189-33,178,239	0.36	3.58	4.72	CCDC7	-	0.02	NS	1	5
						ITGB1	-	0.92	<0.0001	1	6
ENSG00000233387	RP11-342D11	10:33,385,185-33,405,600	0.11	1.82	4.21	CCDC7	+	0.08	NS	2	214
						ITGB1	+	0.84	0.0005	1	138
ENSG00000261438	RP11-399O19	10:90,775,593-90,776,816	0.23	0.91	2.08	STAMBPL1	+	0.16	NS	2	93
						FAS	+	0.7	0.005	0	0
						LIPA	-	0.01	NS	1	197
ENSG00000256427	RP11-118B22	12:9,399,093-9,410,556	0.13	0.90	2.09	KLRG1	-	0.79	0.001	3	236
						A2M	+	0.79	0.001	2	130
						PZP	+	0.65	0.008	1	37
ENSG00000122043	LINC00544	13:30510041-30524625	0.17	0.97	1.32	UBL3	-	0.87	0.0003	1	86
ENSG00000259482	RP11-219B17	15:60,973,768-60,979,087	0.03	0.56	0.22	NARG2/ICE2	+	0.01	NS	1	203
						RORA	+	0.75	0.002	0	89

Neighboring expressed protein coding genes are indicated and whether they are transcribed in sense (+) or antisense (-) relative to the lncRNA. R=correlation coefficient, P is probability that the regression line is non-zero. Genes away and kb away are distance in number of genes or kb between protein-coding genes and lncRNA genes.

# of lncRNAs	Gene (Tn)	# of lncRNAs	Gene (Tcm)	# of lncRNAs	Gene (Tem)
4	SLC12A2	6	ITM2A	5	CD58
4	ZNF746	6	JMJD1C	5	BNIP3L
4	PFKFB3	6	LAMTOR3	5	APBB1IP
4	KRBA1	6	LPP	5	FOXJ3
4	S100B	6	MTMR1	5	PREX1
5	SGK223	6	N6AMT2	5	AHR
5	CD247	6	NBAS	5	PRDM1
5	RAPGEF6	6	PPP2R2A	5	EPC1
5	RGCC	6	RAD51B	5	USP25
5	INPP4A	6	SIRT1	5	INPP5D
5	SCML4	6	SLC24A1	5	HERC4
5	NAA16	6	SNX13	5	KMT2E
5	ZZZ3	6	SRSF11	5	ATP1A1
5	SYNRG	6	TLK1	5	ELOVL5
5	TM9SF2	6	USP20	5	IFI16
5	RNF144A	6	XPO4	5	FYN
5	C1GALT1	6	ZFP36L1	6	TOX
5	COA5	6	ZFY	6	ALCAM
5	NIPBL	7	AOAH	6	PAM
5	CAMK2D	7	APBB1IP	6	MAP3K8
5	BCAS4	7	BCL2	6	SSBP2
5	RPIA	7	C5orf42	6	TBK1
5	YEATS2	7	CERS6	6	SOS1
5	POU2F1	7	ELMO1	6	TSEN15
5	C5orf42	7	EMB	6	NSMAF
5	ZC4H2	7	EPC2	6	ASAH1
6	THEMIS	7	LRRN3	6	PHTF2
6	NDFIP1	7	MBD5	6	ATG16L1
6	CBLB	7	MPLKIP	6	TNIK
6	NDNL2	7	NIPBL	6	CUL3
6	FOXJ3	7	PTBP2	6	PHACTR2
6	RB1CC1	8	ANK3	6	DENND4C
6	TLE4	8	CDK13	6	RASSF3
6	AOAH	8	FOXP1	6	ARHGAP25
6	FBXL4	8	FUT8	6	CBLB
6	CERS6	8	MAML2	6	PRKCB
6	ICA1L	8	MTMR2	6	THEMIS
6	BMPR2	8	PDSS1	6	PCM1
7	IL6ST	8	PIK3R1	6	CNOT6L
7	CD47	8	SLC30A5	6	RPS6
7	TXK	8	THEMIS	7	EPB41L5
7	BBX	8	TNKS	7	DLEU1
7	APBA2	8	ZBTB20	7	MCOLN2
7	CUL3	8	ZNF638	7	B3GALT2
7	DHRS3	9	ARID5B	7	SMYD3
7	EIF4E3	9	FIGNL1	7	ZBTB20
7	RPAP3	9	IKZF1	7	RNASEH2B
7	YIPF4	9	MSRA	7	TIPARP
7	AMIGO2	9	PARP8	7	PTPN4
7	TNFRSF1B	9	PLCL2	7	CCNL1
8	BIRC6	9	RTKN2	8	TRUB1
8	SEPN1	9	SLC9A9	8	IL18R1
8	PDK1	10	ALCAM	8	PDE4D
8	HIVEP1	10	ATP2B1	8	ABLIM1
8	ATF1	10	CBLB	9	IL18RAP
8	DIP2B	10	ITGA4	9	ZNF644
8	PCSK5	10	KIAA0020	9	MAN1A2
8	RFK	10	PLCL1	9	BBX
9	RANBP2	10	TBC1D5	10	UCK1
9	EDAR	10	TSHZ2	10	GATA3
10	FOXP1	10	UBE2E3	10	ATXN1
10	RBMS1	10	ZNF217	10	GDAP2
10	PLCL1	11	CHD7	10	CD47
10	CA6	11	TNIK	12	A2M
11	MAN1C1	11	ZNF644	12	RAPGEF1
12	TBC1D5	12	ARID1B	13	FER
13	MAML2	12	ARL15	13	ADHFE1
13	FER	12	NDUFS4	13	MYBL1
13	MTMR2	12	RFX3	15	CHST11
18	RPL34	13	GPHN	16	PARP8
18	IGF1R	14	ATXN1	21	FAM129A
19	SATB1	14	BTBD9	22	CDC7
20	SFMBT2	14	ZFAND3	22	TGFBR3
21	LEF1	15	GATA3	27	EDEM3
23	PRKCQ	18	GNAQ	27	ERN1
41	SSBP2	22	FER	27	ICAM2
83	BACH2	29	KLF12	28	KLF12

Supplemental Table 4. Indicated lineage-specific protein-coding genes ranked according to numbers of lineage-specific novel lncRNAs either intragenic or within 20kb of 5' start site or 3' end. For each lineage, the first column is the number of discrete novel lncRNA loci transcribed near the indicated protein-coding gene (second column)