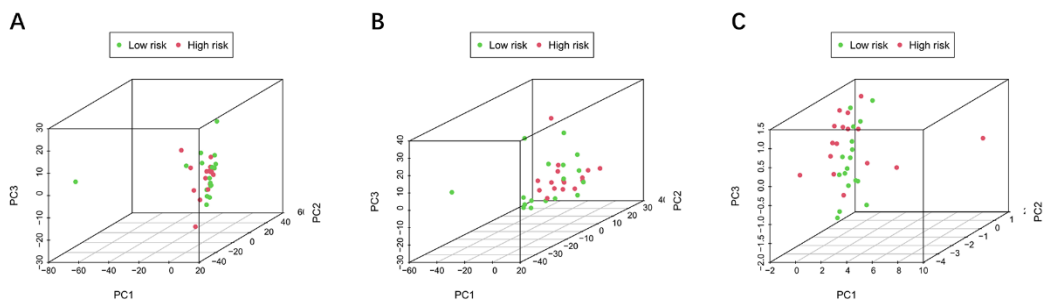


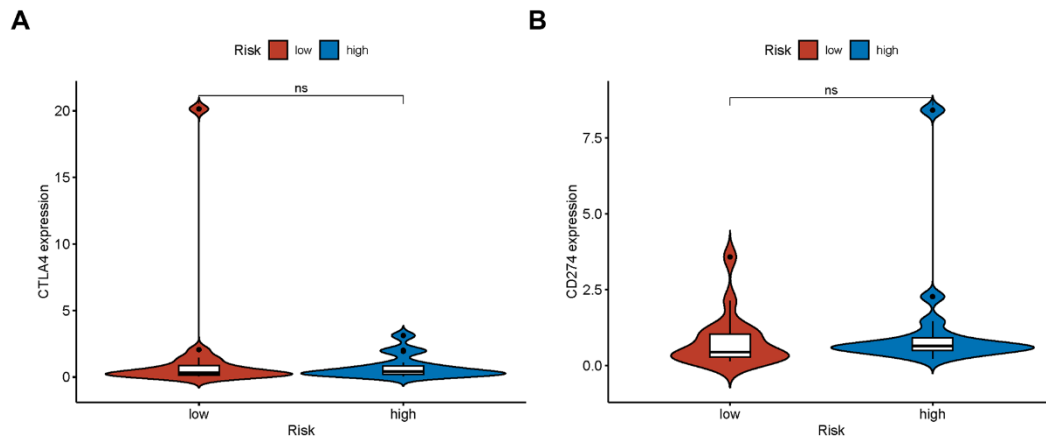
Supplementary materials

Title:

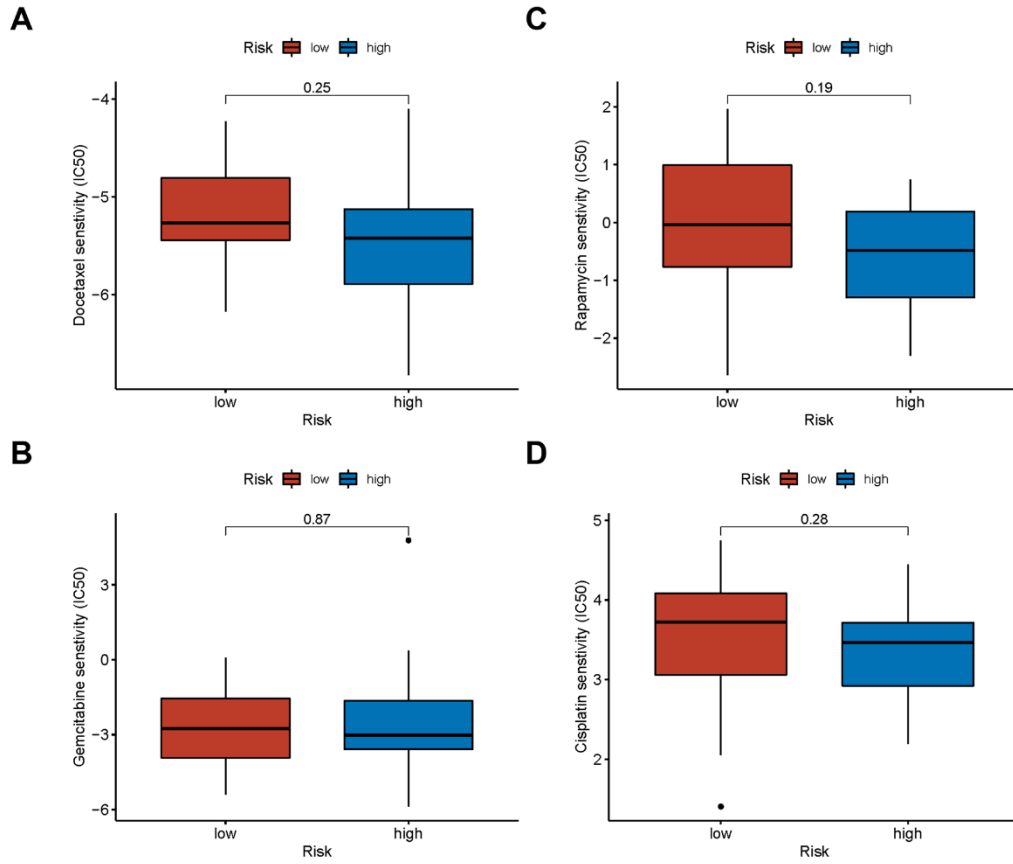
Immune-related lncRNAs exert crucial functions in predicting prognosis and immune landscape of intrahepatic cholangiocarcinoma: a bioinformatics analysis and experimental verification



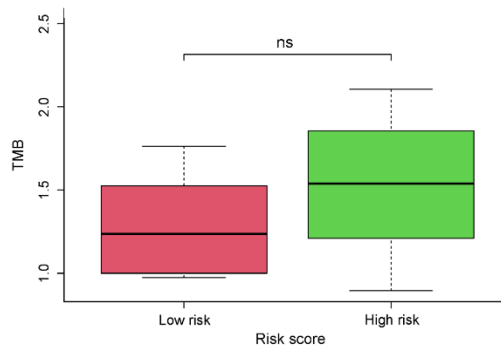
Supplementary Figure S1. Principal components analysis. A-C distribution of high- and low-risk based on the all immune-related gene (A), all irLncRNAs (B), and signature irLncRNAs (C), riskScore.



Supplementary Figure S2. Correlation analysis of signature with immunosuppressed biomarkers. (A) CTLA4, (B) CD274, ns was defined as no significance.



Supplementary Figure S3. Correlation analysis of signature with IC50 for frequently-used chemotherapeutics drugs. A Docetaxel, B Gemcitabine, C Rapamycin, D Cisplatin.



Supplementary Figure S4. Bar plot of relationship between TMB and risk score.

Supplementary Table

Table S1 Primers used for quantitative real-time PCR

GeneName	Direction	Sequences (5'–3')
ACTIN	Forward	CACCCAGCACAATGAAGATCAAGAT
ACTIN	Reverse	CCAGTTTTTAAATCCTGAGTCAAGC
AC090114.2	Forward	GCCTTGTAACCGTGCTTGATG
AC090114.2	Reverse	CCTGGGCGATAGAGTCAAACA
AL391056.1	Forward	AACAGGGATGGTGGAGAAGTAGAG
AL391056.1	Reverse	GAAACGGAGGAACGGTATTGG
LINC01711	Forward	ACAGAACCTGATGGCTGGAAAC
LINC01711	Reverse	AGGCAGCAGAGGTGCAGAGA
LINC01615	Forward	GCCCTAAGTTGAAGCCCTAATC
LINC01615	Reverse	AGGATTTGGGCATCTCGGT
WAC-AS1	Forward	ATACTCTTAGGTGCCAAACTGCG
WAC-AS1	Reverse	CTTTGACCCTTCCTTTCCAGTT
APCDD1L- DT	Forward	CACCCTGTAGGAATTAGAAGACCA
APCDD1L- DT	Reverse	TAGACACTTAGAGGCCACCACTTC

Table S2 Differentially expressed analysis of immune-related

lncRNA

Gene	conMean	treatMean	logFC	pValue	fdr
ALG13-AS1	0.146689 45	0.69474133 7	2.24371 083	0.002840 24	0.0039
AC012615.6	0.202309 823	0.96435557 5	2.25299 8824	9.69E-06	2.58E- 05
TBILA	0.026780 877	1.88258474 7	6.13536 7802	1.52E-05	3.78E- 05
AC010331.1	0.165525 799	0.79440282 2	2.26281 4651	2.85E-06	8.79E- 06
BX539320.1	0.168953 898	1.13356854 9	2.74617 0099	0.000318 708	0.0005 19
AC012073.1	0.127336 45	0.92491879 7	2.86068 1266	4.19E-08	3.15E- 07
TMEM99	2.555950 83	10.6918752 8	2.06458 2926	2.09E-08	1.97E- 07
GABPB1-AS1	0.340644 602	1.38335780 3	2.02183 5107	9.42E-07	3.48E- 06

RNF157-AS1	0.024627 804	1.40160005 9	5.83064 2932	8.37E-08	5.09E-07
AC109460.2	0.163087 047	0.97036096 3	2.57287 9307	2.75E-05	6.24E-05
AC002128.1	0.128978 525	0.88750229 6	2.78261 9979	1.47E-07	7.64E-07
LINC01559	0.005700 191	4.82019556 9	9.72386 5737	0.000125 099	0.0002 26
AC114488.1	0.025106 857	0.99244148 5	5.30482 8709	0.000141 531	0.0002 52
AC096733.2	0.124364 655	0.65637431 9	2.39994 2267	3.49E-05	7.58E-05
AC027796.4	0.198382 581	2.84112105 7	3.84010 3043	2.09E-08	1.97E-07
SPINT1-AS1	0.159187 001	8.03123459 1	5.65682 7344	2.09E-08	1.97E-07
HNF4A-AS1	11.48948 164	0.28320954	- 5.34230 0038	1.41E-05	3.63E-05
LINC01093	33.28396 148	0.54176955	- 5.94100 4035	6.15E-06	1.79E-05
PVT1	0.092846 586	2.44580690 8	4.71931 7834	9.42E-07	3.48E-06
LINC01389	0.25459	1.28242865 9	2.33263 0916	2.01E-06	6.49E-06
AC015871.3	0.523803 586	2.51187253 6	2.26166 5415	4.19E-08	3.15E-07
AC008764.2	0.674694 463	3.52477478 3	2.38522 4853	2.85E-06	8.79E-06
LINC00654	0.069992 424	0.67451146	3.26857 2284	0.000528 11	0.0008 27
AC099552.1	0.021932 163	2.07112947 1	6.56122 5864	0.006008 581	0.0078 13
AC007996.1	0.170264 366	1.67256976 8	3.29621 796	2.09E-08	1.97E-07
AL161785.1	0.453879 022	2.84099876 2	2.64601 8489	0.002016 531	0.0028 18
TNRC6C-AS1	0.418061 956	2.97407960 4	2.83065 4594	3.49E-05	7.58E-05
AC021016.2	0.273401 517	1.10944178 2	2.02074 081	4.19E-08	3.15E-07
AL139287.1	1.372563 555	5.56026424 5	2.01828 0494	1.47E-07	7.64E-07

SNHG3	0.598725 324	5.70849393 3	3.25314 3974	2.09E-08	1.97E-07
AC004449.1	0.126458 173	0.73883719 5	2.54659 622	0.004648 616	0.0061 9
LINC01146	6.361609 436	0.40550342 8	- 3.97160 5787	2.09E-08	1.97E-07
SOX9-AS1	0.142028 287	0.98477525 7	2.79361 6226	0.000223 133	0.0003 76
Z95115.1	0.377063 773	2.39196753 9	2.66531 7359	4.19E-08	3.15E-07
AL022328.1	0.571946 697	2.3334745	2.02852 7097	7.26E-06	2.03E-05
AL031716.1	0.083121 39	0.69010692 4	3.05352 8222	4.20E-05	8.96E-05
LINC01963	0.290674 216	4.10548207 6	3.82007 663	2.09E-08	1.97E-07
ITGB1-DT	0.902821 809	13.5073125 6	3.90315 5583	5.49E-05	0.0001 1
AC245041.1	0.352967 194	5.63713632 9	3.99735 6454	0.000223 133	0.0003 76
AC092535.4	1.435736 118	14.1239679	3.29828 293	0.001527 626	0.0021 67
EIF3J-DT	0.576615 347	3.62794912	2.65347 3082	2.51E-07	1.18E-06
AC138150.2	0.048856 192	0.73913172 6	3.91921 8168	2.01E-06	6.49E-06
NRAV	0.707674 632	7.76872735 7	3.45652 0173	2.09E-08	1.97E-07
AC078778.1	0.082906 978	1.24620037 5	3.90989 8712	2.04E-05	4.86E-05
AC092919.2	0.085544 037	0.91681494 1	3.42189 1365	3.94E-06	1.18E-05
AC004585.1	0.083789 321	0.95125757	3.50499 7741	0.004664 768	0.0061 93
LINC01370	6.111679 182	0.25746061 2	- 4.56914 5171	5.88E-06	1.72E-05
AL160006.1	0.237250 668	1.63758129 5	2.78708 2476	2.09E-08	1.97E-07
LINC00294	0.879428 261	3.99734390 4	2.18440 3897	1.47E-07	7.64E-07
AC002550.2	0.058421 009	1.26383797 5	4.43518 0429	1.52E-05	3.78E-05

AC120498.4	1.358150 573	6.03723083 7	2.15224 353	0.005563 472	0.0072 48
LINC01614	0.173359 531	0.89679827 6	2.37101 635	0.003866 842	0.0052 07
AC007406.5	0.756915 837	3.19271967 3	2.07658 1088	2.51E-07	1.18E-06
AP001453.2	0.343377 406	2.21690700 3	2.69068 1233	9.69E-06	2.58E-05
RBPMS-AS1	0.270435 893	2.44852327 1	3.17855 3363	6.28E-07	2.46E-06
AC005387.1	0.114397 723	0.88680103 7	2.95455 2125	6.41E-05	0.0001 27
MMP25-AS1	0.376874 657	1.70068593 7	2.17396 0056	3.98E-07	1.69E-06
APCDD1L-DT	0.001376 911	0.73056514 5	9.05143 4066	4.03E-05	8.65E-05
AC068722.2	0.067674 638	0.68053431 9	3.32998 0745	0.000199 976	0.0003 43
LINC00942	0.006074 93	1.24389544 5	7.67778 1755	0.000125 099	0.0002 26
LINC02038	0.041455 868	1.01498043 8	4.61373 1773	0.000457 976	0.0007 28
KRT7-AS	0.237426 025	3.73060181 7	3.97385 8395	1.66E-05	4.02E-05
HYI-AS1	0.132649 11	0.83084112 2	2.64695 7633	7.26E-06	2.03E-05
MIR155HG	0.125899 973	1.08537024 8	3.10783 7387	0.003866 842	0.0052 07
AL390719.2	0.202338 208	5.24306799 4	4.69557 0575	9.42E-07	3.48E-06
LINC01348	10.13864 261	0.71205856 1	- 3.83172 4806	6.28E-07	2.46E-06
AC025171.1	0.254164 246	1.19961776 9	2.23874 1796	1.40E-06	4.83E-06
AC008610.1	0.249098 23	3.29329470 9	3.72474 4945	2.09E-08	1.97E-07
AC078909.2	0.016986 137	1.90110749 5	6.80633 8497	1.47E-05	3.77E-05
AC125494.2	0.155021 123	1.07481879 2	2.79355 6733	2.51E-07	1.18E-06
AC003102.1	0.173996 168	1.57378821 7	3.17711 3976	2.09E-08	1.97E-07

AC063948.1	0.100154 234	0.9782915	3.28804 0996	2.09E-08	1.97E- 07
AL512598.1	0.151248 74	0.65016249 9	2.10387 7221	0.001336 274	0.0019 25
FOX3-AS1	0.012663 561	1.60904702 5	6.98937 9503	0.000116 795	0.0002 14
AL161669.3	0.717901 623	3.44651485 3	2.26328 0169	0.001324 19	0.0019 09
AL080248.1	6.794791 797	0.71398492 3	- 3.25046 383	1.78E-05	4.27E- 05
AC022144.1	0.519842 349	3.72192882 5	2.83990 4393	1.27E-05	3.28E- 05
AC007292.1	0.350511 656	1.50441735 8	2.10167 0533	9.69E-06	2.58E- 05
AL121895.2	0.022413 698	0.97650781 3	5.44517 8986	3.49E-05	7.59E- 05
AC121757.1	0.058449 261	0.86734836 3	3.89135 4872	0.000144 792	0.0002 57
AC004812.2	0.155254 707	1.71234152 3	3.46326 1556	2.09E-08	1.97E- 07
AP002761.4	0.228593 758	1.16588662 3	2.35056 9587	0.005563 472	0.0072 48
AC005288.1	2.812161 224	11.8409552 3	2.07403 4257	1.40E-06	4.83E- 06
AL021807.1	0.031060 673	1.14735311 7	5.20707 6562	0.000212 054	0.0003 63
AC010967.1	0.005878 64	0.62734078 3	6.73762 3113	9.23E-05	0.0001 74
LINC01116	0.022877 418	2.74799888 6	6.90831 3405	4.20E-05	8.95E- 05
LINC01426	0.115060 466	1.08041774 3	3.23112 5115	0.000447 983	0.0007 13
ZNF529-AS1	0.336236 455	1.54443017 1	2.19952 6587	1.40E-06	4.83E- 06
AC010201.2	0.079415 446	0.94786366	3.57718 8029	2.09E-08	1.97E- 07
LINC00853	0.218638 795	3.63341143 6	4.05470 3426	6.28E-07	2.46E- 06
MIR600HG	0.171345 535	1.11645045 1	2.70393 8724	3.98E-07	1.69E- 06
AL109615.3	0.032661 479	1.17476305	5.16863 5879	1.47E-07	7.64E- 07

PSMB8-AS1	1.881627 837	8.26002230 7	2.13416 4369	9.69E-06	2.58E-05
LINC01857	0.183131 969	4.91370918 5	4.74585 6906	0.007311 312	0.0094 33
AL513477.2	0.216774 576	1.01920915 4	2.23318 2674	7.26E-06	2.03E-05
OBSCN-AS1	0.035264 749	0.70932778 8	4.33015 3794	4.19E-08	3.15E-07
AL355388.2	0.024424 51	0.71424975 7	4.87002 7138	2.51E-07	1.18E-06
AC245884.9	0.050916 074	3.97657106 9	6.28725 997	0.000724 181	0.0011 15
AC009120.2	0.354622 722	2.70015610 8	2.92868 5934	2.09E-08	1.97E-07
AC234582.1	0.075413 519	0.95024744 2	3.65540 816	8.37E-08	5.09E-07
AP003390.1	0.033634 297	0.63908644 7	4.24800 6078	5.16E-05	0.0001 05
LINC01767	27.12560 613	1.46482871	- 4.21085 1497	4.19E-08	3.15E-07
AC022150.4	0.032225 62	0.70644968 5	4.45430 6786	9.42E-07	3.48E-06
AP001271.1	0.079759 864	1.32176687 3	4.05066 0985	0.001212 924	0.0017 7
AC127521.1	0.302404 485	1.54829339 2	2.35612 7438	0.000223 133	0.0003 76
LINC00605	0.103734 585	0.65304152 2	2.65427 7758	0.004374 774	0.0058 32
TMEM147-AS1	0.264829 441	2.03032830 2	2.93857 761	2.09E-08	1.97E-07
AC004862.1	2.235541 964	0.31264406 1	- 2.83803 1612	4.77E-05	9.79E-05
AP002840.2	0.483226 468	2.02788828 5	2.06920 6795	0.000267 174	0.0004 44
AC092687.3	0.382315 388	1.88846930 2	2.30438 216	1.40E-06	4.83E-06
AL606489.1	0.087651 985	1.86863668 8	4.41405 5523	4.83E-05	9.87E-05
LINC02212	0.003876 88	2.61416742 8	9.39723 9748	0.003923 579	0.0052 78
AC095057.3	0.257038 922	1.23323121 7	2.26238 4574	3.49E-05	7.58E-05

RAD51-AS1	0.592202 439	3.30836424 9	2.48195 5746	3.98E-07	1.69E-06
DNAJC9-AS1	0.096030 422	0.89582419 8	3.22165 2222	2.51E-07	1.18E-06
RHPN1-AS1	0.105381 712	0.85359155 1	3.01792 1372	1.47E-07	7.64E-07
AC004540.1	0.136616 265	3.67319760 9	4.74883 5356	3.94E-06	1.18E-05
AC009318.4	0.161776 934	0.64780344 9	2.00155 0228	0.001144 825	0.0016 8
ZNF213-AS1	0.648889 413	3.01483700 4	2.21603 5473	2.09E-08	1.97E-07
AP001160.1	0.134996 908	0.96211441 4	2.83328 2109	2.09E-08	1.97E-07
MYLK-AS1	0.183571 375	1.03772512 4	2.49901 1335	2.51E-07	1.18E-06
MCCC1-AS1	0.141872 689	1.31376522 6	3.21103 8686	3.98E-07	1.69E-06
ZFH2-AS1	0.056385 271	1.51559447 3	4.74842 162	2.09E-08	1.97E-07
AC073896.3	0.299665 719	1.36061532 6	2.18283 3289	9.69E-06	2.58E-05
ATP2A1-AS1	0.063674 262	0.80554260 4	3.66117 8663	1.52E-05	3.78E-05
AL133367.1	0.050448 854	0.74957125 9	3.89317 2234	2.09E-08	1.97E-07
AC026401.3	0.836232 66	5.35898823 1	2.67998 4351	2.09E-08	1.97E-07
AC010834.3	0.166385 068	1.37519245 9	3.04703 5667	1.40E-06	4.83E-06
AL021707.6	0.489560 648	4.07048161 4	3.05564 0001	2.09E-08	1.97E-07
AL139349.1	0.196068 276	1.77448933 6	3.17797 5878	2.51E-07	1.18E-06
AC011477.3	0.606451 368	2.51760884 7	2.05359 029	3.94E-06	1.18E-05
AC084036.1	1.474308 896	6.15663939 5	2.06210 4242	3.49E-05	7.58E-05
LAMC1-AS1	0.121650 78	1.11691809 5	3.19870 5915	0.000943 738	0.0014 1
AC004067.1	0.082994 709	0.79010020 9	3.25094 4379	7.36E-05	0.0001 41
C1QTNF1-AS1	0.031037 519	0.76217374 2	4.61803 4751	0.001106 928	0.0016 37

AL121992.3	3.279064 776	0.46794125 8	- 2.80888 5062	3.14E-05	7.08E-05
AC034236.2	0.244256 96	1.51364024	2.63155 0769	3.98E-07	1.69E-06
TNFRSF10A-AS1	0.622978 785	2.81083297 1	2.17374 2788	3.98E-07	1.69E-06
AL117379.1	0.138108 283	2.48833377 1	4.17130 8264	4.19E-08	3.15E-07
AC009275.1	0.064271 279	0.91759370 7	3.83560 9406	0.000103 508	0.0001 91
WAC-AS1	3.279772 888	13.6078912 1	2.05277 569	2.09E-08	1.97E-07
AC245041.2	0.379127 297	5.94875495 3	3.97183 3511	0.000318 708	0.0005 19
LINC01436	0.080126 3	7.78573989 6	6.60241 4475	0.007334 333	0.0094 53
LINC01176	0.718124 902	2.91028093 7	2.01885 1731	4.39E-05	9.12E-05
AL354836.1	0.687173 6	7.59651206 1	3.46659 0641	2.09E-08	1.97E-07
AL133410.1	0.068648 121	1.33961063 7	4.28644 9694	2.09E-08	1.97E-07
AC009065.5	0.262267 467	1.18374312 3	2.17424 5282	0.005563 472	0.0072 48
AL353708.3	0.088321 604	0.91052716 8	3.36586 3795	2.09E-08	1.97E-07
AP001767.3	0.124786 734	1.06269004 1	3.09018 4387	4.39E-05	9.12E-05
AC004264.1	0.138071 461	3.97242874	4.84653 4282	0.000260 418	0.0004 36
AC145423.3	0.103225 549	0.86962201 8	3.07458 8381	4.19E-08	3.15E-07
AC108860.2	0.017534 942	1.25062486 9	6.15627 2662	4.20E-05	8.95E-05
AC004253.1	0.155229 908	0.97368635	2.64905 0566	2.01E-06	6.49E-06
AL138781.1	0.060322 954	0.63163918 8	3.38832 1707	2.09E-08	1.97E-07
AC037459.3	0.203623 294	1.05185072 9	2.36895 5463	9.42E-07	3.48E-06
TMEM51-AS1	0.023865 203	0.81562846	5.09493 1588	8.37E-08	5.09E-07

AC022509.3	0.046091 844	0.90547138 8	4.29608 567	9.68E-05	0.0001 81
LINC02449	0.080968 033	0.69806699 6	3.10794 1179	2.09E-08	1.97E- 07
AC102953.2	0.089525 142	1.61853514 8	4.17625 1985	2.09E-08	1.97E- 07
AC110285.2	0.299237 439	4.13784638 3	3.78951 7492	2.09E-08	1.97E- 07
AC021074.3	11.73782 019	0.32174047 3	- 5.18912 3273	1.60E-05	3.98E- 05
LINC00920	0.154879 829	1.34505846 8	3.11844 7714	3.49E-05	7.58E- 05
AC011476.3	0.113273 985	1.04853040 9	3.21048 0233	1.47E-07	7.64E- 07
LINC00707	0.020454 908	4.87661632 7	7.89728 9648	0.002588 883	0.0035 77
LINC00839	0.066678 761	0.62176735 3	3.22107 5673	0.004374 774	0.0058 32
LINC00622	0.044270 523	0.73390922 5	4.05118 3314	2.01E-06	6.49E- 06
TGFB2-AS1	0.078027 79	2.93224774 6	5.23187 5151	0.000175 458	0.0003 06
AC005899.6	0.235422 104	1.42111632 6	2.59370 2965	0.000214 633	0.0003 67
AL645608.8	0.091328 558	0.98022391	3.42397 3374	0.000997 637	0.0014 82
PRR34-AS1	0.877798 086	4.37640147 3	2.31778 4061	9.69E-06	2.58E- 05
AC005332.5	0.462704 063	3.34276597 8	2.85288 0684	2.09E-08	1.97E- 07
MIR4453HG	0.244629 982	1.08838391 7	2.15351 4404	8.37E-08	5.09E- 07
AC091488.1	0.133449 401	0.66393240 3	2.31474 3536	0.000447 983	0.0007 13
AC127024.4	0.074387 936	1.05061513 8	3.82002 1802	4.20E-05	8.95E- 05
HCG27	0.125099 266	0.91417784 5	2.86940 1533	4.19E-08	3.15E- 07
H19	89.09599 691	14.8275608 9	- 2.58707 9317	0.004938 448	0.0065 24
SNHG12	0.591524 918	4.56141433 6	2.94697 0375	8.37E-08	5.09E- 07

AC004908.1	0.176508 382	1.31916425 6	2.90181 561	2.51E-07	1.18E-06
LINC01004	0.329878 981	2.15661712 3	2.70876 1308	2.09E-08	1.97E-07
AL157932.1	0.105855 828	0.80719575 4	2.93081 7884	0.001410 682	0.0020 29
AC099522.2	0.202565 422	1.06503526 4	2.39444 1371	7.26E-06	2.03E-05
AL512274.1	0.012314 792	1.93590446 2	7.29647 1656	2.09E-08	1.97E-07
AC115619.1	40.95888 092	3.43044699 4	- 3.57770 7819	1.51E-05	3.78E-05
AC124016.2	0.246414 584	1.40915306 7	2.51566 8781	2.85E-06	8.79E-06
AC011352.3	0.013703 114	2.26741352 9	7.37039 9969	0.001161 249	0.0017
AC132872.1	0.723505 588	4.98447158 5	2.78436 4505	4.19E-08	3.15E-07
DLG5-AS1	0.173887 1	1.26639169 4	2.86450 0888	3.98E-07	1.69E-06
STARD7-AS1	0.434952 34	1.74287525 1	2.00254 0079	2.09E-08	1.97E-07
AC099568.2	0.129212 251	0.86512269 4	2.74316 1893	0.000335 798	0.0005 45
AC010186.3	0.116936 242	0.72299575 7	2.62826 5049	0.000318 708	0.0005 19
TESC-AS1	0.042733 919	0.68199911 9	3.99631 6347	0.000580 005	0.0009 04
BX255925.1	0.060787 946	1.19704826 6	4.29955 224	2.09E-08	1.97E-07
LINC02035	0.330006 311	2.42594556 5	2.87798 166	2.09E-08	1.97E-07
AC004233.1	0.153704 771	1.32094523 7	3.10333 6804	0.000267 174	0.0004 44
AFAP1-AS1	0.009542 243	9.95739974 5	10.0272 2493	2.73E-05	6.24E-05
AC011462.4	0.122543 42	2.33605543 6	4.25270 959	8.37E-08	5.09E-07
AC005083.1	0.168777 172	3.69188497 6	4.45116 5917	1.40E-06	4.83E-06
AL121583.1	0.082132 083	0.80897589 7	3.30007 8921	2.51E-07	1.18E-06

LINC01914	0.030384 328	0.70466418	4.53553 6603	0.000110 114	0.0002 03
LINC01956	0.002890 19	1.86569286 8	9.33433 1454	0.000163 132	0.0002 86
PTOV1-AS2	0.992103 307	4.93650984 4	2.31492 9144	2.09E-08	1.97E-07
AC010761.1	0.289312 271	1.84401267 6	2.67214 9155	2.09E-08	1.97E-07
AC048341.2	0.356792 83	4.23323635 7	3.56860 2512	2.09E-08	1.97E-07
AC026801.2	0.189054 299	1.82547259 9	3.27139 7451	2.09E-08	1.97E-07
LINC00641	0.247056 67	1.21718069 1	2.30062 9442	2.09E-08	1.97E-07
DPP10-AS1	0.133382 439	4.45432893 5	5.06156 7463	0.000244 225	0.0004 11
LINC01978	0.031014 193	1.26851958 4	5.35407 3414	3.98E-07	1.69E-06
AL049629.1	0.024330 126	4.74163355 9	7.60649 6557	4.48E-05	9.27E-05
GATA2-AS1	0.096315 691	1.75388590 9	4.18664 0251	0.000126 324	0.0002 26
LINC01819	0.006267 983	0.99949702 1	7.31705 7305	0.000164 937	0.0002 89
MNX1-AS2	0.007168 721	1.42606524 5	7.63610 863	5.10E-05	0.0001 04
LINC02487	0.093682 57	0.83020796 9	3.14762 0221	0.000103 508	0.0001 91
LINC01186	0.024583 563	0.67056957 3	4.76962 1105	7.26E-05	0.0001 39
ZEB1-AS1	0.365001 907	2.32737127 7	2.67272 5471	2.09E-08	1.97E-07
DNAH10OS	0.107422 395	1.62665906 5	3.92054 5204	2.51E-07	1.18E-06
AC064836.3	0.506189 887	2.60210224 3	2.36192 7061	3.98E-07	1.69E-06
AL031714.1	0.155433 14	0.95986135	2.62653 1889	6.28E-07	2.46E-06
AC124312.5	0.244677 27	1.20643173 2	2.30179 4292	0.001191 209	0.0017 4
LINC02499	9.593924 871	0.42013055	- 4.51321 154	9.18E-06	2.56E-05

AL157392.3	0.171346 603	1.15470319 1	2.75253 2568	2.09E-08	1.97E-07
AC012645.4	0.062355 687	0.66148265 8	3.40711 0286	1.66E-05	4.02E-05
AGBL5-IT1	0.331434 065	1.39777685 3	2.07634 0263	3.49E-05	7.58E-05
AC087752.4	0.090782 073	0.88199170 6	3.28028 5756	2.04E-05	4.86E-05
AC025171.2	0.136265 338	1.03500725 5	2.92515 0344	1.27E-05	3.28E-05
AC147651.1	0.158046 571	18.7299826 2	6.88885 6014	0.000585 17	0.0009 11
AL139241.1	0.035004 37	0.90770117 8	4.69661 0488	0.000444 464	0.0007 1
AL008582.1	0.058086 928	1.09036347 2	4.23045 1806	1.76E-05	4.24E-05
AC130469.1	0.071045 766	0.83208996 8	3.54991 8941	0.000142 963	0.0002 54
AC108134.1	0.023332 926	0.91831527 2	5.29855 0375	4.19E-08	3.15E-07
SNHG1	1.430345 279	14.5891278 4	3.35045 8285	2.09E-08	1.97E-07
AC026367.2	0.145416 142	0.89552397 9	2.62254 4634	1.27E-05	3.28E-05
ZMIZ1-AS1	0.056769 145	0.81906741 2	3.85080 3287	2.09E-08	1.97E-07
AC115618.2	2.648352 51	12.6286635 4	2.25353 49	9.42E-07	3.48E-06
UNC5B-AS1	0.007584 446	0.81697806	6.75110 9816	0.000212 443	0.0003 64
Z84485.1	0.130756 839	0.76548016 7	2.54947 8599	1.40E-06	4.83E-06
LINC01615	0.002583 073	1.32372098	9.00129 5204	5.10E-05	0.0001 04
AC006960.3	0.013357 178	0.67769627 1	5.66495 1715	2.30E-05	5.39E-05
AC068987.1	0.069780 656	1.13055017 5	4.01805 4054	0.005938 729	0.0077 3
LINC00342	0.429629 277	6.16163238 5	3.84214 8398	2.09E-08	1.97E-07
AC083841.1	3.495702 558	0.47866562 3	- 2.86849 2333	0.000271 858	0.0004 51

AC020916.1	1.528746 243	18.6296832 3	3.60718 2285	2.09E-08	1.97E-07
AC025171.4	0.113020 999	1.51877146 9	3.74824 2048	1.40E-06	4.83E-06
LINC00472	0.071008 439	0.63998936 6	3.17198 5544	1.66E-05	4.02E-05
AC008752.3	0.167621 863	1.17966086 8	2.81508 9929	8.37E-08	5.09E-07
AC138028.6	0.075047 991	0.70298831 7	3.22761 5358	1.47E-07	7.64E-07
AC127024.5	0.270696 862	2.37007272	3.13018 1257	8.37E-08	5.09E-07
AL122125.1	0.117184 776	1.35818153 9	3.53481 9265	3.94E-06	1.18E-05
LINC01485	26.13999 046	1.43509380 9	- 4.18704 1664	1.47E-07	7.64E-07
MALAT1	2.605057 346	11.5855348 5	2.15293 7612	8.37E-08	5.09E-07
AP003419.3	0.054986 623	2.17228758 9	5.30399 0608	1.52E-05	3.78E-05
AC124798.1	0.120088 678	2.27045536 6	4.24080 9634	5.40E-06	1.58E-05
PIK3IP1-AS1	0.083735 179	0.60185265 6	2.84550 4571	2.15E-05	5.04E-05
AL137186.2	0.152243 165	0.73803645 3	2.27731 4618	2.09E-08	1.97E-07
AC005332.3	1.842742 542	7.45342940 9	2.01604 986	2.09E-08	1.97E-07
AC008760.1	0.088269 663	2.67833070 4	4.92327 2607	4.51E-05	9.30E-05
VIM-AS1	0.154528 324	3.18797924 2	4.36669 9033	8.37E-08	5.09E-07
AL118558.4	0.180095 803	0.74539339 3	2.04923 7474	7.26E-06	2.03E-05
AC026740.1	0.232630 357	3.86541633 7	4.05451 2537	1.47E-07	7.64E-07
AC245100.7	0.039360 145	0.62810092 9	3.99618 8948	4.20E-05	8.95E-05
AP000240.1	0.163837 642	0.96464236 9	2.55772 7319	3.49E-05	7.58E-05
SERTAD4-AS1	0.076228 253	0.84322959 7	3.46752 7795	3.49E-05	7.58E-05

CRNDE	0.074260 159	2.19800575 4	4.88746 2954	2.51E-07	1.18E-06
LINC02381	0.515969 27	3.54691507 3	2.78120 7737	0.000126 324	0.0002 26
AL590764.1	0.148267 253	0.87838090 7	2.56664 6701	0.002016 531	0.0028 18
PSPC1-AS2	0.169259 741	0.76940684 6	2.18450 7803	3.49E-05	7.58E-05
NKILA	0.042811 071	3.20828947 1	6.22767 6595	4.19E-08	3.15E-07
UCA1	0.470602 538	68.4386138 9	7.18415 7629	0.001324 19	0.0019 09
DGCR9	0.050284 037	1.94300002	5.27204 1626	9.42E-07	3.48E-06
AL662791.1	0.152394 146	0.89826372 5	2.55933 1591	0.000848 116	0.0012 73
AC009054.2	0.214602 908	1.16367753	2.43894 9796	4.39E-05	9.12E-05
AC008735.2	0.618826 108	3.78091940 8	2.61113 1128	1.40E-06	4.83E-06
AC008115.4	0.098756 097	0.61342810 3	2.63495 2533	3.94E-06	1.18E-05
AL513320.1	0.077704 869	0.94940627 8	3.61094 8677	1.52E-05	3.78E-05
AP000355.1	4.859036 907	0.44597143 3	- 3.44564 7184	3.77E-05	8.12E-05
SNHG7	1.695932 82	9.94909830 9	2.55248 6757	2.51E-07	1.18E-06
AC015712.1	0.020609 641	0.70657298 1	5.09944 732	5.94E-05	0.0001 18
LINC02298	0.140813 977	3.57051846 3	4.66427 1132	2.09E-08	1.97E-07
ROR1-AS1	0.000742 064	1.90598992 4	11.3267 0998	5.87E-05	0.0001 17
AC016065.1	0.243911 156	1.43965768 5	2.56129 8164	2.09E-08	1.97E-07
AP001029.1	0.056796 49	0.90671142 2	3.99676 9776	0.001032 396	0.0015 32
AC104825.1	0.361549 483	2.21598085 3	2.61568 0399	3.98E-07	1.69E-06
AC083843.3	0.287572 937	2.88120925	3.32467 4626	9.69E-06	2.58E-05

FOXD2-AS1	0.343277 324	2.90116274 9	3.07918 4767	8.37E-08	5.09E-07
LINC00899	0.214228 098	0.94530157 1	2.14162 6938	0.001324 19	0.0019 09
AC008105.3	0.135073 801	1.47133502 6	3.44530 6006	5.49E-05	0.0001 1
AC139768.1	0.296996 933	1.64589466 5	2.47035 2072	9.42E-07	3.48E-06
AC015819.1	0.127322 027	0.63262004 1	2.31285 7232	0.002016 531	0.0028 18
AC020907.4	0.098360 505	1.37199919 5	3.80205 6681	8.37E-08	5.09E-07
AC104463.2	0.188765 187	0.78925085 6	2.06389 1203	0.001527 626	0.0021 67
AC009549.1	0.134890 905	2.38204873 4	4.14233 7945	8.43E-05	0.0001 6
AP001469.3	0.115512 041	1.00050411 1	3.11461 1939	2.01E-06	6.49E-06
MIR122HG	2.809336 868	0.58708388 3	- 2.25859 1071	0.000164 937	0.0002 89
AL928654.2	0.596881 418	2.99599968 4	2.32752 1227	2.01E-06	6.49E-06
LINC01018	26.02112 079	0.89204957 7	- 4.86641 5401	2.09E-08	1.97E-07
AC087477.2	0.137116 105	0.88665640 4	2.69297 711	0.000103 508	0.0001 91
LINC01659	0.013128 405	0.81905566 4	5.96319 7987	0.000918 726	0.0013 77
LINC01503	0.467608 555	2.04176057 7	2.12644 0472	2.85E-06	8.79E-06
AL162595.1	0.314704 431	1.29949977 9	2.04588 6992	0.000848 116	0.0012 73
ZNF793-AS1	0.097355 293	0.83959524 5	3.10836 2669	0.000318 708	0.0005 19
LINC00494	0.015560 104	3.54998185	7.83381 6112	0.000622 772	0.0009 62
AL513218.1	0.104766 388	0.78239694 3	2.90072 4796	8.37E-08	5.09E-07
Z69706.1	0.289425 214	1.37521363 2	2.24839 3236	5.40E-06	1.58E-05
AC016590.3	0.112562 473	0.80534057 2	2.83887 3091	7.36E-05	0.0001 41

AC092171.4	0.087531 563	1.55923137	4.15488 7875	2.09E-08	1.97E- 07
AC107959.3	0.031898 317	2.45719017 4	6.26738 5385	4.19E-08	3.15E- 07
ASB16-AS1	1.287278 229	5.49770005 4	2.09450 429	2.09E-08	1.97E- 07
AC105206.2	0.099535 38	0.91585465 9	3.20183 7337	1.47E-07	7.64E- 07
AC112206.2	2.658490 884	0.28139809 2	- 3.23992 3069	4.42E-05	9.15E- 05
AC012065.3	12.10661 971	2.38565499 3	- 2.34333 8781	9.69E-06	2.58E- 05
AC004771.1	0.104494 877	0.86599221 8	3.05092 1843	3.98E-07	1.69E- 06
AC024896.1	3.235930 259	13.3254014 5	2.04192 6577	6.28E-07	2.46E- 06
AC022784.1	0.292126 55	3.05633433 1	3.38713 6981	0.001144 825	0.0016 8
LINC02331	0.228415 2	5.63480545 8	4.62463 5241	0.000126 324	0.0002 26
AC138028.4	0.276365 638	1.74622448 8	2.65958 8885	7.26E-06	2.03E- 05
AC010864.1	0.051820 921	0.62973786 2	3.60314 4844	2.09E-08	1.97E- 07
AL136295.7	0.684973 01	3.38790826 2	2.30627 5762	2.09E-08	1.97E- 07
AC145423.2	0.065156 357	1.57161701 3	4.59219 9938	3.15E-05	7.10E- 05
AC068580.1	0.180285 414	1.39561362 4	2.95254 5004	0.000135 475	0.0002 42
HMG3-AS1	0.169748 511	1.16730058 9	2.78170 5289	2.09E-08	1.97E- 07
SLC12A9-AS1	0.078923 41	1.18555207 9	3.90896 193	1.51E-05	3.78E- 05
SLC25A21-AS1	0.214368 463	1.00013509 2	2.22203 0299	0.000318 708	0.0005 19
CR936218.1	0.186581 112	0.91706577 7	2.29722 2266	0.001060 816	0.0015 7
AC002116.2	0.132920 167	0.75158200 8	2.49937 0524	2.09E-08	1.97E- 07

LINC01554	32.67696 624	0.59616366 3	- 5.77642 1794	2.36E-05	5.50E-05
ZNF32-AS2	0.141673 887	1.36092744	3.26394 438	2.51E-07	1.18E-06
SEMA3B-AS1	0.355747 155	1.76589370 7	2.31147 4384	5.49E-05	0.0001 1
AC103702.2	0.006817 87	2.04002236	8.22504 8158	0.003954 558	0.0053 14
AP003352.1	0.479361 878	2.47920835 8	2.37069 2436	4.19E-08	3.15E-07
AL731567.1	0.101923 783	1.70933254 3	4.06787 0464	0.000260 418	0.0004 36
AC120498.3	0.021804 833	0.71490472 4	5.03503 1114	0.000392 393	0.0006 29
AC010326.3	1.542658 016	7.43702351 6	2.26930 7061	2.09E-08	1.97E-07
LINC01702	17.84933 858	0.80697001 9	- 4.46721 1731	1.46E-05	3.74E-05
AC011481.1	0.073923 539	1.13601060 6	3.94179 8665	1.52E-05	3.78E-05
AC004233.2	0.025126 549	2.20899976 8	6.45803 6933	0.000367 785	0.0005 95
AC009065.2	0.240945 683	1.09745177 5	2.18737 7689	0.000267 174	0.0004 44
DBH-AS1	7.644072 437	1.61675457 1	- 2.24124 076	2.01E-06	6.49E-06
AC006042.1	0.229595 745	3.89569329 4	4.08471 2289	1.47E-07	7.64E-07
AC142472.1	0.248671 049	1.10891852 5	2.15684 2914	5.40E-06	1.58E-05
AC083964.1	0.174154 655	1.15397019 1	2.72816 5015	1.47E-07	7.64E-07
AC135050.3	0.238798 398	1.30419145 5	2.44929 0609	4.39E-05	9.12E-05
AL591895.1	3.772613 771	49.9678734 2	3.72736 4506	2.09E-08	1.97E-07
PAN3-AS1	0.160117 79	0.85955726 1	2.42446 0147	6.28E-07	2.46E-06
AC016747.1	1.165059 595	4.78167294 7	2.03711 1704	4.19E-08	3.15E-07

AC010531.6	0.272886 322	1.10893818 3	2.02280 6956	8.43E-05	0.0001 6
AC119396.2	0.063764 443	1.17878205	4.20840 1038	0.000276 081	0.0004 57
AL731569.1	0.074597 281	1.11756096	3.90508 6665	8.37E-08	5.09E- 07
AL365203.2	0.836166 854	15.2198334 3	4.18601 7904	4.19E-08	3.15E- 07
AL391056.1	0.023751 614	0.80245082 9	5.07831 5557	0.001663 939	0.0023 58
UBE2Q1-AS1	0.048891 909	0.84952148 7	4.11898 2807	5.50E-05	0.0001 1
AC060766.7	0.154841 509	1.70580520 4	3.46158 8727	1.47E-07	7.64E- 07
AF131215.6	0.151706 386	3.12141597 5	4.36284 6908	8.37E-08	5.09E- 07
LINC02188	0.017393 119	2.49267531 3	7.16303 4468	0.005367 761	0.0070 77
BX322562.1	0.961950 754	7.61325623 9	2.98447 8693	1.27E-05	3.28E- 05
AZIN1-AS1	0.233837 544	1.21148389 7	2.37319 6745	1.47E-07	7.64E- 07
LINC01152	0.035553 335	0.78920936 3	4.47235 1283	7.26E-06	2.03E- 05
AC244517.7	0.023061 746	0.71011095 9	4.94447 0807	0.000619 714	0.0009 59
TFAP2A-AS1	0.010669 3	0.73363416 6	6.10352 3347	1.75E-05	4.22E- 05
AP003486.1	0.398615 676	1.96363490 8	2.30045 6366	2.09E-08	1.97E- 07
LINC01671	0.153070 933	2.18350728 1	3.83437 5086	1.66E-05	4.02E- 05
AC084018.1	0.495646 646	3.67648231 8	2.89094 2174	1.40E-06	4.83E- 06
AC005785.1	0.091508 089	0.73578692 6	3.00731 6862	8.37E-08	5.09E- 07
AC016735.1	1.157732 61	24.3138708 1	4.39240 5599	2.75E-05	6.24E- 05
AL121899.1	0.400534 351	2.62766364 6	2.71378 2734	0.000378 51	0.0006 07
LINC00205	0.356844 363	3.34002562 3	3.22649 2282	8.37E-08	5.09E- 07
AC120498.10	0.122310 346	1.82907374 2	3.90249 4888	0.000943 738	0.0014 1

AC018638.7	0.177011 427	0.99005886 4	2.48367 1803	1.47E-07	7.64E-07
AC133644.2	0.047017 696	1.14708620 7	4.60862 6171	0.000738 308	0.0011 26
HLA-DQB1-AS1	0.428856 089	1.89304555 1	2.14214 3616	0.002635 088	0.0036 22
AC138230.1	0.166363 769	0.96987596 9	2.54345 8984	1.40E-06	4.83E-06
PSORS1C3	0.301796 093	4.08702112 8	3.75940 367	9.69E-06	2.58E-05
AC129510.1	0.159057 43	1.62586443 1	3.35358 7299	6.28E-07	2.46E-06
AC011445.2	0.343113 83	2.06070478 5	2.58637 8658	0.000551 525	0.0008 62
DOCK9-DT	0.207594 206	0.90207478 9	2.11948 0871	1.27E-05	3.28E-05
SREBF2-AS1	0.178568 903	1.36785497 2	2.93736 2505	2.09E-08	1.97E-07
AC002398.1	0.203954 209	2.73786456 6	3.74673 3894	2.09E-08	1.97E-07
EPB41L4A-AS1	1.830134 868	9.14159530 9	2.32049 5984	2.51E-07	1.18E-06
AC009005.1	0.150913 081	3.13134813 6	4.37499 4147	8.37E-08	5.09E-07
AC024075.2	0.940520 145	4.76728966 3	2.34163 8536	2.09E-08	1.97E-07
KRTAP5-AS1	0.035903 486	0.61599511 1	4.10072 3052	7.26E-06	2.03E-05
AC092953.2	0.214033 255	1.05205353 7	2.29730 125	1.40E-06	4.83E-06
AL031600.1	0.184856 813	1.11754422 7	2.59585 1808	2.01E-06	6.49E-06
LINC00528	0.108307 884	0.67183734 9	2.63297 3743	0.001527 626	0.0021 67
AC090152.1	0.090269 39	0.99326100 2	3.45986 4111	0.001144 825	0.0016 8
AL157392.4	0.177397 368	0.71918070 5	2.01936 9708	0.000447 983	0.0007 13
AC003965.1	0.162823 179	1.11369292 3	2.77397 3498	9.69E-06	2.58E-05
AC092118.2	0.222114 574	1.19327150 4	2.42554 6374	7.26E-06	2.03E-05
AL596223.2	0.010745 48	0.88139926 4	6.35799 3808	6.03E-05	0.0001 2

AC009686.2	0.179819 437	1.38198260 1	2.94211 8577	2.15E-05	5.04E-05
FAM27C	0.087731 147	0.60490282 7	2.78554 237	0.000838 729	0.0012 73
AC015912.3	0.294314 848	2.01621146 4	2.77621 473	1.40E-06	4.83E-06
AC087623.1	0.054960 883	1.78206442 9	5.01900 0505	4.83E-05	9.87E-05
NRSN2-AS1	0.318717 447	3.04308328 8	3.25518 392	2.09E-08	1.97E-07
AP001107.4	0.059622 262	1.01448873 6	4.08875 7925	2.09E-08	1.97E-07
BX537318.1	0.556771 53	3.21197630 2	2.52830 39	4.19E-08	3.15E-07
ANKRD10-IT1	1.492759 73	11.8040640 2	2.98322 9773	1.40E-06	4.83E-06
AC015961.2	0.073784 961	0.96309838	3.70628 4487	2.01E-06	6.49E-06
AP000345.2	0.091212 468	0.78162966 3	3.09918 228	0.000620 545	0.0009 59
C2orf27A	0.113266 296	2.19007843 7	4.27319 2008	8.37E-08	5.09E-07
MIR181A2HG	0.105031 138	1.50175782	3.83776 3175	2.09E-08	1.97E-07
AC103974.1	0.099071 04	0.72976724 5	2.88090 1098	1.27E-05	3.28E-05
PRKCQ-AS1	0.156463 242	1.06059984 6	2.76098 4775	0.006254 453	0.0081 17
VPS9D1-AS1	0.288027 468	2.99747639 4	3.37947 0085	2.51E-07	1.18E-06
LINC01943	0.036211 193	0.6804607	4.23200 4213	2.36E-05	5.50E-05
AC105411.1	0.025151 775	1.50797397 3	5.90580 7509	0.000126 324	0.0002 26
THAP9-AS1	1.634899 226	7.65993848 2	2.22813 1094	4.19E-08	3.15E-07
AC009120.3	0.122288 577	1.10968002 1	3.18178 2179	8.44E-05	0.0001 6
C2orf91	0.006257 194	0.99479609 3	7.31274 1196	0.001486 092	0.0021 36
CYP4F26P	0.025570 769	0.90563738 5	5.14636 6082	0.001160 786	0.0017
AC093788.1	0.132022 869	0.98236532 2	2.89547 1784	4.19E-08	3.15E-07

DUBR	0.111232 535	1.19533657 6	3.42576 6171	4.19E-08	3.15E-07
TNFRSF14-AS1	0.421794 564	2.31784950 5	2.45817 4489	4.39E-05	9.12E-05
AC002128.2	0.075811 773	0.69371299 2	3.19384 5102	8.98E-05	0.00017
AL354760.1	0.068767 278	0.73783807 6	3.42351 0092	8.43E-05	0.00016
MNX1-AS1	0.002761 436	2.63673461 4	9.89911 7835	2.75E-05	6.24E-05
GACAT2	0.012543 707	6.55206396 4	9.02884 1822	0.000788 802	0.0012
AC009065.8	0.637530 562	2.64118345	2.05061 8103	8.37E-08	5.09E-07
LINC02428	12.64598 88	0.59666913 6	- 4.40560 4883	1.18E-05	3.14E-05
AL512306.2	0.135561 277	0.86233969 6	2.66931 1165	0.000447 983	0.000713
PLAC4	0.001779 69	2.96538558 8	10.7023 7844	3.59E-05	7.76E-05
LINC01089	0.428503 839	3.50504572 3	3.03205 323	1.47E-07	7.64E-07
AC009097.2	0.017386 583	0.84035666 6	5.59495 5439	0.000323 994	0.000527
F11-AS1	3.922300 52	0.51467301 4	- 2.92997 2033	8.37E-08	5.09E-07
AC040977.1	1.346551 938	8.68104630 6	2.68859 9061	3.98E-07	1.69E-06
ARHGAP27P1-BPTFP1-KPNA2P3	0.256128 641	1.79583739 5	2.80971 6232	2.09E-08	1.97E-07
AL031673.1	0.514829 22	3.1260951	2.60219 5823	9.69E-06	2.58E-05
AC099684.2	4.760656 085	1.08374312 3	- 2.13513 7572	4.39E-05	9.12E-05
GAS5	5.967355 949	69.9036299 8	3.55020 3634	2.09E-08	1.97E-07
AP005233.2	0.043894 826	6.51260697	7.21304 0454	0.002431 95	0.003367
LINC01480	0.054443 83	1.14631591 5	4.39609 2323	5.98E-05	0.000119

SLC9A3-AS1	0.884157 563	8.97886125 7	3.34415 709	6.28E-07	2.46E-06
AC104695.2	0.110237 103	1.20897853 5	3.45510 6841	3.98E-07	1.69E-06
AC010487.1	0.136173 666	2.09896632 8	3.94615 9387	1.40E-06	4.83E-06
AC139887.1	0.287898 407	1.26871241 5	2.13973 3373	0.000848 116	0.0012 73
MIR3936HG	0.595103 318	3.53242293 6	2.56944 602	2.85E-06	8.79E-06
SSTR5-AS1	0.037642 072	3.02829902 3	6.33001 781	0.002884 101	0.0039 56
AC024075.1	0.309070 837	1.65339366 5	2.41942 0825	9.69E-06	2.58E-05
AC010247.2	0.054409 453	1.01671560 1	4.22391 5059	0.001324 19	0.0019 09
NEBL-AS1	0.029767 752	0.63172603 3	4.40747 6846	0.000516 197	0.0008 16
BACE1-AS	0.759201 712	4.07691964 8	2.42492 4372	2.09E-08	1.97E-07
AC013275.1	0.127390 18	16.932684	7.05441 2798	5.40E-06	1.58E-05
ZFAS1	5.660998 999	51.8842505 3	3.19616 8101	8.37E-08	5.09E-07
LINC02182	0.015928 499	1.58796795	6.63942 765	0.000568 52	0.0008 87
AC116351.1	0.143589 518	2.37006005 6	4.04490 1271	1.66E-05	4.02E-05
AC026368.1	0.036941 286	1.99398929 3	5.75427 9772	1.52E-05	3.78E-05
AC004908.3	0.122401 405	0.94360213 5	2.94655 8566	9.42E-07	3.48E-06
AL136295.6	0.283786 798	1.26772778 7	2.15936 5617	8.37E-08	5.09E-07
LOXL1-AS1	0.052084 304	1.58785314 6	4.93008 5022	8.37E-08	5.09E-07
AP000424.2	0.156918 768	4.44614471 6	4.82446 5086	0.001060 816	0.0015 7
LINC00623	0.786352 723	3.41613506 2	2.11911 6524	1.47E-07	7.64E-07
SBF2-AS1	0.327046 582	2.08959794 6	2.67565 7343	9.42E-07	3.48E-06
AC116914.2	0.157202 481	1.86563093 9	3.56896 7727	1.47E-07	7.64E-07

AP000759.1	0.617755 377	4.84330084 3	2.97088 3052	4.19E-08	3.15E-07
PCAT6	0.433380 816	3.00968375 9	2.79590 4706	2.09E-08	1.97E-07
MIR222HG	0.192882 577	1.12871175	2.54888 2362	7.26E-06	2.03E-05
LINC01311	0.082086 971	1.06343709 9	3.69543 7648	8.37E-08	5.09E-07
AC009041.2	0.092968 393	2.93213948 5	4.97906 9607	2.01E-06	6.49E-06
AC034229.4	0.088419 872	0.70065694 9	2.98626 5709	0.000199 976	0.0003 43
AL365181.2	0.036714 999	4.85782570 4	7.04779 7377	1.47E-07	7.64E-07
LINC00844	37.14502 336	2.85109673 4	- 3.70358 0039	4.65E-05	9.54E-05
SNHG21	0.208726 011	1.10835165 8	2.40873 3394	2.09E-08	1.97E-07
AC092119.2	0.075424 298	1.30879116 4	4.11706 1737	1.52E-05	3.78E-05
AL596244.1	0.148043 885	0.91197567	2.62297 0438	9.42E-07	3.48E-06
HM13-IT1	0.159645 942	0.92337916 8	2.53204 7303	1.66E-05	4.02E-05
ZNF426-DT	0.128447 926	0.67397082 8	2.39150 2548	0.000726 544	0.0011 15
AC109322.1	0.262594 844	1.10615867 5	2.07464 7856	2.09E-08	1.97E-07
AC004816.1	0.149285 744	0.99475939 2	2.73627 1209	9.42E-07	3.48E-06
AC011352.1	0.010374 636	1.18506552 4	6.83576 2265	0.000548 444	0.0008 58
AL590705.3	0.126593 416	0.77573371 7	2.61535 9132	0.000165 262	0.0002 89
LINC00992	0.157570 071	5.08677270 5	5.01268 5192	0.000126 468	0.0002 26
AC092171.2	0.316989 085	3.89061112 6	3.61749 172	2.09E-08	1.97E-07
AL512413.1	0.079947 567	0.87488587 2	3.45196 8806	0.000126 468	0.0002 26
AC023509.3	0.178906 288	1.53766752 6	3.10346 7599	2.51E-07	1.18E-06

LINC00265	0.131790 663	1.20486184 4	3.19254 7659	6.28E-07	2.46E-06
AC020659.1	0.087622 011	2.98804971 6	5.09176 7016	1.27E-05	3.28E-05
MIR210HG	0.594906 579	2.62797429 7	2.14321 6128	0.000126 324	0.0002 26
LINC01355	0.238720 448	1.07250898 2	2.16759 5674	3.98E-07	1.69E-06
AL360181.1	2.580128 403	0.44892873 5	- 2.52288 4516	4.65E-05	9.54E-05
ADIRF-AS1	0.088505 283	0.74325030 5	3.07001 2672	0.000185 435	0.0003 19
AC022150.2	0.304765 239	2.23881968 4	2.87696 8073	7.26E-06	2.03E-05
AL391095.2	14.80475 873	1.87349690 7	- 2.98225 5479	6.75E-05	0.0001 32
AC009090.3	0.109806 131	0.79117831	2.84904 4263	2.85E-06	8.79E-06
AL031985.3	0.215648 296	1.23614242 1	2.51909 2752	8.37E-08	5.09E-07
AC008736.1	0.373026 383	1.73968066 3	2.22147 2931	1.40E-06	4.83E-06
ABALON	0.129901 28	1.53932168 8	3.56680 7209	9.69E-06	2.58E-05
MELTF-AS1	0.143870 097	3.37181506 1	4.55068 6739	2.09E-08	1.97E-07
AC015849.3	0.313635 5	1.45950891 2	2.21832 2248	4.39E-05	9.12E-05
AL645608.7	0.173414 536	4.63496668 5	4.74026 2234	9.42E-07	3.48E-06
MANCR	0.079420 801	2.26055962 9	4.83101 9256	0.000528 11	0.0008 27
AC022007.1	0.176606 23	0.80039255	2.18017 1501	2.51E-07	1.18E-06
FAM201A	0.150799 237	2.2793839	3.91794 2893	6.28E-07	2.46E-06
AC006435.2	0.189153 373	1.34612174 5	2.83118 0489	3.98E-07	1.69E-06
GSEC	0.174088 464	0.92434169 6	2.40860 5655	9.42E-07	3.48E-06

HS1BP3-IT1	9.499069 281	1.19649264 5	- 2.98897 4636	6.28E-07	2.46E-06
LHFPL3-AS2	0.072089 877	6.08299365 6	6.39884 1004	0.000223 133	0.0003 76
ASH1L-AS1	0.333588 34	2.38460844 5	2.83761 1628	2.09E-08	1.97E-07
AF131215.5	0.119296 591	2.44183020 6	4.35533 816	8.37E-08	5.09E-07
AC092354.2	0.175175 565	0.90817705	2.37417 2034	2.09E-08	1.97E-07
DGCR10	0.024874 029	0.89331808 1	5.16646 1857	3.11E-05	7.03E-05
TRAPPC12-AS1	0.189987 98	1.40331138 5	2.88485 5116	2.01E-06	6.49E-06
AC025287.3	0.096318 494	0.74872888 3	2.95855 8675	8.39E-05	0.0001 6
AC005696.1	0.232420 972	2.13396459 9	3.19872 4086	4.19E-08	3.15E-07
AL590666.2	0.095340 156	6.91501851 1	6.18050 5313	1.47E-07	7.64E-07
AC139887.4	0.047646 593	0.68875579 2	3.85354 7573	2.04E-05	4.86E-05
MAFG-DT	0.093320 179	3.23283683 7	5.11446 7811	2.09E-08	1.97E-07
AC091185.1	0.130372 342	0.91431640 9	2.81005 5671	0.000314 671	0.0005 19
AC012236.1	0.163933 704	1.09671106 3	2.74199 9085	3.49E-05	7.58E-05
AC022762.2	0.183648 663	1.04644536 8	2.51047 6695	2.09E-08	1.97E-07
AC060780.1	0.284560 363	2.03366335 2	2.83727 4255	4.19E-08	3.15E-07
LINC02600	0.025928 984	1.63881738 2	5.98194 5599	1.40E-06	4.83E-06
LINC01977	0.007288 347	0.93893375 4	7.00928 7866	1.51E-05	3.78E-05
AC006547.1	0.202419 232	1.70984931 9	3.07845 0918	2.09E-08	1.97E-07
LINC00511	0.017658 8	1.87562561 4	6.73084 0809	4.19E-08	3.15E-07
AC132192.2	0.204216 325	2.07311887 5	3.34363 2737	2.09E-08	1.97E-07

AC084824.4	0.454142 646	2.40589091 8	2.40535 3809	2.09E-08	1.97E-07
LINC01184	1.125619 627	4.78999257 1	2.08930 4029	3.94E-06	1.18E-05
AC073869.1	1.668265 525	7.16967061	2.10355 791	2.09E-08	1.97E-07
PAX8-AS1	0.137543 914	2.83339243 8	4.36456 6229	0.003001 248	0.0040 87
SNHG6	10.61914 654	50.6513766 2	2.25393 3658	6.28E-07	2.46E-06
AP000695.2	0.030746 498	0.87723203 1	4.83446 4511	9.66E-05	0.0001 81
SLC25A25-AS1	0.772768 331	4.41253506 7	2.51349 9867	3.98E-07	1.69E-06
AC139795.2	0.346761 451	1.83780939 3	2.40597 1715	2.09E-08	1.97E-07
AC009065.4	0.176589 419	0.99372297 6	2.49244 4825	6.28E-07	2.46E-06
RFX3-AS1	0.093806 472	0.60066327	2.67879 7086	0.000153 472	0.0002 7
AL022322.1	0.165950 339	2.73398801 2	4.04218 3436	2.09E-08	1.97E-07
AL358472.3	0.209844 283	1.93625678 8	3.20587 9235	2.09E-08	1.97E-07
AL021707.4	0.051115 694	0.63734025 2	3.64022 5564	5.54E-05	0.0001 11
LENG8-AS1	0.390605 395	3.01724494 7	2.94944 8043	4.19E-08	3.15E-07
AL035071.1	0.911152 426	4.05958671	2.15556 8533	1.47E-07	7.64E-07
AL844908.1	0.129703 161	0.79420971 8	2.61430 6374	0.000726 544	0.0011 15
PIK3CD-AS2	0.132277 897	1.39892481 4	3.40267 4504	9.69E-06	2.58E-05
AL121929.2	0.029233 467	1.03531170 6	5.14630 0467	5.20E-05	0.0001 05
COLCA1	0.074165 986	0.85822231 9	3.53252 1835	2.51E-07	1.18E-06
AC145098.1	0.104404 195	0.89781853 8	3.10424 4202	6.87E-05	0.0001 33
SNHG17	1.060834 132	6.65273759 3	2.64874 9031	2.09E-08	1.97E-07
AC034231.1	0.267386 75	1.18070869 8	2.14265 319	0.000126 324	0.0002 26

LINC01730	0.030393 348	0.65935679 9	4.43923 1873	3.64E-05	7.84E-05
AP001453.3	0.207937 706	2.20926757 9	3.40934 4869	2.09E-08	1.97E-07
BOLA3-AS1	0.103508 015	0.88377244 8	3.09393 2472	8.37E-08	5.09E-07
AC008760.2	54.71525 843	13.5418582 9	- 2.01451 7486	0.000620 545	0.0009 59
AC026367.3	0.205177 653	1.29840375 7	2.66179 3568	9.42E-07	3.48E-06
AC116407.2	0.203412 774	3.23215130 8	3.99001 2553	2.09E-08	1.97E-07
CYTOR	0.488181 698	7.38077780 4	3.91828 2745	2.09E-08	1.97E-07
AP000757.1	0.066733 685	1.83779303 9	4.78341 5338	8.37E-08	5.09E-07
AL049555.1	0.043566 095	4.65354965	6.73898 1989	1.27E-05	3.28E-05
AL135999.1	0.351942 643	7.85964608 2	4.48105 2116	9.69E-06	2.58E-05
LINC01836	0.291722 409	9.25113613 2	4.98696 2436	1.27E-05	3.28E-05
AL592494.1	7.844272 051	1.02608571	- 2.93448 8326	2.36E-05	5.50E-05
TM4SF1-AS1	0.052014 304	0.61978084 4	3.57477 7829	2.75E-05	6.24E-05
AL353801.1	0.023758 176	1.21240139 5	5.67329 9527	0.000788 802	0.0012
AL139246.3	0.111686 424	1.15471486 1	3.37001 0909	0.000185 435	0.0003 19
SLCO4A1-AS1	0.041005 178	2.91914010 4	6.15359 354	6.83E-05	0.0001 32
FAM99A	22.92818 842	0.57175799 8	- 5.32557 3917	8.19E-06	2.28E-05
RUSC1-AS1	0.592842 065	2.83458796 5	2.25741 9319	7.26E-06	2.03E-05
AL355488.1	0.291492 017	3.33917183 1	3.51796 2055	2.09E-08	1.97E-07
HMGA1P4	0.212003 822	1.51691368 4	2.83897 6818	5.57E-05	0.0001 11

AC005726.3	0.308010 102	1.73432166 1	2.49332 1926	2.85E-06	8.79E-06
LINC01011	0.119070 842	1.36836495 5	3.52256 0984	2.09E-08	1.97E-07
AC073389.3	0.104634 493	0.81674814 2	2.96453 2748	1.47E-07	7.64E-07
PRKCZ-AS1	0.221666 922	0.99945816 9	2.17275 2683	1.47E-07	7.64E-07
AC000123.1	0.469764 155	2.06123374 9	2.13349 9579	2.51E-07	1.18E-06
AL449403.2	0.049111 055	1.77456077 8	5.17527 0362	4.39E-05	9.12E-05
AC040970.1	0.079451 916	2.05757589 2	4.69471 9832	2.09E-08	1.97E-07
LINC00685	0.323797 645	2.50922299 9	2.95407 6295	3.98E-07	1.69E-06
AC023043.4	0.340510 024	1.78932835 2	2.39364 8981	6.83E-05	0.000132
BX470102.1	0.063929 222	3.762975	5.87925 4363	4.81E-05	9.85E-05
LINC00482	0.513522 492	3.68752927 3	2.84415 5129	1.66E-05	4.02E-05
AC087500.1	0.214685 832	1.07055085 2	2.31805 4434	6.83E-05	0.000132
AC148476.1	0.010908 6	1.56696160 9	7.16636 0081	4.40E-05	9.12E-05
LINC01595	10.39457 518	1.19873776	- 3.11624 2808	5.71E-05	0.000114
AL121839.2	0.063952 863	0.85871896 2	3.74710 5201	2.09E-08	1.97E-07
AL139089.1	0.166265 929	1.52996765 9	3.20193 6693	2.09E-08	1.97E-07
ZKSCAN2-DT	0.109919 69	1.30328108 1	3.56762 6525	2.09E-08	1.97E-07
AC245884.8	0.210650 64	1.43895431 7	2.77209 6585	8.37E-08	5.09E-07
DLGAP1-AS2	0.190438 963	1.56902507 8	3.04246 7831	3.98E-07	1.69E-06
AC232271.1	0.163748 571	1.19089293 9	2.86248 95	2.09E-08	1.97E-07
AC112484.3	0.129371 566	1.12569632 7	3.12122 5219	2.01E-06	6.49E-06

AL359921.2	0.370330 698	3.44053546 4	3.21574 7063	4.19E-08	3.15E-07
AC003070.1	0.182519 011	2.32295649 5	3.66984 3493	7.26E-06	2.03E-05
AP000424.1	0.161412 536	4.31687863 2	4.74116 3995	0.000318 708	0.0005 19
MIR4435-2HG	0.230545 317	4.07806383 2	4.14476 2093	2.09E-08	1.97E-07
AL031186.1	0.169208 614	1.31260912 7	2.95556 2449	2.01E-06	6.49E-06
AC015802.5	0.116574 208	0.68085773 7	2.54610 4757	2.15E-05	5.04E-05
AC010973.2	0.158968 665	1.33614998 9	3.07126 7644	2.09E-08	1.97E-07
SNHG15	0.767295 872	5.06885932 5	2.72380 6227	2.09E-08	1.97E-07
AC120053.1	0.857856 527	5.35475059 3	2.64201 1093	8.37E-08	5.09E-07
ERICD	0.118663 892	0.89497562 4	2.91496 7385	1.40E-06	4.83E-06
LINC01833	0.003863 818	1.24865327 4	8.33613 021	0.000367 785	0.0005 95
AC011468.1	0.397090 955	2.26124679 4	2.50957 7053	2.01E-06	6.49E-06
AL591845.1	0.157281 314	2.12960568 5	3.75916 7143	2.09E-08	1.97E-07
AC021078.1	0.547115 711	2.35093500 3	2.10331 6764	8.37E-08	5.09E-07
LINC00941	0.019668 397	3.20162519 4	7.34678 1262	4.51E-05	9.30E-05
TAPT1-AS1	0.283361 796	1.14810304 1	2.01853 4962	9.69E-06	2.58E-05
AC055822.1	0.212871 153	2.40643883 8	3.49884 7392	5.40E-06	1.58E-05
Z83843.1	0.241251 037	1.32447442 2	2.45681 2935	2.01E-06	6.49E-06
AL731533.2	0.022880 865	0.92121542 0.92121542	5.33132 5061	1.49E-05	3.78E-05
AP001628.1	0.046550 423	0.86219438 7	4.21114 7004	3.55E-05	7.70E-05
AC027601.3	0.150153 127	1.31216583 8	3.12744 3639	2.85E-06	8.79E-06
AC027020.2	0.120252 316	1.02418030 9	3.09033 3138	1.66E-05	4.02E-05

AC104534.1	0.166083 988	0.77320128 2	2.21893 1036	0.000223 133	0.0003 76
AC073046.1	0.198041 583	0.93914445 6	2.24554 3702	0.000318 708	0.0005 19
C1orf229	0.072038 995	0.63566251 9	3.14141 106	7.26E-06	2.03E-05
MIATNB	0.212334 456	1.36825788 8	2.68792 9772	2.09E-08	1.97E-07
AC087741.1	0.349847 343	1.76551057 6	2.33528 8026	4.19E-08	3.15E-07
AC093620.1	0.072924 103	0.85691063 1	3.55467 7107	3.16E-05	7.11E-05
AGAP2-AS1	0.657082 061	8.28056004 4	3.65558 2885	2.09E-08	1.97E-07
CASC15	0.014575 594	0.72750267 3	5.64132 6002	4.19E-08	3.15E-07
AL589843.1	0.121275 675	1.53283160 4	3.65983 7098	0.001678 805	0.0023 77
AC009237.15	0.192411 031	1.96234259 2	3.35031 3516	8.37E-08	5.09E-07
LINC00926	0.123917 662	3.61101850 2	4.86495 2076	2.85E-06	8.79E-06
AC124312.3	0.035550 178	0.65758455 5	4.20924 7715	0.000276 081	0.0004 57
PCED1B-AS1	0.463934 36	2.83623102 7	2.61198 2447	0.007017 649	0.0090 63
ATP6V0E2-AS1	0.084944 257	0.70562956 2	3.05432 2696	2.09E-08	1.97E-07
MZF1-AS1	0.250713 852	1.01885086 3	2.02282 9277	2.01E-06	6.49E-06
AC017104.1	0.038188 976	1.62218438 2	5.40863 7782	1.47E-07	7.64E-07
ADORA2A-AS1	4.994663 056	0.79273814 6	- 2.65547 1052	9.69E-06	2.58E-05
AP003392.1	0.344362 817	1.84557537 7	2.42206 9383	0.000185 435	0.0003 19
AC244197.2	0.085486 357	0.87895871 1	3.36202 9295	3.94E-06	1.18E-05
AC024075.3	0.140693 775	1.11859981 5	2.99106 3599	6.28E-07	2.46E-06
HAGLR	0.019338 992	1.00894191 9	5.70518 6698	0.000356 968	0.0005 79

LINC00857	0.549742 139	4.70749997 4	3.09813 4112	2.85E-06	8.79E-06
LINC01948	0.046306 245	1.02811256 8	4.47264 7662	9.66E-05	0.000181
MKLN1-AS	0.130782 957	1.24064108 4	3.24583 9359	6.28E-07	2.46E-06
AC006111.2	0.115956 085	0.88447920 1	2.93124 9694	3.49E-05	7.58E-05
AL021707.2	0.066826 146	0.84781683 5	3.66526 804	2.09E-08	1.97E-07
AL139289.2	0.142738 423	0.84214384	2.56069 2932	3.49E-05	7.58E-05
AC139100.2	0.173728 164	2.05032602 8	3.56094 9777	2.09E-08	1.97E-07
AP003469.2	0.018051 27	0.97668319 9	5.75771 8413	2.69E-05	6.24E-05
AC003965.2	0.019816 191	1.82700586 7	6.52665 7759	3.02E-05	6.85E-05
CD27-AS1	1.470440 468	7.70385647 2	2.38933 2449	2.09E-08	1.97E-07
AL670729.1	0.044548 903	1.76901785 1	5.31141 4898	3.59E-05	7.76E-05
LINC00865	0.074830 893	0.96724617 4	3.69217 723	0.000620 545	0.000959
AC005840.4	0.330926 956	2.09897950 3	2.66510 3362	1.47E-07	7.64E-07
AC125807.2	0.107680 794	1.11922312 4	3.37766 4814	1.47E-07	7.64E-07
AC022306.2	0.446261 574	1.96394951 9	2.13779 6357	2.51E-07	1.18E-06
AL136295.2	0.191321 504	0.76617729	2.00167 9228	2.75E-05	6.24E-05
ELF3-AS1	0.412974 973	2.40651660 9	2.54282 0122	6.28E-07	2.46E-06
AL607028.1	0.105192 292	1.15518386 1	3.45702 1589	7.26E-06	2.03E-05
DGUOK-AS1	0.185500 524	1.74179785	3.23108 2031	4.19E-08	3.15E-07
AC073611.1	0.200814 91	1.88082168 7	3.22742 4785	2.09E-08	1.97E-07
MSC-AS1	0.155206 64	0.64560859 8	2.05646 9512	0.000848 116	0.001273
LINC00665	0.102162 997	2.88019086 9	4.81721 9762	1.40E-06	4.83E-06

LINC01123	0.036285 962	0.95959007 9	4.72493 4818	3.98E-07	1.69E-06
PTOV1-AS1	0.505692 627	2.94063314 2	2.53979 4162	2.09E-08	1.97E-07
AC008514.1	0.026222 169	2.55691377 9	6.60747 2691	9.66E-05	0.000181
NIFK-AS1	0.621320 342	2.65357741 1	2.09452 9443	3.98E-07	1.69E-06
LINC00239	0.079702 275	1.35151822 2	4.08381 6251	7.88E-05	0.000151
AC048382.2	0.153345 944	0.68934463 7	2.16843 5432	0.000726 544	0.001115
AL445524.1	1.566107 731	7.24540388 1	2.20988 2655	1.66E-05	4.02E-05
AC090114.2	0.259205 944	1.54225060 2	2.57286 6505	2.09E-08	1.97E-07
U62317.1	0.200734 029	1.09939940 5	2.45335 8489	9.69E-06	2.58E-05
HCP5	2.023250 883	17.0430664 1	3.07443 7801	2.09E-08	1.97E-07
AC027117.1	0.135456 209	2.19588132 9	4.01890 1657	0.000103 508	0.000191
AC092757.3	0.041259 104	0.82742514 4	4.32584 4389	2.09E-08	1.97E-07
LINC02361	0.212592 173	1.66489226 4	2.96926 8433	2.51E-07	1.18E-06
AC132872.3	0.426581 028	1.96051405 5	2.20034 0277	2.01E-06	6.49E-06
AL121772.3	0.097661 417	1.47110781	3.91297 0452	2.09E-08	1.97E-07
AP006623.1	0.099030 773	0.83306609 5	3.07248 2153	2.01E-06	6.49E-06
CCDC18-AS1	0.419993 228	2.58585757 3	2.62220 4845	2.09E-08	1.97E-07
AC105105.2	6.070052 898	1.13134897 8	- 2.42366 5075	5.40E-06	1.58E-05
AC027031.2	0.233949 632	1.42762861 7	2.60935 0864	0.000126 324	0.000226
AC087741.2	0.367236 508	2.51836308	2.77770 4903	2.09E-08	1.97E-07
AC139887.2	0.238725 015	1.18732674 5	2.31429 5356	8.37E-08	5.09E-07

AC007773.1	0.226418 042	1.05005856 5	2.21340 8967	8.43E-05	0.0001 6
AC009133.1	0.318368 883	2.41698443 6	2.92443 6942	2.09E-08	1.97E- 07
HEIH	5.495526 993	23.3809504 2	2.08900 3836	2.09E-08	1.97E- 07
AC067817.2	0.093907 158	0.94536070 9	3.33155 7871	6.87E-05	0.0001 33
AC069120.1	0.057431 215	3.45125265 9	5.90914 1198	0.000437 307	0.0007
AC253576.2	0.093193 557	0.74543870 7	2.99978 7606	5.40E-06	1.58E- 05
AL390728.6	1.090157 713	9.02224772 9	3.04895 0034	2.09E-08	1.97E- 07
AC012510.1	0.239620 428	2.26858378 7	3.24296 9132	2.09E-08	1.97E- 07
AC005332.4	0.229701 607	1.25798101 1	2.45327 7291	2.15E-05	5.04E- 05
AL365181.3	0.079970 673	11.1602877 2	7.12468 7474	8.37E-08	5.09E- 07
AC103706.1	0.306449 958	1.39711861 1	2.18873 1092	0.000185 435	0.0003 19
AC010201.1	0.074843 727	0.94549391 4	3.65911 4859	2.73E-05	6.24E- 05
AP002807.1	0.265770 389	2.01709227 9	2.92402 4809	6.28E-07	2.46E- 06
AL355102.4	0.359316 015	18.0950858 6	5.65420 0906	0.000144 792	0.0002 57
ZNF460-AS1	0.218794 104	0.96387415 1	2.13927 0929	3.94E-06	1.18E- 05
AC073896.4	2.652486 161	11.3814856 5	2.10127 1759	3.98E-07	1.69E- 06
HCG18	0.316815 67	2.12923876 9	2.74862 2143	2.09E-08	1.97E- 07
SAPCD1-AS1	0.084091 834	1.04517546 2	3.63563 5641	2.04E-05	4.86E- 05
AC008549.1	24.36938 916	0.50796404	- 5.58419 9911	7.17E-06	2.03E- 05
AL353801.3	0.062077 002	0.85964226 5	3.79160 5627	5.57E-05	0.0001 11
CAPN10-DT	0.077718 998	1.14562776	3.88172 7253	2.09E-08	1.97E- 07

EPB41L4A-DT	0.330048 271	1.60505212 8	2.28187 1207	5.40E-06	1.58E-05
AC005393.1	0.035680 801	0.75493519 3	4.40313 291	1.51E-05	3.78E-05
AC068473.5	0.424063 991	2.52497206 6	2.57391 3539	3.98E-07	1.69E-06
AC103691.1	0.350405 755	3.36784625 9	3.26472 7908	1.47E-07	7.64E-07
AP000757.2	0.047650 244	3.80260412 3	6.31836 0344	0.000115 778	0.0002 13
LINC00847	2.102027 732	9.17299006 6	2.12561 0375	2.09E-08	1.97E-07
SNHG20	0.405407 634	3.16699516 9	2.96566 9505	2.09E-08	1.97E-07
SERPINB9P1	0.230199 029	2.32653770 2	3.33723 0914	6.83E-05	0.0001 32
AC010245.2	0.205141 753	1.22862830 4	2.58235 5463	2.09E-08	1.97E-07
AC068580.3	0.269079 917	1.27538437 6	2.24482 5489	1.40E-06	4.83E-06
HORMAD2-AS1	2.428006 31	0.38621938 9	- 2.65227 9673	4.84E-05	9.87E-05
AC124312.2	0.109470 341	1.09954035 6	3.32828 8603	0.001493 207	0.0021 44
MAPKAPK5-AS1	1.534461 053	7.52697099 9	2.29433 7385	2.09E-08	1.97E-07
ZNF32-AS1	0.083233 938	1.02812291 4	3.62669 7054	1.47E-07	7.64E-07
AL158166.1	0.056160 203	0.73702665 4	3.71409 6745	3.62E-05	7.81E-05
SNHG14	0.241376 388	1.97957610 7	3.03583 5075	1.27E-05	3.28E-05
LINC01315	0.167864 314	1.84080944 5	3.45497 282	5.40E-06	1.58E-05
AF001548.2	0.324838 218	2.79599796 4	3.10557 0027	6.28E-07	2.46E-06
DGCR11	0.220736 49	1.25792727 1	2.51065 1464	2.51E-07	1.18E-06
AC046143.2	0.355847 093	1.51338980 2	2.08845 4275	0.000620 545	0.0009 59
BCRP3	0.190896 932	1.24002011 5	2.69949 7699	0.001527 626	0.0021 67

SNHG4	0.075741 854	2.26948092 4	4.90512 7826	2.51E-07	1.18E-06
AC092757.2	0.026556 46	1.12933586 9	5.41026 7963	1.49E-05	3.78E-05
AC011477.1	0.282577 708	1.44770173 8	2.35704 484	2.09E-08	1.97E-07
AC005261.1	1.750676 851	8.79218599 2	2.32830 9098	2.09E-08	1.97E-07
LINC01711	0.004218 595	1.56687722 7	8.53691 3836	2.75E-05	6.24E-05
AL355075.2	0.122703 943	0.80098829 8	2.70659 9563	0.000103 565	0.0001 91
AC097639.1	4.294828 149	0.92261454 6	- 2.21880 0462	2.51E-07	1.18E-06
AC133528.1	0.118574 072	0.80732156 8	2.76735 4861	0.000260 418	0.0004 36
AC092118.1	0.158916 788	1.40621246 9	3.14547 1151	6.83E-05	0.0001 32
AC015908.3	3.902618 625	0.64896612 5	- 2.58822 7406	3.98E-07	1.69E-06
IBA57-DT	0.020586 167	0.73732536 6	5.16255 4251	2.03E-05	4.86E-05
AC107375.1	0.226330 82	1.65690895 9	2.87198 9376	2.09E-08	1.97E-07
BAIAP2-DT	1.665472 759	10.5793450 7	2.66724 6656	8.37E-08	5.09E-07
AC008875.1	0.011693 022	0.62769483 6	5.74634 363	2.33E-05	5.45E-05
AC016705.2	0.025480 269	1.58881915 4	5.96243 0616	4.19E-08	3.15E-07
AP006621.4	0.345181 757	1.80488631 2	2.38647 9842	0.002097 569	0.0029 29
AC130371.2	0.088509 74	0.84167772 8	3.24935 9819	2.01E-06	6.49E-06
TMEM220-AS1	4.476711 952	0.80117302	- 2.48225 3749	9.42E-07	3.48E-06
AC100861.1	0.234039 596	1.48962375 9	2.67012 3451	3.98E-07	1.69E-06

Table S3 Univariate and multivariate Cox regression analysis for

identifying independently prognostic lincRNA

Univariate Cox regression analysis

Gene	HR	HR.95L	HR.95H	pvalue
AL161431.1	2.460993399	1.364394903	4.438955685	0.002767997
APCDD1L-DT	2.052526269	1.086030009	3.879141507	0.026823499
LINC01116	1.544800423	1.020033346	2.339539543	0.040011621
WAC-AS1	0.274818277	0.076745813	0.984093893	0.047188991
LINC01615	1.671109709	1.016996606	2.745936066	0.042715893
AL391056.1	2.787016319	1.372113888	5.660944059	0.004583128
LINC02188	1.388783428	1.001577958	1.925680766	0.048905024
SNHG15	0.302753675	0.094099159	0.974076587	0.045068232
AC090114.2	0.08677776	0.013970786	0.539009003	0.008711084
LINC01711	2.126201013	1.271539243	3.555321451	0.004030066

Multivariate Cox regression analysis

Gene	coef	HR	HR.95L	HR.95H	pvalue
APCDD1L-DT	-	0.07060903	0.00537538	0.92749296	0.04366957
WAC-AS1	-	0.31693702	0.07575202	1.32602494	0.11559531
LINC01615	-	0.34688772	0.06500080	1.85122473	0.21528168
AL391056.1	-	13.9430466	1.11314264	174.648371	0.04104518
AC090114.2	-	0.06867523	0.00705493	0.66850893	0.02106579
LINC01711	-	4.22902715	0.75656911	23.6391763	0.10053696

Table S4 Gene set enrichment analysis

NAME	High risk score			
	SI ZE	ES	NES	NOM p-val
KEGG_COMPLEMENT_AND_COAGULATION_CASCADES	69	0.6790 669	1.5635 167	0.0146 75053
KEGG_PRIMARY_BILE_ACID_BIOSYNTHESIS	16	0.8035 825	1.5666 269	0.0202 83977
KEGG_PANTOTHENATE_AND_COA_BIOSYNTHESIS	16	0.6457 4945	1.4833 385	0.0304 87806

KEGG_N_GLYCAN_BIOSYNTHESIS	46	0.5235 5534	1.5062 242	0.0582 52428
KEGG_SYSTEMIC_LUPUS_ERYTHEMATOSUS	55	0.5804 8654	1.4255 934	0.1032 38866
KEGG_PRION_DISEASES	35	0.4851 969	1.3071 725	0.108
KEGG_PPAR_SIGNALING_PATHWAY	69	0.4927 8355	1.3024 63	0.1570 5766
KEGG_DRUG_METABOLISM_OTHER_ENZYMES	51	0.5146 988	1.3058 443	0.1673 3871
KEGG_RETINOL_METABOLISM	64	0.5322 0475	1.2863 597	0.1746 988
KEGG_STEROID_HORMONE_BIOSYNTHESIS	55	0.4806 248	1.2520 766	0.1809 145
KEGG_GRAFT_VERSUS_HOST_DISEASE	37	0.6256 9225	1.3018 975	0.2209 073
KEGG_ANTIGEN_PROCESSING_AND_PRESENTATION	81	0.4703 836	1.2219 3	0.2289 1566
KEGG_NOD_LIKE_RECEPTOR_SIGNALING_PATHWAY	62	0.3988 2758	1.1607 61	0.246
KEGG_ABC_TRANSPORTERS	44	0.4191 341	1.1452 796	0.266
KEGG_ALANINE_ASPARTATE_AND_GLUTAMATE_METABOLISM	30	0.4712 4442	1.1317 767	0.32
KEGG_DRUG_METABOLISM_CYTOCHROME_P450	71	0.4695 8977	1.1378 99	0.3215 7677
KEGG_ARACHIDONIC_ACID_METABOLISM	58	0.3538 6395	1.0804 083	0.3269 639
KEGG_STARCH_AND_SUCROSE_METABOLISM	52	0.4014 9313	1.0796 864	0.3333 3334
KEGG_GLYCOSAMINOGLYCAN_BIOSYNTHESIS_HEPARAN_SULFATE	26	0.3936 776	1.0523 12	0.3382 046
KEGG_CYSTEINE_AND_METHIONINE_METABOLISM	34	0.3820 015	1.0775 691	0.3483 6066
KEGG_RIBOFLAVIN_METABOLISM	15	0.4506 085	1.0798 092	0.3499 044
KEGG_ARGININE_AND_PROLINE_METABOLISM	54	0.3811 9566	1.0577 523	0.3730 1588
KEGG_GLYCINE_SERINE_AND_THREONINE_METABOLISM	31	0.5110 286	1.0939 424	0.375
KEGG_METABOLISM_OF_XENOBIOTICS_BY_CYTOCHROME_P450	69	0.4333 942	1.0712 026	0.3833 3333
KEGG_ASCORBATE_AND_ALDARATE_METABOLISM	25	0.4805 1336	1.0577 233	0.39

KEGG_PENTOSE_AND_GLUCURONATE_INTERCONVERSIONS	28	0.4618	1.0709	0.3964
		4912	78	8438
KEGG_GLYCOSAMINOGLYCAN_BIOSYNTHESIS_KERATAN_SULFATE	15	0.4165	1.0387	0.4088
		827	452	0504
KEGG_TGF_BETA_SIGNALING_PATHWAY	86	0.3387	1.0084	0.4311
		7635	065	0237
KEGG_PROTEASOME	46	0.4206	0.9892	0.4493
		0766	875	6708
KEGG_LINOLEIC_ACID_METABOLISM	29	0.3997	0.9886	0.4834
		554	542	7107
KEGG_O_GLYCAN_BIOSYNTHESIS	30	0.3883	0.9562	0.4888
		796	589	889
KEGG_PROTEIN_EXPORT	24	0.3828	0.9811	0.4939
		8555	006	0244
KEGG_GLUTATHIONE_METABOLISM	49	0.3417	0.9597	0.4989
		448	809	605
KEGG_GLYCOSAMINOGLYCAN_BIOSYNTHESIS_CHONDROITIN_SULFATE	22	0.3797	0.9600	0.5163
		0757	1375	934
KEGG_FRUCTOSE_AND_MANNANOSE_METABOLISM	33	0.3468	0.9563	0.5326
		8663	5515	316
KEGG_CYTOKINE_CYTOKINE_RECEPTOR_INTERACTION	26	0.3307	0.9397	0.5492
	4	587	0495	958
KEGG_GLYCOSYLPHOSPHATIDYLINOSITOL_GPI_ANCHOR_BIOSYNTHESIS	25	0.3586	0.9199	0.5894
		4455	3636	9417
KEGG_EPITHELIAL_CELL_SIGNALING_IN_Helicobacter_Pylori_Infection	68	0.2868	0.9196	0.6031
		798	673	434
KEGG_CELL_ADHESION_MOLECULES_CAMS	13	0.3174	0.8793	0.6127
	1	339	7176	0493
KEGG_BETA_ALANINE_METABOLISM	22	0.4069	0.8866	0.6177
		5146	8364	0624
KEGG_LONG_TERM_DEPRESSION	70	0.3115	0.9133	0.6229
		062	725	508
KEGG_ARRHYTHMOGENIC_RIGHT_VENTRICULAR_CARDIOMYOPATHY_ARVC	74	0.3262	0.8706	0.6236
		098	793	786
KEGG_TIGHT_JUNCTION	13	0.2744	0.9143	0.6260
	2	9867	8365	6835
KEGG_GLYOXYLATE_AND_DICARBOXYLATE_METABOLISM	16	0.3881	0.8493	0.6356
		7793	1105	1076
KEGG_DILATED_CARDIOMYOPATHY	90	0.3060	0.8837	0.6384
		0917	125	778
KEGG_PORPHYRIN_AND_CHLOROPHYLL_METABOLISM	40	0.3382	0.8481	0.6526
		1023	3285	104
KEGG_ECM_RECEPTOR_INTERACTION	84	0.3092	0.8320	0.6570
		1608	9074	248

KEGG_LEISHMANIA_INFECTION	70	0.3382 9772	0.8415 168	0.6619 433
KEGG_VASCULAR_SMOOTH_MUSCLE_CONTRA CTION	11 4	0.2877 441	0.8610 174	0.6687 5
KEGG_TYPE_I_DIABETES_MELLITUS	41	0.3696 0414	0.8158 9574	0.6712 871
KEGG_BIOSYNTHESIS_OF_UNSATURATED_FAT TY_ACIDS	22	0.3328 3177	0.8353 6124	0.674
KEGG_ALLOGRAFT_REJECTION	35	0.4307 4465	0.8171 375	0.69
KEGG_ASTHMA	28	0.3829 8932	0.8163 9403	0.6921 4875
KEGG_TRYPTOPHAN_METABOLISM	39	0.3135 946	0.7964 245	0.6970 297
KEGG_HYPERTROPHIC_CARDIOMYOPATHY_H CM	83	0.3016 3315	0.8592 475	0.6989 4737
KEGG_GAP_JUNCTION	90	0.2708 6833	0.8459 0733	0.7127 883
KEGG_MELANOMA	71	0.2709 59	0.8910 6286	0.7145 7905
KEGG_VIBRIO_CHOLERAE_INFECTION	54	0.2732 3437	0.8583 092	0.7323 9434
KEGG_NATURAL_KILLER_CELL_MEDIATED_C YTOTOXICITY	13 2	0.3089 6336	0.8091 826	0.7393 075
KEGG_GLYCOSPHINGOLIPID_BIOSYNTHESIS_G ANGLIO_SERIES	15	0.3251 9072	0.7859 6616	0.7601 626
KEGG_TYROSINE_METABOLISM	42	0.2944 1676	0.8082 222	0.7674 4187
KEGG_PEROXISOME	78	0.2852 1943	0.7349 8905	0.7677 165
KEGG_CYTOSOLIC_DNA_SENSING_PATHWAY	54	0.2844 8895	0.7621 774	0.7697 095
KEGG_ETHER_LIPID_METABOLISM	33	0.2753 6157	0.8347 456	0.7851 2394
KEGG_FOCAL_ADHESION	19 9	0.2534 759	0.7651 4816	0.8012 2954
KEGG_CHEMOKINE_SIGNALING_PATHWAY	18 8	0.2604 1687	0.7305 85	0.802
KEGG_AMINO_SUGAR_AND_NUCLEOTIDE_SUG AR_METABOLISM	43	0.2687 285	0.7302 707	0.8391 039
KEGG_FATTY_ACID_METABOLISM	42	0.2812 973	0.6287 7375	0.8534 653
KEGG_HISTIDINE_METABOLISM	29	0.2639 037	0.7151 0416	0.8867 1875

KEGG_ONE_CARBON_POOL_BY_FOLATE	17	0.2838	0.6863	0.8895
		8032	937	7053
KEGG_AUTOIMMUNE_THYROID_DISEASE	50	0.2763	0.5552	0.9050
		9973	0517	505
KEGG_JAK_STAT_SIGNALING_PATHWAY	15	0.2407	0.6915	0.9111
	5	5548	567	111
KEGG_OLFACTORY_TRANSDUCTION	38	0.1930	0.7585	0.9193
	6	631	9964	858
KEGG_ADIPOCYTOKINE_SIGNALING_PATHWAY	67	0.2365	0.7326	0.9241
		252	9385	2454
KEGG_AMYOTROPHIC_LATERAL_SCLEROSIS_ALS	53	0.2342	0.7444	0.9547
		087	115	3254
KEGG_GLYCEROPHOSPHOLIPID_METABOLISM	77	0.2272	0.8000	0.9572
		2712	0395	3015
KEGG_VIRAL_MYOCARDITIS	68	0.2274	0.5914	0.9656
		3116	5963	566
KEGG_HEMATOPOIETIC_CELL_LINEAGE	85	0.2470	0.5902	0.9670
		1825	611	782
KEGG_BLADDER_CANCER	42	0.2206	0.6658	0.9682
		8128	981	5397
KEGG_APOPTOSIS	87	0.2229	0.6877	0.9761
		599	152	431
KEGG_PHENYLALANINE_METABOLISM	18	0.2429	0.6178	0.9793
		3268	9006	8144
KEGG_WNT_SIGNALING_PATHWAY	15	0.2198	0.6962	0.9856
	1	4014	1277	557
KEGG_PANCREATIC_CANCER	70	0.2064	0.6680	0.9882
		2035	077	583
KEGG_OOCYTE_MEIOSIS	11	0.2075	0.6512	0.9895
	3	2451	894	3974
KEGG_HEDGEHOG_SIGNALING_PATHWAY	56	0.2101	0.5948	0.9917
		9503	558	6955
KEGG_PROXIMAL_TUBULE_BICARBONATE_RECLAMATION	23	0.2149	0.5499	0.9938
		3794	454	3986
KEGG_RIG_I_LIKE_RECEPTOR_SIGNALING_PATHWAY	70	0.2077	0.6189	0.9941
		6944	404	292
KEGG_RENIN_ANGIOTENSIN_SYSTEM	17	0.2474	0.6180	0.9958
		371	6166	506
KEGG_ADHERENS_JUNCTION	73	0.2046	0.5867	0.9980
		7009	7155	354
KEGG_ENDOCYTOSIS	18	0.1868	0.6310	1
	1	3425	8164	
KEGG_LEUKOCYTE_TRANSENDOTHELIAL_MIGRATION	11	0.1975	0.5881	1
	6	6258	2237	

Table S5 Univariate and multivariate Cox regression analysis for identifying independently prognostic factor

Univariate Cox regression analysis				
id	HR	HR.95L	HR.95H	pvalue
age	1.01671408	0.97320115	1.06217253	0.45763243
gender	1.00923661	0.36392805	2.79879095	0.98590443
grade	0.69443012	0.31370317	1.53722768	0.36842309
AJCCstage	1.09240521	0.72239315	1.65193862	0.67532136
T_stage	1.15601086	0.62281857	2.14566678	0.64592536
M_stage	1.40276546	0.395091	4.98050049	0.60061408
N_stage	3.28467282	1.09877489	9.81918648	0.033291
PNI	2.798002	0.62276398	12.5710791	0.17953732
riskScore	1.07717562	1.02409854	1.13300359	0.00393131

Multivariate Cox regression analysis				
id	HR	HR.95L	HR.95H	pvalue
age	1.0517396	0.97957634	1.12921896	0.16423278
gender	1.58683854	0.4033079	6.24350908	0.50881642
grade	1.01763608	0.37828938	2.73754235	0.97237822
AJCCstage	1.29080152	0.25841319	6.44769163	0.75576456
T_stage	1.50990381	0.19413789	11.7432485	0.69379355
M_stage	0.29379549	0.03339052	2.58503862	0.26960664
N_stage	6.04019611	1.00860652	36.1726486	0.04891313
PNI	1.1349649	0.11189992	11.5115837	0.91470599
riskScore	1.08026311	1.01326221	1.15169438	0.01811518

Table S6 Clinical information of all patients with intrahepatic cholangiocarcinoma

id	futi me	fu st at	a g e	gr ad e	TCGA-CHOL dataset					AJC Csta ge	perineural_in vasion_prese nt
					T	N	M	nd er	race		
TCGA- 3X- AAV9	0.92 8767 1	1	7 2	G 2	T 1	N 0	M 0	ma le	asian	stage i	YES

TCGA-3X-AAVA	1.21	9178	1	5	G	T	N	M	fe		stage	YES
				0	2	2	X	0	ma	white	ii	
						b			le			
TCGA-3X-AAVB	1.10	1369	0	7	G	T	N	M	fe		stage	YES
				0	1	3	1	1	ma	white	ivb	
									le			
TCGA-3X-AAVE	0.84	6575	0	6	G	T	N	M	ma	asian	stage	NO
				0	2	2	0	0	le		ii	
TCGA-4G-AAZO	3.22	4657	0	7	G	T	N	M	fe		stage	NO
				0	2	2	0	0	ma	white	ii	
						a			le			
TCGA-4G-AAZT	1.15	0684	0	6	G	T	N	M	ma	white	stage	NO
				0	2	2	1	0	le		i	
TCGA-W5-AA2G	5.41	3698	0	6	G	T	N	M	fe		stage	NO
				0	2	3	1	0	ma	white	i	
									le			
TCGA-W5-AA2H	2.95	0684	0	7	G	T	N	M	fe		stage	NO
				0	0	3	3	0	ma	white	iii	
									le			
TCGA-W5-AA2I	5.31	2328	1	6	G	T	N	M	ma	white	stage	NO
				1	6	2	1	0	le		i	
TCGA-W5-AA2O	1.75	3424	1	5	G	T	N	M	ma	white	stage	NO
				1	7	3	1	0	le		i	
TCGA-W5-AA2Q	0.13	6986	0	6	G	T	N	M	ma	white	stage	NO
				0	8	2	2	0	le		ii	
							b					
TCGA-W5-AA2R	4.06	8493	0	7	G	T	N	M	fe		stage	NO
				0	7	3	1	0	ma	white	i	
									le			
TCGA-W5-AA2T	3.34	2465	1	6	G	T	N	M	fe		stage	NO
				1	4	3	2	0	ma	white	ii	
									le			
TCGA-W5-AA2U	1.71	7808	1	7	G	T	N	M	fe		stage	NO
				1	8	3	1	0	ma	white	i	
									le			
TCGA-W5-AA2W	2.53	1506	1	3	G	T	N	M	fe		stage	NO
				1	1	3	2	1	ma	white	iva	
							a		le			

TCGA-W5-AA2Z	0.42 4657 5	0	2 9	G 3	T 2	N 0	M 0	fe ma le	white	stage ii	NO
TCGA-W5-AA30	2.95 6164 4	0	8 2	G 3	T 1	N 0	M 0	ma le	white	stage i	NO
TCGA-W5-AA31	0.02 7397 3	0	7 1	G 3	T 1	N 0	M 0	ma le	white	stage i	NO
TCGA-W5-AA33	3.96 9863	0	6 0	G 3	T 1	N 0	M 0	ma le	white	stage i	NO
TCGA-W5-AA34	1.52 0547 9	1	7 5	G 2	T 1	N 0	M 0	fe ma le	white	stage i	NO
TCGA-W5-AA36	3.84 1095 9	1	5 1	G 3	T 3	N 0	M 1	fe ma le	white	stage iv	NO
TCGA-W5-AA38	4.03 0137	0	5 5	G 3	T 1	N 0	M 0	fe ma le	white	stage i	NO
TCGA-W5-AA39	0.46 5753 4	1	8 1	G 4	T 2	N 0	M 0	ma le	white	stage ii	NO
TCGA-W6-AA0S	1.50 4109 6	0	4 6	G 2	T 1	N 0	M X	fe ma le	white	stage i	YES
TCGA-WD-A7RX	0.05 7534 2	1	7 3	G 3	T 2	N 0	M 0	fe ma le	asian	stage ii	
TCGA-ZD-A8I3	0.46 3013 7	1	7 4	G 2	T 3	N 1	M 0	fe ma le	white	stage iva	
TCGA-ZH-A8Y1	1.05 4794 5	1	5 9	G 2	T 1	N X	M 0	fe ma le	black or african american	stage i	NO
TCGA-ZH-A8Y2	1.92 0547 9	1	5 8	G 3	T 1	N 0	M 0	ma le	white	stage i	NO
TCGA-ZH-A8Y4	2.03 0137	1	6 9	G 3	T 3	N 1	M 1	ma le	white	stage ivb	NO

TCGA-ZH-A8Y5	2.78	0	4	G	T	N	M	female	black or african american	stage i	NO
TCGA-ZH-A8Y6	1.42	0	7	G	T	N	M	male	white	stage i	YES
TCGA-ZH-A8Y8	1.12	0	5	G	T	N	M	male	white	stage i	YES
TCGA-ZU-A8S4	0.26	1	7	G	T	N	M	female	white	stage ii	XX

Table S7 The relationship between risk and immune cell infiltration

Immune cell	cor	pvalue
NK cell resting_CIBERSORT	0.368152777	0.035030509
Macrophage M1_CIBERSORT	0.546305614	0.001005293
NK cell resting_CIBERSORT-ABS	0.361197124	0.038902322
Macrophage M1_CIBERSORT-ABS	0.463390196	0.006609511
T cell CD4+ (non-regulatory)_QUANTISEQ	-0.393944249	0.023305664