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**Micro-RNAs in cancer: novel origins and  
sequence variation**

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This thesis is submitted in fulfilment of the requirements for the  
Doctor of Philosophy

School of Medicine  
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	H1299-Por	H1299-Por	WE-68-Nut	WE-68-Nut	H1299+Por	H1299+Por	WE-68+Nu	WE-68+Nu	Fold change	p value
TAP1	9.09789	9.07659	6.67369	6.71182	10.9379	10.9379	8.55521	8.58535	1.2362602	2.51E-07
SKP2	11.2577	11.4668	10.5735	10.6238	9.93482	10.0751	9.26934	9.34185	0.8793153	1.26E-05
ARFGAP3	8.61287	8.34195	7.07892	7.27861	9.34166	9.08782	7.87547	8.05047	1.0971843	1.64E-05
MBOAT1	9.42207	9.56706	8.16024	8.29104	7.95327	8.22947	6.73522	6.84716	0.8398639	1.79E-05
DDX11	9.84582	9.85366	8.71152	8.7792	8.68534	8.75516	7.65196	7.71344	0.8821114	2.06E-05
RAD51	8.82433	9.2157	8.51127	8.53504	6.82601	7.2628	6.69568	6.66675	0.7823911	2.2E-05
CDC25A	8.65987	8.66175	8.82841	8.85419	6.66428	6.48249	6.59314	6.65317	0.7539971	3.41E-05
HIST1H2BN	8.27575	8.53622	7.85009	7.86947	7.04891	7.37867	6.76391	6.77425	0.8596503	5.12E-05
ABCA12	4.81502	4.81884	5.15908	4.96404	6.55938	6.78193	6.90063	6.77944	1.3676878	5.13E-05
ANKRD29	5.67368	5.49918	6.39198	6.30216	6.30289	6.10425	7.00964	6.85201	1.1006323	5.51E-05
C12orf5	8.698	8.85095	8.89391	9.07526	10.6949	10.9551	10.9326	10.898	1.2241808	6.07E-05
MSH2	9.4884	9.59688	9.48225	9.54468	8.35814	8.33189	8.38299	8.37775	0.8776917	6.47E-05
SERTAD1	6.30944	6.26502	6.28544	6.20359	7.10699	6.98672	6.98554	6.89976	1.1163254	7.43E-05
PLXNB2	10.1263	9.83119	8.40313	8.52522	11.6029	11.5109	10.0377	10.0174	1.170338	7.44E-05
FEN1	8.32084	8.47147	9.37953	9.41683	7.11354	7.15061	8.10498	8.28141	0.8612443	7.72E-05
KITLG	5.20748	5.30403	4.78253	4.72233	6.56682	6.81585	6.07826	6.13776	1.2788877	7.77E-05
MMD	7.54572	8.4303	6.86868	6.9564	6.65694	7.55454	6.09563	6.06375	0.8848955	7.98E-05
MR1	5.3795	5.97673	6.20562	6.08295	6.68865	7.48405	7.55492	7.40914	1.2322693	8.01E-05
RNF19B	7.97401	8.75415	6.97796	6.86157	9.73692	10.3504	8.58003	8.68122	1.2218316	8.21E-05
DNA2	8.93671	8.5628	9.24906	9.20098	7.24261	6.83731	7.76717	7.59156	0.8188879	8.22E-05
MCM4	11.1842	11.1602	10.9812	11.1437	9.37543	9.38809	9.40145	9.53012	0.8476655	8.31E-05
SLC7A1	9.76235	9.83084	8.77783	8.96848	8.82818	8.85053	7.93994	8.0121	0.9006749	8.39E-05
CDCA7L	9.46552	9.93515	8.83906	8.96116	8.27825	8.64252	7.43506	7.69188	0.861477	9.17E-05
SESN2	7.61265	7.54436	5.93429	5.86098	9.6345	9.84641	7.93047	7.87887	1.3093605	9.33E-05
MOSPD1	8.19426	8.12094	6.65775	6.54491	9.58911	9.33914	7.87506	7.74579	1.1704473	0.000106
SLC35D1	7.60169	7.33256	6.13246	6.27162	8.43207	8.30318	7.05652	7.10826	1.1302823	0.000125
MYO6	8.51027	8.53338	7.58867	7.68412	9.97201	10.1612	8.94179	9.12953	1.1822011	0.000129
CHEK1	10.3731	10.3378	10.3623	10.3864	9.40255	9.26447	9.43955	9.30057	0.9022552	0.000132
C6orf204	6.23914	6.1314	6.43169	6.5117	7.29747	7.20142	7.39096	7.41774	1.1577653	0.000136
DDX11	9.64677	9.65706	8.71152	8.7792	8.39962	8.46208	7.65196	7.71344	0.8758661	0.000153
MKNK2	9.03154	8.86878	7.39279	7.45049	10.0878	9.98405	8.41437	8.36407	1.1254196	0.000154
RAD9A	8.70335	8.64715	7.5536	7.63372	8.05155	7.89661	6.7947	6.8397	0.9091746	0.000154
CDC6	10.2582	10.292	10.1951	10.2473	7.3988	7.56623	7.69791	7.86589	0.74474	0.000155
MCM5	9.17461	9.5218	8.86764	9.00002	7.41221	7.95981	7.42041	7.34737	0.824301	0.000159
SMOX	7.11339	6.69771	6.18684	6.23693	7.80285	7.40355	6.79525	6.98215	1.1047815	0.000161

RRM2B	9.91274	9.8505	8.24205	8.14048	12.0015	11.8481	10.0341	10.3306	1.223222	0.000162
FAM111B	9.74417	10.1317	9.38318	9.33621	6.14315	7.17854	5.98498	5.82202	0.6510823	0.000171
NETO2	11.5696	11.4344	9.40341	9.3249	10.6342	10.3852	8.47745	8.47192	0.9098171	0.000175
CABYR	8.99199	9.33647	6.84025	6.94965	10.0678	10.2258	7.88414	7.8956	1.1231377	0.000182
CCNE2	10.7145	10.5896	10.0207	10.1001	7.8633	8.21533	7.14995	7.253	0.7358275	0.000188
HIST1H2AB	7.60295	7.82771	8.95035	8.85597	5.63299	6.23629	7.0898	7.08397	0.7835564	0.000193
DDR1	8.48656	6.81736	6.60605	6.48815	9.6453	8.21298	7.76423	7.72188	1.174176	0.000202
POLA2	9.18944	9.29337	8.36275	8.3168	7.86282	7.87962	7.21465	7.10625	0.8549864	0.00022
HELLS	9.3307	9.0846	9.02955	9.04453	7.93046	7.83388	7.73586	7.93178	0.8614008	0.000228
SESN1	6.8025	6.82673	8.03565	8.14479	9.6976	9.87461	10.6199	10.6295	1.3694083	0.000239
RFWD3	11.9999	12.0738	9.66344	9.72013	10.9263	10.8991	8.70632	8.53418	0.8989497	0.00025
DDR1	8.58735	6.8652	6.60605	6.48815	9.81549	8.30775	7.76423	7.72188	1.1773442	0.00025
UHRF1	9.82963	10.0145	9.06518	9.09137	7.98471	8.25089	6.86985	7.06933	0.7940589	0.00026
CASP2	10.6551	10.5998	8.57323	8.65868	9.7814	9.67006	7.74727	7.92442	0.9126023	0.000261
BLOC1S2	9.72515	9.3847	7.95222	7.9543	10.8677	10.7454	9.39935	9.33753	1.1523176	0.000267
BBS9	7.25814	7.37317	6.34595	6.45635	8.2345	8.25223	7.12466	7.27577	1.1258876	0.000269
OSGEP	6.60237	6.28116	7.81433	7.82765	5.83149	5.5198	7.18532	7.16891	0.9011415	0.000288
PTP4A1	10.1166	10.2183	9.37004	9.34655	11.0886	10.9827	10.1896	10.2039	1.0874054	0.000298
ASRGL1	6.29376	6.41403	5.9083	6.0681	5.62823	5.80031	5.38937	5.49317	0.9038611	0.00031
ASTE1	7.12412	7.43396	6.37617	6.41522	6.4143	6.54346	5.64357	5.66287	0.8871909	0.00032
GBE1	7.85498	7.94231	7.07999	7.27702	9.52434	9.65137	8.4892	8.67909	1.2052676	0.000328
NCAPH2	6.82667	6.86395	6.63908	6.6914	6.17923	6.19868	5.90671	6.1318	0.9036057	0.000356
TM7SF3	11.2945	11.4466	10.0171	10.0533	12.3868	12.3933	11.2572	11.1712	1.102706	0.000359
TK1	10.4555	10.5693	9.34896	9.49983	8.83044	8.94305	7.59961	7.46278	0.8234995	0.000366
YPEL3	6.76905	7.00213	5.9676	5.93511	7.92095	8.34985	7.10008	6.97651	1.1820332	0.000366
TNFRSF10B	9.53899	9.53489	9.91143	9.91076	10.7709	10.757	11.228	11.4479	1.1364593	0.000366
TIPIN	9.16634	9.59822	9.58566	9.59951	7.56622	7.91744	8.2911	7.98953	0.8370096	0.000373
CHRNA5	8.94411	9.19298	9.2765	9.08169	7.462	7.52684	7.35115	7.46941	0.8168015	0.000376
TMEM68	9.095	8.89825	7.86453	7.97366	10.1779	9.87696	9.1009	9.2105	1.1340416	0.000376
DDX11	9.6988	9.72685	8.71152	8.7792	8.38026	8.46119	7.65196	7.71344	0.8724273	0.000404
MDM2	11.2479	11.1311	10.6302	10.7475	12.815	12.8868	12.6538	12.7176	1.1672087	0.00041
POLD3	8.68064	8.99535	9.43362	9.46007	6.9981	7.17953	8.04298	7.93228	0.8245325	0.000416
TCEA3	9.02603	9.4777	7.7546	7.63018	10.1195	10.2999	8.71117	8.57704	1.112696	0.000426
ARL6IP6	9.22309	9.56645	8.8881	8.85834	8.22098	8.29165	7.70215	7.54459	0.8692628	0.000427
POLH	10.1947	9.62901	8.92736	8.94077	11.7926	11.6384	10.5257	10.5757	1.1814865	0.000437
AREG	5.96334	5.80362	5.00027	5.21472	9.49517	9.77224	8.56886	8.16154	1.6376077	0.000471

CLSPN	7.76604	8.13011	7.71796	7.71591	5.69257	6.08156	5.89112	6.13077	0.7595278	0.000481
NFKBIL2	7.17303	6.96537	6.60067	6.71979	6.25142	6.13353	5.88917	5.99216	0.8837322	0.000505
RFC2	10.9836	10.923	10.407	10.3514	9.95217	9.89414	9.10744	9.10558	0.8920504	0.000507
HIST2H2AC	10.411	10.547	11.0235	11.1018	9.44022	9.5193	10.022	9.84226	0.9011329	0.000516
HIST1H2AK	9.88439	10.449	10.772	10.9781	8.13853	8.20902	9.02291	8.93665	0.8152154	0.000518
HIST1H2BL	9.09119	9.2372	8.99037	9.1794	8.10977	7.9745	7.77892	7.8557	0.8690545	0.000532
HIST1H2AI	7.70087	7.73658	8.94118	8.84484	6.44112	6.53093	7.939	7.85822	0.8659321	0.000534
ZFP161	8.71655	9.12282	8.02177	8.01184	7.99937	8.23799	7.15439	7.03357	0.898218	0.000536
C16orf5	6.4188	6.5502	5.6472	5.37366	7.34363	7.46519	6.34928	6.17664	1.1394289	0.00054
NIF3L1	8.92864	9.29701	9.13445	9.1442	8.1707	8.36354	8.37752	8.43811	0.9135874	0.000547
NUP85	9.55272	9.91701	9.45974	9.5755	8.81559	8.92738	8.55979	8.6033	0.9065339	0.000569
KIAA1324L	9.508	9.01638	7.94827	8.12622	10.5048	10.2218	8.83582	9.14604	1.1187782	0.000576
CDKN1A	9.2437	8.37022	7.90035	8.07612	11.8243	11.5165	11.454	11.2597	1.3710618	0.000581
PHF17	8.13408	8.25704	7.67132	7.80868	7.47402	7.42492	7.04891	7.08134	0.9108306	0.000589
HIST2H2AB	11.6914	11.6838	11.1644	11.079	10.2488	10.3325	10.0093	9.98594	0.8894736	0.000596
DDR1	8.72368	6.93957	6.60605	6.48815	9.98181	8.4846	7.76423	7.72188	1.1806513	0.000605
ANXA3	7.10126	6.35841	6.54501	6.68689	6.48091	5.75406	5.92054	5.89839	0.9011797	0.000613
NEURL2	7.06036	6.93042	5.75689	5.71247	8.1923	8.47672	7.11129	6.97812	1.2081014	0.000613
SESTD1	7.32316	7.18533	8.24664	8.23067	6.5633	6.52749	7.48232	7.65633	0.9110444	0.000624
USP37	8.77244	8.86432	8.20935	8.30241	7.73913	7.76704	7.3897	7.41055	0.8874885	0.000631
BAX	9.83465	9.73776	8.4645	8.37205	10.8138	10.8805	9.33132	9.24738	1.1061288	0.000637
CENPM	7.86018	7.82884	8.16237	8.30754	6.72503	6.96287	7.14892	7.13	0.869644	0.000645
E2F8	9.91477	10.2712	8.05795	8.06208	7.50351	8.19512	6.26354	6.17874	0.7751036	0.000651
INPP1	6.69077	6.65818	5.81971	5.86814	7.74348	7.80855	6.64775	6.86863	1.1610274	0.000652
PROCR	8.61198	8.9523	6.38704	6.3782	9.58321	10.0596	7.59382	7.72052	1.1525784	0.000676
DCP1B	9.03971	9.29041	7.93986	7.91126	9.92994	10.4061	8.88517	8.72359	1.110106	0.000693
NASP	8.61619	9.05407	9.1069	9.14207	7.44673	7.57601	7.95579	8.03017	0.8632897	0.000703
TMEM131	10.4368	10.4248	9.01322	9.04733	11.2223	11.3376	10.1094	10.0305	1.0970566	0.000709
RFC4	10.8365	11.126	11.4809	11.4568	9.24329	9.62851	10.2022	10.2787	0.8764482	0.000714
CYLD	7.68914	7.57121	5.47038	5.68076	8.2879	8.30208	6.02677	6.22898	1.0921659	0.000725
ZMAT3	8.20232	8.07343	7.46624	7.5981	10.5459	10.7531	9.60141	9.53471	1.2902043	0.000738
METTL8	7.13702	6.89131	7.45695	7.43345	7.85544	7.52075	8.33833	8.18673	1.1031345	0.000745
PRKAB2	9.8063	9.69894	8.44836	8.47018	10.8078	10.8257	9.56014	9.28826	1.111414	0.000749
LPXN	6.81351	7.05512	5.46311	5.47013	7.68775	7.86837	6.26253	6.09002	1.1252647	0.000758
WDR76	10.1361	10.6102	10.4401	10.5612	7.64918	8.38486	8.66786	8.57377	0.7970679	0.00083
CSNK1G1	8.09508	8.36763	7.37133	7.53845	8.87735	9.16864	8.08519	8.10926	1.0914161	0.000835

PPM1D	9.08152	8.93944	8.08864	8.13955	10.1576	10.439	9.31322	9.55521	1.1522922	0.000844
LETM2	9.04246	8.95682	7.05083	6.92471	8.32071	8.06027	6.40122	6.07286	0.9024307	0.000849
DTL	11.0461	11.2655	10.5084	10.5	8.14094	8.48763	8.36163	8.22331	0.7667015	0.000857
FIG4	9.65606	9.47403	7.88355	7.98014	10.3876	10.4126	8.78926	9.03505	1.1037536	0.000865
PASK	7.00729	7.31382	7.03231	6.87345	5.97058	6.30081	6.25185	6.06999	0.8712702	0.00089
BRI3BP	9.06334	9.57224	9.14359	9.08172	8.04062	8.28314	8.22339	8.07149	0.8849119	0.000911
CXorf23	6.80235	6.84161	5.6096	5.85636	7.61365	7.68411	6.41316	6.44793	1.1214233	0.000928
FAM57A	10.3873	10.1744	8.8178	8.8663	9.672	9.27831	7.90628	7.82267	0.9067469	0.000936
PRKAR2B	9.05159	9.18146	7.63524	7.63972	8.12682	8.16552	6.7126	6.9407	0.893686	0.000939
TOE1	9.56669	9.53005	8.87678	8.96268	8.63828	8.571	8.19544	8.00111	0.9044198	0.000966
ASCC3	9.25466	9.07221	9.76742	9.85657	10.6185	10.6184	10.926	10.9733	1.136633	0.000969
ATAD2	11.1219	10.7356	10.2569	10.2378	9.23438	8.9139	8.72377	8.89148	0.8444315	0.000976
ANKRA2	7.04787	6.39965	6.25936	6.41386	9.45553	9.18631	8.5399	8.32333	1.3592674	0.00099
MCM7	11.4479	11.4504	10.4114	10.4122	10.0445	10.1474	9.30078	9.42108	0.890029	0.000997
F11R	6.95735	7.46265	7.21133	7.17837	7.8361	8.24241	7.81309	7.8983	1.1034443	0.001013
POLR3K	9.2809	9.52101	9.61537	9.47421	8.4474	8.54977	8.87326	8.79287	0.9148044	0.001028
EBP	8.12851	8.37405	8.90137	8.9865	7.54233	7.64307	8.15707	8.11987	0.9148574	0.00104
MMP14	9.21979	9.58529	6.38078	6.50085	10.2052	10.7385	7.60269	7.35625	1.1330504	0.001044
TCP11L2	7.48465	7.43166	5.76705	5.79529	9.2588	9.66006	7.3704	7.44483	1.2740109	0.001053
MCM10	9.36745	10.0372	9.36547	9.51303	6.37769	7.30526	7.24685	7.22659	0.7354774	0.001066
PDE6C	4.90238	4.72165	4.83913	4.5741	5.43968	5.32097	5.28359	5.00351	1.1056082	0.001095
OR10A6	4.5002	4.51837	4.23366	4.2969	4.93235	5.01943	4.62061	4.85396	1.1069694	0.0011
RAD54L	8.32496	8.61004	7.6617	7.80207	6.26111	6.56494	6.21252	6.07169	0.7750374	0.001108
DNMT1	10.4549	10.6251	9.67545	9.84869	9.38211	9.52032	8.91954	8.84696	0.9030835	0.001114
ITGA3	11.2482	11.4729	5.70599	5.33671	12.5905	12.9089	6.69254	6.75315	1.153457	0.001144
APOBEC3G	5.4269	5.18687	5.81644	5.83456	6.10237	6.05683	6.49825	6.75876	1.1415438	0.001157
FANCL	8.17849	8.18545	8.18829	8.09981	7.34729	7.50105	7.4633	7.54382	0.9143521	0.00116
PER3	8.20683	8.70069	6.38558	6.54613	7.353	8.01889	5.62908	5.55293	0.889899	0.001182
VPS13C	7.95487	8.33363	7.22567	7.25881	8.95335	9.56974	8.06424	8.22269	1.1311878	0.0012
KLF11	8.70014	8.98365	7.76587	7.80905	8.08091	8.13861	7.09445	6.94257	0.9097328	0.001203
ZNF473	9.335	9.05106	7.51341	7.62787	8.45525	8.06907	6.81642	6.90943	0.9022538	0.001223
TOM1L2	7.49909	6.7185	6.11822	6.21815	8.04377	7.52589	6.89903	6.9803	1.1090244	0.001251
RFC5	10.2095	10.4297	9.58766	9.74565	8.59449	9.03063	8.42712	8.03201	0.8526923	0.001251
GP5M2	10.1539	10.3741	8.24296	8.23993	9.17231	9.48626	7.29196	7.58024	0.9059704	0.001259
E2F2	6.70609	7.09094	7.06114	7.19482	5.38108	5.38917	5.20674	5.20332	0.7550108	0.001261
BBS12	5.76274	5.85278	5.43647	5.18309	6.31074	6.54493	5.95144	5.90754	1.1115161	0.001263

USP1	9.21642	9.38085	9.0251	8.96019	8.01614	8.25712	8.13142	8.11136	0.8888399	0.001295
MYO19	9.14951	8.73454	8.49905	8.67436	8.29379	7.80254	7.81491	7.63684	0.8998963	0.001311
HIST1H4B	8.5568	8.45462	8.71642	8.79113	6.86183	6.79119	7.51865	7.47572	0.8299028	0.001312
CCNF	8.26581	8.4882	7.55607	7.62048	6.66759	7.04253	6.36631	6.51526	0.8327975	0.001332
MASTL	10.3873	10.7886	8.45982	8.52665	8.75048	9.35047	7.35555	7.28152	0.8578613	0.001342
PKMYT1	8.248	8.69705	8.31009	8.29343	6.84999	6.95529	7.13725	6.97068	0.8320238	0.001342
RPS27L	7.23911	7.30127	8.16235	8.04263	9.35099	9.52831	9.746	9.69219	1.2462853	0.001344
IKZF3	5.79056	5.89036	6.75842	6.87167	5.17796	5.25234	6.14626	6.01958	0.8927396	0.001348
TRAF4	8.56107	8.20832	7.87259	8.09264	9.26772	9.0276	8.88572	8.81825	1.0997314	0.001362
RBBP8	11.3399	11.4129	10.6387	10.6308	10.1741	10.4085	9.25417	9.1438	0.8854733	0.00137
APOBEC3C	10.5949	10.4735	8.81107	8.97128	12.2451	12.2612	10.3575	10.1395	1.1583637	0.001383
FAM43A	6.53306	8.28406	7.94978	8.07004	7.79545	9.24952	8.82797	8.99153	1.1306073	0.001386
MDM1	7.38994	7.38902	6.54965	6.60255	6.86897	6.80548	5.77516	5.99242	0.9108834	0.001408
C6orf182	6.32326	6.63137	7.01494	7.02843	5.7724	6.15354	6.30359	6.37548	0.9113642	0.001415
SPIN4	9.55166	9.84986	6.79384	6.95739	8.36644	8.61932	5.93801	6.0244	0.8731755	0.001453
GDF15	5.40544	5.57834	6.01099	5.78159	8.88669	9.38676	10.9228	10.7286	1.7529074	0.001457
TMEM63B	9.8971	9.56069	8.33873	8.2517	11.238	11.2333	9.49491	9.43486	1.1484914	0.001496
FDXR	6.68032	6.52639	6.73627	6.78098	10.204	10.0995	9.38195	9.34152	1.4603738	0.001509
CWF19L1	9.56555	9.21782	8.91443	8.86054	8.89778	8.2524	8.07129	8.17499	0.9135114	0.001513
ZER1	9.12128	9.11262	6.42462	6.54156	9.71812	9.91978	7.17815	7.09725	1.086962	0.001522
ABTB2	8.03163	7.79886	6.45061	6.5764	9.01082	8.7906	7.44105	7.23799	1.1255466	0.001557
MXD4	7.91367	7.54026	6.18641	5.98618	8.78374	8.86802	7.18777	7.11324	1.1565977	0.001565
RAB39	7.34019	7.70355	8.3236	8.42679	6.52423	6.49205	7.45236	7.44061	0.8778114	0.001571
ARL8A	9.02273	8.63089	7.90282	8.05801	9.69027	9.47893	8.71755	8.62507	1.0861942	0.001582
TFAP4	7.30591	7.67029	7.8161	7.72885	6.30223	6.65597	7.04082	7.0256	0.8854391	0.001597
PDK1	9.36141	9.11534	8.11742	7.94577	8.80921	8.26108	7.30791	7.22258	0.9149055	0.001599
GAL3ST4	7.52038	6.68076	6.0073	6.02823	10.7258	10.36	8.68316	8.49072	1.4582521	0.001613
PSMG1	9.4118	9.34738	9.75055	9.90638	8.68516	8.31377	8.95126	8.85399	0.9059788	0.00162
HIST1H4L	6.68023	6.80208	6.69543	7.00216	5.98559	5.98948	6.18221	6.31733	0.9004673	0.00162
SLC44A3	6.76372	6.51609	5.0805	4.93466	7.57216	7.41352	5.67329	5.61012	1.1276722	0.001627
MBD5	9.1852	8.86259	6.54025	6.51252	9.87851	9.90461	7.37193	7.26877	1.1068553	0.00163
WDR63	5.28768	5.38211	5.20156	5.00269	8.81704	8.92023	7.74018	7.60014	1.5846281	0.001638
STAMBPL1	9.70845	8.82571	7.97322	7.82765	8.94521	8.03316	6.90196	7.08591	0.9018848	0.00164
C1orf57	7.99777	8.00428	6.17977	6.38086	8.97781	9.02511	7.61529	7.47549	1.1586343	0.001641
PRKAB1	9.861	10.1276	8.90617	9.08351	11.0191	11.2723	9.99178	9.83723	1.1090658	0.001665
RANBP1	9.3467	9.66318	10.2566	10.1892	8.2526	8.57923	9.46296	9.40321	0.904762	0.001666

SKAP2	9.57595	9.4972	6.40398	6.44572	10.092	10.2866	7.1828	7.11649	1.0863031	0.001677
GIN53	8.30455	8.65678	8.59325	8.66752	6.36194	6.62685	7.22062	7.14334	0.7992715	0.001708
SLC25A20	8.21226	8.39502	6.33193	6.20956	9.02909	9.00268	6.86845	6.83237	1.0886425	0.001713
ERAP2	5.89001	6.11737	5.85686	5.95471	6.57107	6.55551	6.49149	6.5001	1.096529	0.001729
C1orf135	8.04452	8.32519	8.64242	8.81774	6.52656	6.41964	7.41123	7.39172	0.8202559	0.001731
HYLS1	7.7762	7.87788	8.06861	8.14134	6.65815	6.78421	7.31489	7.28445	0.8800425	0.001752
RSPH3	8.54565	7.80149	7.40169	7.57255	9.30927	8.71975	8.36611	8.19882	1.1044836	0.001784
MCM2	9.28294	9.73133	8.94372	9.04399	7.1222	7.67645	7.47073	7.47128	0.8037586	0.0018
PLK3	8.20904	7.82207	5.58336	5.69886	10.4514	10.2208	7.2432	7.38955	1.2925905	0.001811
KIAA1432	8.21055	8.23105	7.29652	7.50504	9.32992	9.39506	8.08922	8.35777	1.1257494	0.001833
POLL	7.56834	7.23264	5.627	5.73633	8.25428	7.81173	6.36462	6.20793	1.0945658	0.001859
PARP2	9.3467	9.57536	10.0241	9.98449	8.15849	8.24938	9.17429	8.99136	0.8880797	0.001913
MRTO4	8.71833	9.27749	8.91808	8.99031	7.53227	7.92319	8.05965	7.96802	0.8768646	0.001914
TUBGCP3	8.44667	8.25694	8.06915	8.18317	7.56855	7.40513	7.42792	7.58551	0.9099155	0.001918
CDK2	10.6409	10.7521	9.93552	10.1657	9.2237	9.37386	9.04208	8.86346	0.8797153	0.001921
CABC1	7.3013	7.58666	7.41881	7.56901	8.75177	9.00259	8.48075	8.55848	1.1646086	0.001923
WEE1	8.69828	8.67817	8.22594	8.21754	7.65563	7.82687	7.36318	7.57675	0.8995415	0.001932
FOXA1	7.12719	7.19082	6.83954	6.63847	6.61291	6.44027	6.127	6.10704	0.9097425	0.001947
FBXO22	8.97552	8.84965	9.46382	9.50443	10.5164	10.4493	10.6145	10.5953	1.1462783	0.001963
NOTCH1	7.25011	6.7882	7.12549	7.30542	8.04366	7.58295	8.24745	8.07119	1.1220978	0.001966
HSDL2	9.40267	9.59645	6.89879	7.13589	10.7706	11.0609	7.88407	8.17484	1.1470194	0.001997
BICC1	7.65621	7.42894	6.5214	6.33418	6.97454	6.78852	5.54345	5.51292	0.8882885	0.002
RGAG4	5.01684	5.00996	5.15184	5.20675	5.80371	6.15376	6.39261	6.44942	1.216533	0.002001
ANXA4	9.85087	9.82065	6.50623	6.67149	11.4459	11.514	8.90801	8.84451	1.2393717	0.002002
DUT	8.08917	8.34213	8.23506	8.41376	7.04666	7.3017	7.46868	7.69828	0.8922374	0.002009
FBXW7	6.56164	6.72622	7.03548	7.1376	7.4984	7.61003	8.38199	8.18835	1.1535938	0.002009
PRKCZ	6.99972	7.02383	6.44035	6.57445	7.72146	7.85308	7.11986	7.07986	1.1011863	0.002034
ORC1L	8.5728	9.12137	8.90708	9.01278	5.9656	6.31306	7.06243	6.98078	0.7390871	0.002043
GGT1	5.99608	5.78885	6.35118	6.38997	6.45391	6.41446	6.95793	6.80829	1.0859701	0.002067
GOLGB1	8.37434	8.19126	7.19407	7.24298	8.99361	9.14465	8.16558	8.01564	1.1069854	0.002145
FAM19A2	5.84736	5.82015	5.26079	5.40478	7.0962	6.99648	6.97269	7.13124	1.2625491	0.002147
RABGGTA	8.08351	8.15464	6.66619	6.601	9.38225	9.2182	7.61891	7.40937	1.1397506	0.002151
C6orf167	10.1287	10.0531	9.9615	10.0731	9.00304	8.81103	8.99732	9.30906	0.8981522	0.002209
CDC7	8.27822	8.83214	7.76079	7.80896	6.87736	7.24541	6.72914	6.71007	0.843387	0.002236
ORC6L	8.1568	8.16491	8.45752	8.53377	5.99236	6.35036	6.99069	7.1217	0.7941377	0.00224
SP4	8.86606	8.86282	7.20613	7.42654	8.00442	8.23185	6.62253	6.55807	0.9090068	0.002252



SDF2L1	6.26506	6.28591	6.48232	6.57316	5.77085	5.64984	6.04852	5.8981	0.9125556	0.002269
SLC6A15	9.1217	9.18081	8.89322	8.9243	8.46942	8.29857	7.86918	7.86323	0.8997888	0.002278
DNMT3B	6.94642	6.81985	7.11587	7.27996	6.08401	6.11029	6.60466	6.5506	0.9001303	0.00232
IL10RB	9.22363	8.84216	7.41988	7.51979	10.0783	9.45622	8.33768	8.14808	1.0913431	0.002322
GAD1	6.36656	6.23929	5.44578	5.40888	6.98069	6.86341	5.88101	5.83723	1.0895901	0.002323
NRM	9.71462	9.76696	8.12951	8.29652	8.80245	8.69988	7.4568	7.55013	0.9053585	0.002368
ACAD11	7.83553	7.60931	6.02069	6.1746	9.67086	8.84166	7.24813	7.48477	1.2027954	0.002395
CTNNAL1	10.1864	10.3175	7.42166	7.53956	9.48558	9.22393	6.6765	6.73991	0.9058455	0.002533
C15orf33	7.30632	7.44581	4.89406	5.15829	8.0275	7.987	5.55674	5.59686	1.09529	0.002581
DCK	8.86878	9.08914	8.70068	8.78797	7.73996	8.03516	7.97576	8.0043	0.8958604	0.002632
WHSC1	9.46509	9.41467	7.64499	7.67113	8.37613	8.54374	6.99501	6.8768	0.90045	0.002638
HMGCL	6.61067	7.048	5.1808	5.13801	7.47959	7.78789	5.77934	5.67729	1.1145504	0.002639
POP7	9.7459	9.52483	8.81332	8.91231	8.99608	8.62256	7.73515	7.66809	0.8925711	0.002653
DGKA	8.65366	7.20687	6.8846	6.67916	10.7242	9.89027	8.47779	8.64241	1.2824326	0.002734
EFNB1	6.35294	6.66495	8.73728	8.739	7.26535	7.31521	9.37892	9.30467	1.0908364	0.002764
GINS2	10.8348	11.2129	9.01967	9.25975	8.128	8.81225	7.42714	7.2096	0.7830212	0.002772
BDH1	6.45378	6.07816	6.0646	6.15965	5.94073	5.23361	5.24483	5.5063	0.8856561	0.002779
UNG	9.08924	9.37681	9.88929	9.77908	7.98695	8.28139	8.18924	8.32786	0.8597335	0.002791
CNKSR3	7.47801	7.46588	6.30736	6.32326	7.0051	6.64036	5.61539	5.66518	0.9039519	0.002796
MCM3	10.1376	10.552	10.2142	10.3278	8.21223	8.51344	8.8622	8.97618	0.8382903	0.002813
TNFRSF10D	9.88184	9.70052	8.67917	8.69442	10.8864	11.1001	10.3676	10.3573	1.1557381	0.00284
CASP8AP2	8.54081	8.46733	8.6297	8.70293	7.84509	7.6941	7.68878	7.56497	0.8966875	0.002855
DSN1	11.1189	10.9724	9.00941	9.11631	9.67718	9.36744	8.08529	7.83553	0.869419	0.002875
TRIP13	10.7271	11.3513	10.1265	10.1991	9.23043	9.67199	9.10392	9.02558	0.873312	0.00291
CDT1	8.43313	8.5177	7.75697	7.67254	6.61098	6.63592	6.45157	6.46254	0.8079288	0.002912
SCN3B	6.53913	6.08822	5.62728	5.54243	7.38621	7.43069	6.63218	6.41835	1.1710451	0.002936
DPY19L2P1	8.60596	8.5606	7.76324	7.69634	8.05797	7.88493	6.82653	6.96985	0.911517	0.002972
C1orf183	4.97546	4.9801	4.85372	4.85652	5.63211	5.58998	5.22953	5.40533	1.1114193	0.002975
LMNA	9.47263	9.25669	6.35099	6.52314	10.1572	10.1583	6.91495	7.11162	1.0866557	0.002984
FIGNL1	7.49244	7.53899	7.42145	7.39223	5.95324	6.0602	6.25961	6.47037	0.8290611	0.003034
RNF135	7.55254	7.94937	6.81078	6.84553	8.08373	8.46264	7.50807	7.66301	1.0877704	0.003038
HIRIP3	6.33649	7.04562	6.47693	6.58906	5.40591	5.79247	5.74675	5.66818	0.855007	0.003051
RECQL4	8.05494	7.86069	7.5379	7.60134	6.90272	6.6472	6.80907	6.70718	0.8715596	0.003073
HIST2H2AA3	9.34429	9.37385	9.7184	9.94637	8.22236	8.70948	8.8025	8.8257	0.9004018	0.003084
HIST1H2BF	11.4936	11.7324	11.6342	11.6419	9.88209	10.6045	10.6387	10.5424	0.8960389	0.003088
CLCA2	5.13973	5.19739	4.73443	4.96107	8.1516	7.8244	6.79229	6.78142	1.4750796	0.003092



SLC25A10	8.20925	8.57368	7.52552	7.88616	7.45224	7.60743	6.8246	6.74309	0.8891973	0.003093
DYRK1B	8.28611	7.93376	6.46666	6.51869	8.96319	9.14446	7.45645	7.49249	1.1318727	0.003101
SLC12A4	8.28663	7.72497	5.43384	5.52225	9.4353	9.20887	6.41282	6.42894	1.1675427	0.003104
NR0B1	6.27907	5.98573	8.4963	8.65811	7.16327	6.87854	9.12786	9.22358	1.1010918	0.003126
BARD1	8.63092	8.55526	7.85214	7.97147	7.0085	7.04903	6.83346	6.88092	0.8413234	0.00315
EXO1	8.91275	9.37591	9.536	9.62444	6.21984	6.66762	7.79147	7.75099	0.7591616	0.003181
EFNA3	6.71508	6.67121	7.18076	7.21255	6.25478	6.10573	6.45675	6.43676	0.9090851	0.003185
SLC7A2	8.03963	8.43304	8.29841	8.36805	7.4285	7.51263	7.38231	7.75529	0.90765	0.003248
LEF1	8.81237	9.76447	7.32656	7.13333	7.49967	8.48013	6.4606	6.26817	0.8689895	0.003252
TP53INP1	9.47448	8.82799	6.45196	6.30296	11.9895	12.2475	10.6206	10.6536	1.4653904	0.003254
PRKX	6.91104	7.36929	7.3427	7.49472	8.25583	8.5794	8.23647	8.32447	1.1469351	0.003261
RPL23AP7	10.2032	10.4279	10.2485	10.3277	11.4371	11.6386	11.1129	11.0995	1.099031	0.003279
AREG	5.54335	5.32857	5.00027	5.21472	10.0489	10.353	8.56886	8.16154	1.7609171	0.003285
CHAF1A	8.82233	8.8575	8.27606	8.13054	7.19157	7.14772	7.02684	7.11402	0.8355275	0.00331
DLX1	7.83274	7.74583	6.93083	6.76693	7.11012	6.80086	6.3272	6.1879	0.9026432	0.003389
LOC442075	7.28745	7.37725	6.98583	6.7688	5.94709	6.3534	6.0821	5.98426	0.8574041	0.003447
HIST1H3J	9.12507	9.47967	10.2264	10.0404	6.6457	6.90184	8.33089	8.52105	0.7820498	0.003452
GADD45A	7.81935	8.10762	6.60964	6.89481	8.83567	9.3874	8.40527	8.37483	1.189313	0.003453
HIST1H1B	10.9649	10.8885	10.767	10.8121	8.18103	8.18837	8.92056	9.0362	0.7903335	0.003487
RMI1	8.59108	9.42949	8.41946	8.65659	6.86093	7.86467	7.45733	7.32638	0.840802	0.003553
ITFG1	9.67724	9.83225	9.7834	9.71657	10.752	10.8193	10.3825	10.5492	1.0895562	0.003564
SRPX2	7.17428	6.81423	6.42432	6.60607	7.82286	7.35167	7.36552	7.33056	1.105545	0.003583
MCM6	9.77178	10.0293	9.9952	10.0368	8.03776	8.0835	8.69734	8.8759	0.8458924	0.003591
EDA2R	4.93303	4.66965	5.26929	5.52558	6.58859	6.87431	8.27844	7.97946	1.457077	0.003669
UBE2T	10.1472	10.1226	10.2629	10.2352	8.55358	8.5248	9.19202	9.21529	0.8704321	0.003671
CENPL	8.47691	8.09894	7.30248	7.34514	6.72134	6.4209	6.21877	6.17419	0.8178207	0.003695
RETSAT	8.78822	8.83678	7.61786	7.56566	10.6182	10.7591	8.75437	8.91757	1.1902164	0.003699
PSTPIP2	6.28246	7.17859	7.03842	7.16964	8.96201	9.22627	8.77942	8.74429	1.2906808	0.00372
GEMIN4	9.12721	8.73236	7.99152	7.91943	8.2848	7.56149	7.15753	7.25907	0.8961334	0.00376
CPEB2	7.16765	7.22525	10.1305	10.1221	8.19541	8.12618	10.7732	10.7539	1.0924562	0.003827
HBP1	9.28792	8.4859	6.6396	6.84059	9.98617	9.64278	7.44284	7.58385	1.1088382	0.003869
CGRRF1	6.57744	6.95851	6.74239	6.92898	7.34604	7.37435	7.30633	7.57129	1.0878694	0.003939
EFCAB4B	4.3911	3.93169	4.66936	4.36881	4.7418	4.50462	5.02172	4.85829	1.101692	0.003955
GGH	11.2574	11.1759	9.27243	9.27231	10.2316	9.88489	8.36036	8.56742	0.904003	0.004003
HIST1H2AE	8.78404	9.01781	9.21004	9.04569	7.55536	7.64826	8.29302	8.25407	0.8805558	0.004029
GMNN	9.75299	9.77471	9.43007	9.44609	8.67457	8.48601	8.75327	8.4157	0.8939088	0.004045

SDC1	7.67137	6.23871	5.89479	6.11556	8.72148	7.606	6.85741	6.86012	1.1591247	0.004101
SLC25A19	8.06484	8.66389	8.22602	8.41898	7.46502	7.62643	7.49031	7.41465	0.898803	0.004113
HIST1H2AL	8.98674	8.95381	8.47261	8.45006	7.25332	7.44697	7.32346	7.46125	0.8457337	0.004134
TMEM74	7.19929	8.02533	6.52882	6.52008	6.14224	6.54715	5.56825	5.66822	0.8462286	0.004175
FRMD5	8.17661	8.7237	5.53918	5.58089	8.97017	9.14605	6.26549	6.33429	1.0962021	0.004182
UNC13B	8.2698	8.43804	6.90889	6.96181	9.34471	9.41423	7.59015	7.6076	1.1104745	0.004202
NADSYN1	7.7491	7.44163	6.90877	6.9531	9.47816	9.52879	8.26095	8.13973	1.2187422	0.004233
ACTA2	7.97778	6.35138	7.07188	7.09596	11.9208	11.5073	10.1636	10.1942	1.5365091	0.004319
LYAR	9.98822	10.2467	9.63583	9.54115	8.77538	8.60031	8.54994	8.6215	0.876566	0.004348
IQGAP2	6.39514	7.06573	6.901	6.96594	5.8855	6.48826	6.15659	6.06675	0.9000758	0.004371
PCBP4	8.98105	8.883	5.50168	5.56974	9.88681	9.98815	6.2579	6.16898	1.1163406	0.004382
SAT1	9.1927	8.48005	7.10267	7.3762	10.5187	10.31	8.41232	8.35355	1.1692901	0.004486
ZNF367	8.42732	8.59291	6.93781	7.04802	6.30685	6.76204	5.64134	5.78947	0.7901584	0.004486
CYHR1	9.73101	8.96409	6.66122	6.53727	10.5369	9.87826	7.15622	7.47546	1.0988678	0.004493
PSMC3IP	7.75289	7.76894	7.31084	7.55684	5.83386	5.94394	6.17759	6.31995	0.7988066	0.004675
C5orf41	7.91873	7.37352	5.16424	5.12079	9.0257	8.71404	6.01345	5.87152	1.1582432	0.004695
ZNF385A	7.83557	7.03655	8.28469	8.32307	9.85945	9.51785	9.85909	9.70647	1.2370714	0.004711
HOXC13	5.89574	6.04471	7.28594	7.40266	6.62018	6.93336	7.94765	7.85731	1.102499	0.004718
STAT2	8.26098	7.51279	7.20123	7.25441	9.50019	8.94658	8.14382	8.03994	1.1455907	0.004807
VWCE	5.55055	5.35881	5.39557	5.57789	6.60418	6.05918	6.30963	6.15049	1.1480915	0.004837
TYRO3	7.73551	8.41411	6.22474	6.63849	7.19528	7.59636	5.60599	5.66487	0.8983089	0.004859
YPEL2	5.55331	5.84152	5.4002	5.31661	6.36055	7.41649	6.71487	6.82762	1.2355271	0.004941
WDHD1	9.11429	9.28837	9.57086	9.68131	7.14451	7.46672	8.45804	8.40226	0.83579	0.004976
ZAK	8.49633	8.48513	6.58721	6.68631	7.47188	7.76548	5.93289	6.11954	0.9019933	0.004998
FLJ36840	6.81161	7.07477	7.61889	7.83851	5.83198	6.10448	7.06405	7.16498	0.8916878	0.005046
RPA2	7.84167	8.29484	7.74576	7.84847	6.89949	7.38516	7.14433	7.29475	0.9052335	0.005056
ZNF654	8.01907	7.67726	8.31174	8.26716	9.16262	9.19032	9.11714	9.25808	1.1379674	0.005075
SULF1	5.30664	5.27981	5.46137	5.4706	5.6466	5.88472	6.04992	5.87949	1.0902627	0.005141
TBX20	8.56423	9.51148	7.67031	7.571	8.08938	8.60937	6.80776	6.63263	0.9046169	0.005145
SLC1A3	5.7945	6.97271	7.61674	7.52793	5.21052	5.93877	6.44014	6.60178	0.8666994	0.005172
BDNF	6.79319	7.28053	6.27026	6.17625	7.56766	7.68026	6.83569	6.71411	1.0858775	0.005188
E2F1	9.11244	9.44444	7.24542	7.67627	7.22302	7.74062	6.25463	6.35959	0.8237467	0.005208
C9orf100	8.27935	8.37467	7.49349	7.50365	6.91781	7.03107	6.64505	6.68013	0.8617081	0.005243
RIBC2	7.85598	8.22013	7.21209	7.20837	5.86081	6.21564	5.86215	6.068	0.7871902	0.005292
ATAD5	8.66088	8.95668	8.70817	8.99074	6.54704	6.56907	7.42431	7.42703	0.7919096	0.005311
ADA	8.08167	6.18132	7.97654	7.78002	9.20757	7.10506	8.52702	8.6568	1.1158212	0.005324

CALML4	6.52281	7.10967	5.86975	5.87941	5.62268	6.09426	5.28434	5.27038	0.8774713	0.005352
KIAA0247	6.56354	6.6096	5.86719	5.87705	8.48144	8.49783	7.09316	6.9987	1.2469662	0.005376
FBXO5	11.1979	11.1062	10.96	11.026	8.98723	8.93052	9.65164	9.63272	0.8399645	0.00538
SECTM1	8.34198	7.40363	5.63054	5.3453	9.49855	8.60865	6.36642	6.06367	1.1428006	0.00539
ASF1B	10.2907	10.46	9.25382	9.1902	7.87231	8.625	7.91087	7.7403	0.8202248	0.005422
FKBP5	9.02987	8.92808	8.43037	8.47725	7.60202	7.42451	7.5502	7.55354	0.8641841	0.005455
CDKL1	6.35291	6.46871	6.14433	6.19023	5.5216	6.00757	5.59977	5.66049	0.9059178	0.005471
MAPRE3	8.44846	8.25861	5.81754	5.57009	9.01766	9.15137	6.57379	6.68837	1.1187587	0.005491
C21orf45	9.61127	9.79009	9.25077	9.39002	8.56883	8.29894	8.48241	8.36942	0.8863747	0.005545
ABHD4	8.34982	8.6567	6.09326	5.84844	10.8748	10.9379	7.57253	7.33404	1.2684466	0.005555
TOPBP1	11.3282	11.4851	10.4076	10.4488	9.99222	10.2747	9.60579	9.68017	0.9057282	0.005566
POLE	8.92113	9.34257	8.22208	8.32619	7.43923	7.7029	7.33196	7.27401	0.8545365	0.00557
C1orf187	6.08771	6.10555	6.31972	5.89205	7.43549	7.4791	7.04696	6.879	1.1817461	0.005606
XPC	6.37341	6.65595	6.13409	5.94119	8.02755	8.51348	7.09107	7.21265	1.2286474	0.005607
FANCG	9.21408	9.15069	7.91553	8.02917	8.03117	7.77737	7.20116	7.1273	0.8783872	0.005671
SERINC5	8.55519	8.55252	7.14541	7.11177	9.41428	9.48073	7.61756	7.7788	1.0933043	0.005682
PHLDA3	5.2911	5.17985	5.78916	5.96876	5.89215	6.26732	7.00763	6.87414	1.1715053	0.005689
PNRC1	9.93731	9.66738	8.69236	8.70133	10.4917	10.8204	9.71461	9.73392	1.1016869	0.005702
ZBP2	4.75637	4.70913	4.72618	4.83846	5.15336	5.27786	5.07287	5.14944	1.0853063	0.005727
SHMT1	8.46397	8.19641	7.39788	7.63512	7.09012	7.10659	6.65469	6.80473	0.8726154	0.005738
MYO1B	9.33659	9.84194	6.6422	6.77328	8.70021	9.36683	5.6959	6.04602	0.9145533	0.005789
C16orf53	8.08633	8.37793	8.01294	8.28525	7.16453	7.5911	7.56677	7.41689	0.9077248	0.005814
CCDC77	9.26222	9.59855	8.89082	8.62857	7.94454	7.99871	7.84583	7.81401	0.8686902	0.00591
RASL11B	5.6244	5.74192	6.15086	6.08256	5.25482	5.21491	5.39983	5.53102	0.9068142	0.005925
ICMT	9.69158	9.98997	8.14167	8.38464	9.20932	9.18846	7.30154	7.36284	0.9131211	0.005962
HIST1H3H	8.69972	8.78688	8.73132	8.66744	7.43703	8.00149	7.8694	7.99206	0.8972239	0.005976
GUCY1B3	5.75957	5.81983	5.95166	5.91091	5.37355	5.2422	5.44184	5.141	0.9043007	0.006
POLR3G	10.0916	10.0976	9.54475	9.66898	8.81023	8.67817	8.81412	8.73044	0.8890953	0.006131
HIST1H4A	6.42036	6.53273	7.43025	7.46996	5.786	5.89761	6.50191	7.0038	0.9043568	0.006152
KCND1	7.43305	6.91349	6.01307	5.90679	7.9143	7.77775	6.54394	6.44841	1.0920568	0.006232
LAMC1	8.98097	9.29033	7.19562	7.18754	10.0949	10.4137	7.82055	7.90864	1.1097348	0.006281
LCAT	7.78442	7.55889	5.48493	5.4262	8.64188	8.49794	6.01449	5.97486	1.109495	0.006396
DDB2	8.30176	8.73229	8.34607	8.60463	10.9647	11.1641	10.1472	9.94312	1.242296	0.006415
CCDC138	7.83674	8.08068	8.31984	8.54071	6.81978	6.53573	7.55846	7.41384	0.8642332	0.006458
STIL	11.2387	11.2034	9.45701	9.6304	9.11158	9.28848	8.2819	8.37668	0.8441862	0.006463
KLHL24	9.34034	8.94335	7.64523	7.52388	10.3175	10.6523	8.5855	8.72169	1.1442089	0.006467

RPS6KA1	7.7983	7.83787	6.46341	6.48707	8.99547	9.13699	7.11841	7.36348	1.1408944	0.00648
CDCA2	9.83449	9.74388	9.24807	9.39969	7.95877	7.95504	8.21943	8.2376	0.8468249	0.006497
C4orf34	9.00033	8.67269	6.73949	6.43901	9.4943	9.54159	7.28996	7.32219	1.0906445	0.006506
RAB40B	7.05335	7.13443	7.39704	7.30487	7.58804	8.09464	8.16461	7.83837	1.0967809	0.006542
PTPN22	4.88053	5.36264	6.8966	7.11316	5.2506	5.97786	7.5869	7.52928	1.0862457	0.006548
ARNTL2	10.2359	10.8208	7.42712	7.52521	9.48394	10.3004	6.66422	6.44477	0.9134745	0.006578
DOPEY1	7.21848	6.83288	6.41733	6.5124	7.88144	7.43404	7.44315	7.60656	1.1254249	0.006584
BLM	9.20605	9.22849	9.56008	9.72033	6.52886	6.93726	8.1204	8.16426	0.7888325	0.006733
TRIAP1	7.53824	8.16993	8.8446	8.94287	9.02557	9.41899	9.76072	9.70046	1.1316619	0.006734
C3orf14	7.97632	8.46699	9.21956	9.47048	7.16964	7.23307	8.39496	8.00364	0.8766972	0.006774
ZFYVE1	7.99184	7.79747	6.31292	6.42782	9.08831	9.22498	7.08507	7.22937	1.1436268	0.006799
JAM2	9.27699	8.41826	6.5232	6.35425	8.18466	7.65283	5.61715	5.849	0.8930726	0.007058
MGC16703	6.44228	6.53229	6.57939	6.5205	5.58256	5.98211	6.12568	6.00077	0.9085948	0.007071
ANKRD6	6.52833	6.51115	5.61973	5.46422	7.05191	6.97953	6.27472	6.36675	1.1056848	0.0071
C5orf30	8.29442	8.45602	8.1673	8.50906	7.81316	7.70454	7.36697	7.45598	0.9076744	0.007128
NRM	10.7661	10.7672	8.12951	8.29652	9.57657	9.53308	7.4568	7.55013	0.8987667	0.00715
FANCA	8.71768	8.52104	7.63396	7.52765	6.89726	6.87578	6.55882	6.56143	0.8300314	0.007202
APAF1	8.75933	8.74951	7.81277	7.75739	9.4285	9.8714	9.1139	9.23925	1.1382766	0.007208
VPS13D	7.21206	7.56557	6.51036	6.52819	7.92255	8.43763	6.96212	7.03273	1.0912724	0.007218
BUD13	7.01739	7.22063	6.92113	7.06129	6.27884	6.25933	6.48617	6.36859	0.8998063	0.007244
CDCA5	9.51329	9.55178	8.83447	8.96503	6.88695	6.96534	7.36149	7.40641	0.7763603	0.007284
RFESD	7.59514	7.09252	6.67053	6.86042	6.70004	6.60755	6.18233	6.20755	0.9106568	0.007312
SLC43A2	6.72247	6.29959	6.49956	6.47992	7.18744	7.34682	7.31458	7.41568	1.1254918	0.007508
MORC4	9.05058	9.00229	6.86658	7.09243	9.83031	9.92058	7.46524	7.52451	1.0852421	0.007603
FAM98C	7.90186	7.89367	6.30583	6.24052	9.18397	9.13283	7.10964	6.89767	1.1405069	0.007817
HK2	8.31047	8.20598	7.25786	7.08777	7.85352	7.65537	6.41204	6.19447	0.9110015	0.00782
TPX2	12.3192	12.4091	9.84412	9.81271	10.5586	11.0677	8.85976	8.90986	0.8875928	0.007831
DHRS7	7.74805	7.68313	6.42229	6.4567	8.76704	8.83706	7.23368	6.97825	1.1238375	0.007846
CENPQ	9.14713	8.80279	8.02587	8.13006	7.02416	6.85834	6.92366	6.88341	0.8118716	0.007886
DDIT4	6.76376	6.07367	8.19685	7.98004	9.44532	8.72497	9.57624	9.6851	1.2901088	0.007897
BCAS3	8.40499	8.45541	7.01222	6.93445	9.44444	9.75256	7.74975	7.59034	1.1210768	0.007907
CCDC21	8.55516	8.41565	7.59384	7.7177	7.01643	7.083	6.73597	6.90715	0.8593721	0.007924
NFATC4	6.83676	6.72467	6.59423	6.60309	7.87253	7.50936	7.14379	7.15822	1.1093156	0.007934
FANCC	7.99847	8.20016	7.27128	7.57733	7.06999	7.26936	6.85255	6.80415	0.9017243	0.007966
FAM54A	8.86467	9.00712	9.03088	9.10951	6.59332	6.63662	7.754	7.73127	0.7973749	0.007974
CHD7	9.90362	10.1897	7.40668	7.48656	9.28792	9.5544	6.33993	6.36324	0.9016459	0.008003

HIST1H2BM	11.2681	11.3462	12.2715	12.387	8.15372	8.696	10.7513	10.5132	0.8062611	0.008009
TMEM201	7.75552	8.24356	6.89747	6.80426	6.98597	7.14572	6.32801	6.2015	0.897659	0.008124
FOXM1	11.8486	12.1238	10.2571	10.3369	9.93822	10.569	9.35354	9.16614	0.8757023	0.008133
RPP25	8.14263	8.53902	7.05225	7.14701	7.5277	7.58803	6.61331	6.48236	0.9135547	0.008141
SAT2	7.91107	7.09879	7.76343	7.60244	9.14218	8.09618	8.35121	8.34515	1.1171656	0.008155
POLD1	7.96899	7.81017	7.25787	7.26098	6.62218	6.73258	6.4305	6.63211	0.8719177	0.00831
DIXDC1	6.91268	7.02333	6.32825	6.54511	6.07633	6.52966	5.77483	6.13309	0.9143784	0.008353
POLE2	10.0073	10.1949	9.57632	9.55822	7.4306	7.66714	8.21657	8.03666	0.7969895	0.008508
EXOSC9	9.96544	10.0716	10.3649	10.3202	8.96831	8.85177	9.74847	9.64819	0.9139191	0.00856
ERCC6L	7.92743	8.08858	6.98856	7.35611	5.22312	5.66038	5.59351	5.84398	0.735194	0.008662
DONSON	10.5824	10.3352	9.29685	9.37024	10.0773	9.4616	8.28933	8.17545	0.9095355	0.008684
PLA2G6	6.13567	5.75587	5.36169	5.46167	6.62634	6.14713	6.08909	5.83902	1.0874615	0.008705
BRIP1	10.0201	10.4303	9.73517	9.77405	7.57593	8.43096	8.49057	8.44989	0.8245161	0.008721
PHF19	10.0328	9.80171	7.0772	7.23526	8.94368	8.85455	6.59018	6.51812	0.9051031	0.008734
C10orf78	9.2008	9.30559	8.08593	8.08014	8.24176	8.82501	7.4959	7.14322	0.9144402	0.008791
ZNF219	6.81669	6.86207	6.55919	6.63166	7.79042	7.94813	7.339	7.09978	1.1231026	0.008802
FN3KRP	8.47065	9.05879	7.5037	7.54159	7.91305	8.24591	6.30605	6.37069	0.8852169	0.008859
ARMC4	7.053	8.36817	6.15095	6.18466	6.61013	7.88794	5.32873	5.35403	0.9071956	0.008862
GLTP	7.82878	8.04742	6.31232	6.36197	8.69037	8.85857	6.86531	6.76717	1.0921501	0.00888
NCAPD3	10.6495	10.5417	9.62379	9.65521	8.99494	8.87396	8.601	8.81075	0.8717686	0.008907
LRP1	7.23142	5.74559	7.20251	7.29668	9.56769	8.67982	8.97076	8.64393	1.3052096	0.008947
IER3	9.93538	9.04998	8.54714	8.58997	10.618	10.0404	10.1016	9.77105	1.1220454	0.009093
HIST1H4J	8.44124	8.57705	8.8742	8.79987	7.23924	7.16593	7.9569	8.17877	0.8803333	0.009107
TCF19	7.85106	7.55797	6.85802	6.85785	5.74508	5.82464	5.7204	5.80111	0.7928347	0.009114
IER3	10.1966	9.37385	8.54714	8.58997	10.8855	10.3472	10.1016	9.77105	1.1198061	0.009118
INCENP	8.06963	8.29319	8.07211	7.98255	7.07432	7.2076	7.42239	7.4627	0.8997309	0.009274
RNASEH2A	9.59559	9.93997	9.54373	9.63564	7.80466	8.31891	8.7233	8.51281	0.8616748	0.009316
TCF19	7.87369	7.64441	6.85802	6.85785	5.76616	5.8643	5.7204	5.80111	0.7919544	0.009324
DOCK10	8.70297	9.6423	6.10242	6.26528	7.53379	8.67926	5.55559	5.5877	0.8907097	0.009334
MGRN1	7.84207	7.92795	7.10624	7.29044	8.3761	8.87839	7.90628	7.74913	1.0909347	0.00935
GSG2	8.75547	8.4304	7.86474	7.95758	6.41547	6.34681	6.73679	6.60463	0.7908249	0.009385
KIAA1370	7.98978	7.92584	5.64927	5.75384	9.07022	9.33584	7.90241	7.9453	1.2538566	0.009389
TEAD4	8.95807	9.06685	8.03546	8.06133	8.48684	8.33958	7.0077	7.00821	0.9038917	0.009489
PDE3B	7.93403	7.97496	6.74636	6.88105	6.96852	6.93845	5.98704	6.44393	0.8917112	0.00949
ANLN	12.3687	12.0715	10.3425	10.4588	9.91645	10.1482	9.18345	9.0881	0.847368	0.009545
ISCU	9.0932	9.09972	9.42878	9.36279	10.2426	10.4926	10.0803	10.1562	1.1078076	0.009651

TUBGCP4	10.1983	10.363	9.76768	9.86611	9.13811	9.18775	9.15444	9.24685	0.9137223	0.009668
ZNF79	6.88995	7.05372	6.26472	6.61035	8.67098	9.24102	7.65641	7.54936	1.2348742	0.00973
LIN9	8.73297	8.74742	8.50751	8.5442	7.69351	7.407	7.89215	7.77739	0.8910564	0.009752
PIGW	8.92153	9.29537	8.79096	8.93413	8.16486	7.87604	7.97147	8.16331	0.8952114	0.009761
CYP4F3	5.38432	5.2044	5.04523	5.10758	6.01	5.53455	5.86392	5.84903	1.1213011	0.009878
SNORA75	8.03572	7.47377	7.81169	7.73382	6.97979	6.43522	6.96859	7.301	0.89147	0.010118
TM7SF2	7.50182	6.61725	6.4365	6.39342	8.84485	8.34199	7.22792	7.35594	1.1789199	0.010218
GJC1	10.0274	10.7021	8.95545	8.87778	9.11698	10.1097	7.55196	7.64797	0.8927431	0.010339
C20orf108	7.58071	7.28531	5.93249	6.35118	9.49627	9.20844	7.04983	7.30942	1.2178393	0.010382
UGT8	9.41458	9.74881	8.16873	8.28258	8.60139	9.04206	6.68513	6.99242	0.8794402	0.010421
HIST1H4E	10.7286	10.6016	10.4231	10.2494	9.39813	9.30838	9.4171	9.70587	0.900644	0.010487
FAS	8.33904	7.50551	7.8586	7.88767	10.6735	10.0019	9.14324	9.20425	1.2352604	0.01049
KIAA1731	7.9966	7.83526	7.46015	7.24177	7.05824	7.12576	7.05421	6.68585	0.9145301	0.010505
TACC3	9.91597	9.96217	8.2208	8.34774	7.87647	8.27703	7.22511	7.29215	0.8415241	0.010601
PLTP	11.6127	11.5886	11.1851	11.2601	13.32	13.3179	12.1455	12.1361	1.1155182	0.010757
XRCC3	6.34709	6.59055	6.14465	6.20961	5.41763	5.67707	5.59984	5.76293	0.8879313	0.010767
GIN51	10.747	10.8903	10.1919	10.2532	8.44851	8.60806	9.09012	8.88988	0.8325706	0.010804
MCC	7.48961	7.44352	6.31151	6.41081	8.61848	8.26238	6.88684	6.95628	1.1109557	0.010852
KIF20A	11.6959	11.4304	10.3778	10.4317	9.51604	9.72867	9.26705	9.37794	0.8623878	0.010871
MYO5A	8.70066	8.97955	5.9508	6.15847	9.28304	9.9775	6.5358	6.62696	1.0884144	0.010932
MELK	10.9883	10.9351	10.2787	10.3542	8.79911	9.0871	9.13763	9.30285	0.8536149	0.010996
FIGN	10.0752	9.88379	7.28884	7.4527	9.04535	8.96018	6.87093	6.7625	0.9117717	0.011055
ADCY3	9.86262	9.62279	7.34424	7.31189	9.29631	8.95372	6.10631	6.30808	0.8981557	0.011073
GATS	8.75909	8.22708	6.28723	6.20394	9.89959	9.6963	7.08073	6.87132	1.1380925	0.011079
GIN54	7.67465	7.95536	8.49241	8.67724	6.28377	6.6858	7.92154	7.75491	0.8733633	0.011141
SLC25A45	6.90868	6.02718	5.69602	5.55574	7.85971	7.91863	6.6676	6.71122	1.205458	0.011156
MAMDC4	6.04034	6.04113	5.89373	5.89322	6.91807	7.02512	6.42026	6.36291	1.1197373	0.011186
ARC	6.51513	6.15273	7.23873	7.21053	7.62108	6.59183	8.38765	8.28274	1.1388857	0.011266
ZNF684	6.42954	6.84671	6.27105	6.37215	5.78658	5.98544	5.9341	5.79956	0.9068742	0.011326
POLE3	9.35791	9.87633	8.14348	8.37625	8.76353	8.7692	7.64354	7.51495	0.9143382	0.011345
GPR63	8.76739	8.74646	9.53464	9.54533	7.88531	7.48686	8.92165	8.91978	0.9076287	0.011365
SLC30A1	7.18523	7.15066	6.86176	6.85114	7.79183	7.91876	8.15481	8.14756	1.1413312	0.011507
EDIL3	4.9071	4.9302	8.1761	8.31242	7.23776	6.83512	9.42686	9.36773	1.248488	0.011512
ACD	9.01736	9.09586	6.69419	6.65418	8.52506	8.58754	5.67095	5.92002	0.9123369	0.011525
MAP3K12	8.78498	8.7185	7.57754	7.58345	10.0758	10.0444	8.40304	8.16643	1.1232287	0.011555
AURKB	11.0547	10.5488	9.6354	9.66263	8.47204	8.5873	8.39606	8.38094	0.8272634	0.011557



KIAA1524	10.4946	10.5681	9.35131	9.3889	8.55218	8.80283	8.40603	8.37564	0.8576428	0.011559
HSD17B6	7.31475	7.909	5.58944	5.68725	6.47973	7.23535	5.24639	5.18544	0.911189	0.011644
UBASH3B	8.83338	9.09928	5.47797	5.45627	9.35941	9.59019	6.35765	6.48845	1.1014588	0.011813
KLHDC1	6.22051	6.47037	5.74836	5.82675	7.15443	7.18981	6.51265	6.16572	1.1136001	0.011891
PRIM1	10.8556	10.9711	11.1012	11.0571	8.42181	8.77824	9.87662	9.85722	0.8396928	0.011951
TOB1	8.71752	9.75575	7.94287	8.0116	9.69559	10.4697	9.58414	9.56586	1.1419655	0.012151
BTBD10	10.3961	10.2951	7.54002	7.46544	11.0035	10.9768	8.82176	8.67108	1.1057937	0.012345
CHAC2	8.60492	8.9512	8.85099	8.73902	7.42689	7.44629	8.12617	8.01801	0.8825256	0.012354
C4orf21	7.90787	7.83546	7.69695	7.79639	5.92875	6.24967	6.90194	6.62154	0.8228118	0.012397
NEIL3	9.91601	10.1277	8.91284	9.10141	7.61723	7.81029	7.93275	7.6186	0.8139919	0.012405
HIST1H3D	10.7934	10.7551	10.8489	10.9462	8.86381	9.02558	10.0152	9.84942	0.87104	0.012407
ESCO2	10.264	10.3783	9.56606	9.65417	7.85232	8.29846	8.35343	8.51497	0.8283263	0.012417
PRIM2	9.55711	9.37107	8.46763	8.48445	8.35744	8.25709	7.84424	7.91061	0.9021501	0.012419
DMC1	6.73523	7.06732	6.72973	6.91398	5.25766	5.53686	5.97031	6.12474	0.8339777	0.012456
GPR137C	7.47906	7.61104	6.1862	6.29472	6.42157	6.25604	5.51806	5.667	0.8654983	0.012599
TP53I3	6.40716	6.71556	6.15583	6.08867	10.4355	10.6292	8.2082	8.10971	1.4736581	0.012613
TGFB2	6.46048	6.47398	7.21538	7.28846	6.14439	5.88655	6.50207	6.42832	0.9097258	0.012667
LRP10	10.8025	10.6139	6.1013	6.29588	11.7215	11.7827	8.26624	7.8982	1.1731571	0.012701
HIST1H4K	9.54418	9.62834	10.1231	10.0186	7.87362	7.92385	8.99049	9.33242	0.867889	0.012745
CEP55	11.0273	10.5227	9.22276	9.33188	8.71888	8.39237	8.14878	8.132	0.8326226	0.012996
CCNA2	11.665	11.7621	11.2475	11.3596	9.4322	9.84441	10.2132	10.2459	0.863178	0.013043
NRF1	7.79817	7.71479	7.10501	7.16257	6.79935	6.7058	6.50792	6.72102	0.8977033	0.01305
FAM40B	8.00427	7.70484	5.48189	5.56551	7.19002	7.02023	5.17064	5.05893	0.9134158	0.013127
LOC375010	7.59431	7.7058	6.55373	6.62285	8.09459	8.48598	7.84533	7.68624	1.1276641	0.013161
PPIH	8.9887	9.47848	9.29325	9.12369	7.9828	8.30131	8.50642	8.69206	0.9077779	0.013195
APOBEC3F	8.10996	7.48441	7.28214	7.42573	9.16003	8.4587	8.22677	7.78995	1.1099988	0.013273
CDC25B	10.6145	10.3272	7.33085	7.29912	9.41168	9.3437	6.73014	6.76155	0.906538	0.013451
ZNF596	5.95438	5.81511	5.66601	5.68542	6.49482	6.29119	6.74003	6.40959	1.1217387	0.013496
CLIP3	9.59462	9.07724	6.85307	6.58026	10.5248	10.5138	7.46777	7.34528	1.1166933	0.013513
SIDT2	8.47559	7.7465	8.25752	8.39243	10.1568	9.52613	9.18125	9.21818	1.1585031	0.013537
C20orf27	7.29448	7.43612	6.12264	6.15429	6.51179	6.63845	5.72184	5.76007	0.9120475	0.013554
TMEM117	7.95589	7.86449	7.31462	7.49402	9.27115	9.35333	8.12262	8.12885	1.1386571	0.013554
RAD54B	9.73409	9.77554	8.92654	8.95751	8.12381	8.23514	8.12963	8.16929	0.8733527	0.013609
HIST1H3B	10.4253	10.4744	11.2488	11.4025	8.79673	9.03892	10.5464	10.5395	0.8937005	0.013773
GPRC5B	6.20961	6.94622	6.31978	6.39786	5.90132	6.13048	5.83382	5.78795	0.9142017	0.013811
AP3M2	8.6696	8.59225	8.83235	8.53981	7.50286	7.73587	7.8939	8.14299	0.903032	0.013836

MYBL1	11.5896	11.4862	7.08945	7.32788	10.6701	11.033	6.40924	6.15247	0.9138957	0.013855
UBE2S	10.2622	10.3427	9.62635	9.64153	8.88973	8.96072	8.92787	8.96293	0.8963822	0.013862
PGAP1	9.76704	9.7141	9.65076	9.78807	10.8406	10.8787	10.259	10.3077	1.0864859	0.01394
C19orf48	9.30067	9.21781	8.68908	8.84125	8.19737	7.82898	8.16318	8.02148	0.8935388	0.014006
C7orf10	7.18514	7.20151	6.42815	6.43083	8.17817	8.07558	6.76117	7.19191	1.1086853	0.014201
WDR4	7.6228	7.38456	6.83185	6.85675	6.89692	6.49172	6.25299	6.53998	0.9123797	0.014216
FEZ1	4.91048	5.5588	4.691	4.97176	5.80794	6.87085	5.48688	5.4614	1.1736054	0.01424
MON2	9.00715	9.10032	8.7923	8.78226	10.3266	10.5402	9.39604	9.56756	1.1162594	0.014454
ELFN1	10.7254	10.6592	6.40775	6.24865	11.7314	11.7043	6.8699	6.80549	1.090188	0.014561
ANKRD20B	7.78023	8.24929	6.62129	6.71228	8.25559	9.09748	7.94824	7.86132	1.1293985	0.01463
DEPDC1B	8.55112	8.9235	8.55664	8.79346	6.51287	7.14633	7.7504	7.65099	0.8344817	0.014655
LRRCC1	9.57518	10.0369	8.22511	8.37295	8.21671	8.95245	7.73805	7.53763	0.8960153	0.014739
FAM83H	7.54049	7.27879	5.97533	6.06581	9.19445	8.78248	6.7632	6.84011	1.1757165	0.014747
RASL11A	5.48349	5.60287	5.53248	5.59801	5.83955	5.91735	6.15435	6.31672	1.0905223	0.014778
KCTD1	7.32802	7.33042	6.42381	6.34897	8.2358	8.11525	6.84683	6.76996	1.092472	0.0148
MAD2L1	9.2087	9.33953	10.3834	10.4824	6.88321	7.05174	9.29247	9.31241	0.82559	0.014941
PLA2G7	6.40515	6.02987	4.8879	4.85696	6.74899	6.84544	5.28988	5.47682	1.0983436	0.01495
WBP1	10.6883	10.1464	8.34487	8.32346	11.4129	11.4199	8.97429	8.91151	1.0857416	0.014962
WEE1	8.77197	8.71823	8.22594	8.21754	7.16588	7.36902	7.36318	7.57675	0.868601	0.014972
PHLDB3	6.3971	5.98545	5.46968	5.40215	6.96097	6.78069	5.88088	5.72287	1.0899198	0.015076
CYP4F2	5.62335	5.62192	5.33562	5.2846	7.15741	6.13925	6.35726	6.51885	1.1969899	0.015141
PGBD1	6.64155	6.72955	6.06226	6.22997	6.11577	5.8978	5.77493	5.55662	0.9096684	0.015322
CROT	8.66666	8.64609	7.10378	7.22841	9.55733	9.19988	8.47155	8.70353	1.135483	0.015391
SERTAD4	7.82803	8.27257	7.43862	7.77085	6.42794	6.74761	6.90314	6.76935	0.857489	0.01542
NEU1	9.21245	9.07738	6.72578	6.82812	10.7085	10.0683	7.48042	7.44537	1.1211812	0.015446
HIST1H1C	9.08616	9.23796	9.97211	9.89522	7.84881	7.88517	9.33616	9.26853	0.8991193	0.015485
RRM2	10.1765	10.2026	10.2187	10.3841	7.78985	8.3448	9.13718	9.31602	0.8439787	0.015574
LIF	8.66786	8.59872	4.87635	4.68445	9.24357	9.00368	5.82171	5.7133	1.1101442	0.015627
XYLB	8.58428	8.54185	7.29763	7.3974	8.13165	7.87151	6.53394	6.20313	0.9031798	0.015834
REEP2	8.12436	6.53508	6.57087	6.47706	9.66813	8.2194	7.43287	7.1882	1.1732835	0.015834
SPRYD5	4.76761	4.70984	4.75749	4.42745	5.21433	5.14221	5.00559	5.12491	1.0977715	0.015878
CENPN	11.0482	11.0104	9.30488	9.30959	9.43893	9.53586	8.62412	8.49031	0.8873001	0.01591
WBP1	10.5331	10.0224	8.34487	8.32346	11.2394	11.3088	8.97429	8.91151	1.0862396	0.016092
SLC16A10	7.67972	8.04237	8.12767	8.22315	8.39686	8.40313	9.10427	9.29727	1.0975471	0.016202
FBXL2	7.8487	8.06877	6.8226	7.07029	9.11074	9.066	7.6737	7.47627	1.1179573	0.016209
CYHR1	6.86568	6.57866	6.66122	6.53727	7.24717	7.1316	7.15622	7.47546	1.0888652	0.016267

SCML2	8.61721	8.60041	7.99225	8.12637	7.07724	6.81971	7.31752	7.15448	0.8509943	0.016354
KIF15	9.93176	9.96287	8.98167	9.06858	6.94456	7.25998	7.72059	7.58677	0.7777571	0.016416
KIF23	10.7361	11.103	9.89181	9.90036	8.34248	9.07552	8.76581	8.87446	0.8421139	0.016429
H2AFZ	10.9964	11.2813	11.1952	11.2104	9.73705	9.92154	10.5674	10.5856	0.9133522	0.01644
SRA1	7.84804	7.36298	6.89366	6.80997	8.49193	8.44987	7.39245	7.3053	1.0942394	0.016446
CDC20	10.8505	11.0922	9.83166	9.91095	9.47464	9.8805	9.1635	9.32907	0.9079388	0.01648
CDKN3	11.1826	10.8092	10.0178	9.94089	8.98407	8.86902	8.87751	9.06511	0.8532847	0.016483
CENPA	10.257	10.2235	8.82217	8.91955	8.22327	8.53949	7.94552	7.97912	0.8551937	0.016486
HJURP	10.6607	10.5322	9.22658	9.2713	8.24763	8.42958	8.13398	8.18597	0.8313558	0.016505
COBLL1	8.5275	8.36128	5.82808	5.76463	9.45298	9.37505	6.4343	6.12858	1.1021513	0.016571
C14orf106	10.4623	10.2715	10.0319	10.1013	8.94463	8.95875	9.39025	9.3742	0.8972479	0.016589
PLK4	10.7229	10.6921	9.61486	9.61749	7.65435	8.08741	8.26085	8.22899	0.792957	0.016702
DIS3L	7.49093	8.11005	7.96695	8.22291	6.55901	6.72493	7.50627	7.33592	0.8847243	0.016744
LOC81691	7.19072	7.32601	5.37741	5.67354	6.25694	6.54482	5.02479	5.17949	0.8998094	0.016828
ARL13B	8.64732	9.01688	7.50387	7.68465	7.80089	7.89168	7.15052	6.92389	0.9060735	0.016886
MNS1	8.85025	9.28745	8.81731	8.83972	6.55063	7.43699	7.82251	7.8129	0.8275808	0.017096
MYBL2	11.3203	11.572	9.97039	10.0639	8.71374	9.46402	8.8233	8.91843	0.8367655	0.017098
HIST1H2AM	7.44594	7.77313	7.69932	7.64535	5.77054	6.08622	6.9813	6.77249	0.837939	0.017147
CYFIP2	4.82779	4.98269	7.21823	7.41322	10.3112	11.1757	10.0404	10.1419	1.7048245	0.01715
POLD4	9.37248	8.89891	6.79526	6.81488	10.2643	10.0448	7.25452	7.3638	1.0955378	0.017152
MYB	7.45502	7.46047	9.32099	9.32734	5.7348	5.64625	8.52009	8.46286	0.8450766	0.017198
C15orf23	10.6243	10.9659	10.4053	10.3737	9.10622	9.5442	9.75342	9.64013	0.8979157	0.017323
TRAIP	7.44745	7.52568	7.09176	6.97667	5.79953	6.01859	6.1005	6.40285	0.8374712	0.01733
PDCD4	8.68543	7.64684	7.37796	7.45679	9.22425	8.43497	8.56664	8.93651	1.1281916	0.017374
KIAA0101	11.1064	11.4634	11.3057	11.3875	9.5221	10.2117	10.7152	10.5728	0.9062987	0.017477
NCAPH	10.582	10.6584	10.1955	10.3585	7.79719	8.536	9.07778	9.04947	0.8245229	0.017543
ZNF551	7.82889	7.71423	6.89674	6.92338	6.80285	6.68416	6.4805	6.36668	0.8968421	0.017563
ESPL1	9.29916	9.66771	8.57117	8.66297	6.99901	7.74482	7.54008	7.67806	0.8276556	0.017632
LCE1B	5.33734	5.2712	5.14628	5.04914	6.43404	6.26587	5.66785	5.51064	1.1477815	0.017697
SNORD30	8.92533	8.1513	9.04559	9.05695	7.74024	7.17955	8.401	8.63748	0.908443	0.01783
BUB1B	11.0866	11.5369	11.0067	10.9369	8.36822	9.25228	9.78274	9.78688	0.8344748	0.017915
RACGAP1	10.8276	10.8664	10.2246	10.2294	9.16022	9.33039	9.48448	9.47708	0.8885871	0.017953
LRDD	8.1684	8.22339	7.68314	7.91886	10.2249	10.1486	8.88229	8.64779	1.1847168	0.017966
NDC80	10.9393	10.8923	9.36072	9.40812	8.33634	8.82474	8.28458	8.23367	0.8295312	0.018006
RBM43	7.00935	7.01444	6.46765	6.51672	7.46377	7.97984	6.94315	6.9829	1.0874365	0.018014
CYGB	5.59385	5.69568	5.68701	5.36409	6.46567	6.27191	7.11842	6.9527	1.1999975	0.018076

KDELC2	9.35569	9.53911	8.02228	8.18895	8.37565	8.4033	7.57864	7.62975	0.9111637	0.018092
BRCA1	8.80014	8.81482	8.349	8.42844	6.13874	6.12051	7.00037	7.29441	0.7720901	0.018235
SNORD27	8.63471	8.12201	9.28531	9.43734	7.16809	6.78476	8.76618	8.6148	0.8831563	0.018451
MORC4	7.98031	7.72531	6.86658	7.09243	8.63977	8.86181	7.46524	7.52451	1.0952886	0.018473
FANCB	8.25561	8.28583	7.73321	7.94413	6.43214	6.51534	7.08812	6.87188	0.8351489	0.018616
BRCA2	8.521	8.89304	8.40762	8.33911	6.18651	6.8505	7.44817	7.2682	0.8124343	0.018783
SMC2	10.3774	10.5602	9.0806	9.05722	8.57915	9.08349	8.21994	8.36834	0.8765336	0.018862
BBS4	8.04747	8.55972	7.299	7.32428	9.46532	9.97311	7.96653	7.94711	1.1319737	0.018987
PLXNB1	6.08294	5.76637	5.77084	5.757	7.13737	6.97817	6.2265	6.35596	1.1420554	0.01923
PRKCD	8.08352	7.20058	7.36433	7.42209	9.06627	8.21273	7.82287	7.86859	1.096438	0.019258
NUP50	8.38783	8.48648	8.02145	8.24683	7.52724	7.40673	7.71535	7.5036	0.9097937	0.019413
PHGDH	10.53	10.7918	10.6952	10.7807	9.29098	9.29069	10.0177	10.1852	0.9062302	0.01954
SNORD25	7.42604	7.24041	8.37755	8.95279	6.12567	5.68571	7.91644	7.28064	0.844099	0.019725
BTG2	5.55066	5.50606	7.95735	7.97192	9.55756	9.49524	9.86607	9.66501	1.4297745	0.019768
C20orf165	7.01955	6.95301	6.0253	5.84016	7.45087	7.36087	6.9765	6.75597	1.1047367	0.01986
MTBP	10.4062	10.2695	8.62179	8.67091	8.22706	8.50797	7.72496	7.74145	0.8481116	0.019902
CENPK	10.45	10.1551	9.83351	9.84088	7.94693	7.74642	8.88735	8.55458	0.8226341	0.020005
SGEF	8.52413	8.74413	5.77304	5.77406	7.5958	7.69394	5.3515	5.29838	0.9002011	0.020033
TMPO	11.1453	11.4352	11.2701	11.3417	9.41863	9.60863	10.4023	10.6092	0.8859642	0.020043
SOX5	6.32358	6.18506	7.84206	7.92461	7.20463	7.25369	8.44249	8.26603	1.1022634	0.020082
CDCA4	10.2806	9.99695	8.03947	8.02409	9.82874	9.41076	6.81295	7.01303	0.9098643	0.020114
TNFRSF14	5.75689	5.43313	5.51417	5.39713	7.82904	7.39006	6.38976	6.32586	1.263939	0.020166
ZDHHC1	6.44804	6.54522	5.26935	5.30064	7.25946	7.35596	5.7961	5.55713	1.1020827	0.020256
FLJ45825	4.69735	4.45167	4.59629	4.67788	4.88502	5.03047	5.08086	4.99583	1.0851639	0.020346
P4HA2	8.22641	7.9029	6.56181	6.52582	9.74919	9.43426	7.18132	7.27069	1.1512314	0.020438
TLR3	7.24641	7.80325	5.67193	5.92665	8.6875	8.99249	6.90757	6.2989	1.1590431	0.020511
ZNF468	8.4657	8.36859	6.69115	6.71556	9.50816	9.28311	7.08027	7.21316	1.0940346	0.020576
SNORD31	7.61251	7.27244	8.28902	8.26956	6.71126	6.31316	7.76878	7.93765	0.9137285	0.0206
CMBL	9.3182	9.80763	9.83592	9.85026	11.5709	11.9254	10.8908	10.7413	1.1627432	0.020761
MSH6	9.26682	9.33913	9.08018	9.1333	8.76027	8.64215	7.74861	7.78288	0.8944709	0.020767
HHAT	6.42106	6.20163	5.14798	5.16529	7.72305	7.62771	5.77246	5.75422	1.1718472	0.020802
KIFC1	9.35715	9.11115	8.27362	8.23089	7.07724	7.25414	7.1997	7.40175	0.827295	0.020812
PHPT1	7.79102	7.82718	7.05955	7.10417	9.10134	9.08489	7.56601	7.74194	1.1246481	0.020836
LOC389842	7.53715	7.66174	8.08057	8.69166	6.36371	6.75269	7.77878	7.75271	0.8960553	0.020898
NMNAT2	6.92097	7.52526	6.24027	6.08998	8.50269	9.21975	6.88858	6.90279	1.1769213	0.0209
C13orf27	8.14629	8.39777	8.53926	8.36762	6.875	7.32707	7.91029	7.92232	0.8978725	0.020906

MLF1IP	9.8971	9.86114	9.5217	9.65285	7.85403	8.11288	8.80823	8.63212	0.8580752	0.020925
C19orf40	8.02244	8.45543	7.08168	7.17459	7.17745	7.21623	6.61623	6.6175	0.898916	0.020969
MCM8	11.6031	11.3665	9.01248	8.8416	9.61462	9.76865	8.00379	8.17264	0.8710557	0.020988
HSPA4L	11.7491	11.5369	10.7091	10.788	12.257	12.2511	12.1259	12.0978	1.0881739	0.021227
ZNF530	6.61497	6.56607	5.64577	5.92747	5.53787	5.64001	5.28183	5.37556	0.8820806	0.021283
SASS6	10.3203	10.6255	9.45284	9.66144	8.21946	8.70479	8.73979	8.55031	0.8540759	0.021296
FOXRED2	8.67732	8.67386	8.00533	8.25482	7.48378	7.49592	7.65807	7.44502	0.8950193	0.021369
HIST1H2BO	7.30482	7.57282	7.19557	7.08756	5.68605	5.88304	6.53465	6.29275	0.8366202	0.021446
FAM149B1	6.7223	6.04209	6.54296	6.74541	7.53078	6.8714	6.98134	7.03943	1.0909765	0.021488
EME1	7.78957	9.17911	7.75588	7.88546	5.53368	6.71894	6.74396	6.82734	0.7919014	0.021572
MARK4	8.4738	8.11794	6.58827	6.66931	9.25642	9.11712	7.12713	6.98027	1.0881635	0.021576
HIST3H2A	5.53636	5.74842	6.90861	6.93107	5.23725	5.12409	6.08297	5.88454	0.8887295	0.021719
TMEM129	8.21162	8.01253	7.29753	7.05228	8.91584	9.06411	7.58211	7.77679	1.0904328	0.021797
WEE1	7.42088	6.91552	8.22594	8.21754	5.58187	5.55485	7.36318	7.57675	0.8471979	0.021808
PSRC1	8.47705	8.48071	6.64138	6.65163	6.8037	6.84455	5.8635	5.98624	0.8428873	0.021851
SNORD22	7.192	6.92048	7.6347	8.08271	6.16359	5.6877	7.32537	7.17407	0.8833667	0.021988
DCLRE1B	8.82531	9.59389	8.66561	8.83225	7.5866	8.03334	8.0627	8.17372	0.8869423	0.022026
HIST1H2BH	11.6444	11.5219	8.58184	8.90262	9.76412	9.95769	8.10882	7.53107	0.8698903	0.022028
APOBEC3H	4.32647	4.46379	4.7521	4.53527	6.03325	5.88167	5.27212	5.47447	1.2535664	0.022086
RHBDP2	7.78719	7.24072	5.36499	5.68642	8.9211	8.59204	6.16833	6.07068	1.140833	0.022312
C12orf48	8.98454	9.04665	9.13745	9.27935	7.28416	7.40346	8.50258	8.45857	0.8683269	0.022342
NUP35	8.454	8.401	9.40408	9.36092	7.24552	7.06357	8.93838	8.70779	0.8971157	0.02259
PLEKHF1	5.48631	5.45147	5.48784	5.06745	6.11064	5.8474	5.67958	5.71353	1.0864502	0.022608
RAD51AP1	9.94762	9.85524	9.3839	9.51703	7.00873	7.42703	8.3355	8.1819	0.7997449	0.022639
C6orf150	10.9227	10.8453	9.62019	9.76821	9.41744	9.22329	9.09968	8.89239	0.8900876	0.022731
SPATA20	6.14879	6.97765	7.44917	7.49892	6.98817	7.84052	7.81836	7.85953	1.0866283	0.022731
POLQ	8.03566	8.24119	6.85904	6.91666	5.79052	6.08455	5.871	6.02228	0.790893	0.02301
SGOL2	9.66349	10.0629	9.02962	9.02835	7.71264	8.26823	8.27422	8.17501	0.8582943	0.023024
RALGDS	7.45507	7.56782	6.67081	6.52445	8.88774	9.32685	7.38402	7.21256	1.1627683	0.023113
NEU1	9.74697	9.70675	6.72578	6.82812	11.4258	10.7066	7.48042	7.44537	1.1227162	0.023203
AMZ2	10.9766	11.2387	9.25633	9.32476	11.5873	11.7472	10.6032	10.5962	1.0916137	0.023319
C18orf54	9.98653	10.3004	7.51943	7.72402	8.46998	8.97055	6.92477	7.09502	0.8854485	0.023342
ZNF66	7.86881	7.77381	6.19035	6.26509	6.69244	6.78749	5.80672	5.69025	0.888919	0.023431
PRC1	11.5347	11.7093	10.2195	10.169	9.00048	9.66797	9.13157	9.24687	0.8490664	0.023516
CENPJ	7.85953	8.35163	8.45206	8.23316	6.3703	6.46702	7.80712	7.3759	0.8517758	0.023526
CCDC92	9.16305	9.70251	5.72721	5.49918	10.0433	10.763	6.11042	5.96169	1.0925982	0.023553

KIF2C	10.019	10.1242	9.04211	9.07058	7.72359	8.18269	8.10222	8.1894	0.8416456	0.023862
ZNF425	6.13052	5.84029	5.25161	5.32324	6.60381	6.81977	5.64822	5.77654	1.1021341	0.023931
PHLDB3	6.177	6.26719	5.46968	5.40215	7.10459	6.99824	5.88088	5.72287	1.1025286	0.02398
CAPN1	8.79073	8.89367	7.28084	7.43503	9.96288	9.9383	7.87773	7.80612	1.0982942	0.024048
ZDBF2	8.61936	8.49245	7.39102	7.1287	9.02545	8.98587	8.53244	8.07347	1.09439	0.024304
KIF22	9.32038	9.59274	9.22451	9.09593	7.38969	8.07193	8.38063	8.42737	0.866681	0.024374
KIF22	9.34189	9.59783	9.22451	9.09593	7.40466	8.11559	8.38063	8.42737	0.8676358	0.02444
THAP10	7.91708	8.18894	6.53742	6.64636	7.07837	7.23853	6.2467	6.15644	0.9122643	0.024582
CDCA8	10.7603	10.8165	9.14599	9.22642	7.98025	8.61369	8.11261	8.1078	0.8214017	0.024772
CEL	4.75383	4.93616	4.98804	4.8892	5.36392	5.27177	6.08791	5.96824	1.1596859	0.024867
ZNF519	7.14093	7.56088	7.09506	7.06862	6.13814	6.20514	6.61373	6.50666	0.8821492	0.025029
CALCOCO1	8.6137	8.25255	6.45709	6.40154	10.1254	10.0667	7.12937	7.13697	1.1592457	0.025143
ITSN2	8.97845	8.93447	6.92791	6.95583	10.1003	10.0085	7.30686	7.49815	1.0980339	0.025227
EID2B	5.70817	5.94964	5.12437	5.31922	6.73777	6.83	5.53052	5.71418	1.1226651	0.025269
DKKL1	5.96233	5.65752	5.43289	5.2032	6.53209	6.45918	5.66698	5.60863	1.0903552	0.025308
MORC4	8.05446	7.86811	6.86658	7.09243	9.21233	9.16026	7.46524	7.52451	1.1164851	0.025353
ARHGAP11A	10.2585	10.6149	9.8352	9.98229	7.59564	8.53414	8.68207	9.08591	0.8330553	0.025548
ZFP30	8.19803	7.97924	7.01568	7.0248	7.35223	6.95334	6.7274	6.48335	0.9106012	0.025625
RAD18	10.1896	10.2225	9.03692	9.01914	8.76872	9.0298	8.4544	8.50495	0.9035491	0.025655
TIMELESS	8.90008	8.82267	8.38091	8.40989	7.48267	7.58332	7.75983	7.92242	0.8909034	0.025785
PGPEP1	6.93788	6.31603	5.85348	5.92163	8.30028	8.08728	6.52887	6.58927	1.1788596	0.025905
C18orf56	6.26177	6.37012	5.8524	5.8674	7.08438	7.41561	6.22211	6.29309	1.1093764	0.025984
ANKRD20B	7.38523	7.85685	6.62129	6.71228	7.73564	8.60458	7.94824	7.86132	1.1250761	0.026216
ANKRD20B	7.38524	7.85685	6.62129	6.71228	7.73564	8.60458	7.94824	7.86132	1.1250757	0.026217
HIST2H3A	9.5691	9.6904	9.43468	9.83352	7.97181	8.29858	9.03388	8.88304	0.8873437	0.026344
PLCD3	8.65147	8.18658	7.31243	7.38933	9.56032	9.25171	7.76273	7.75501	1.0884584	0.026624
GAMT	8.68439	8.43324	7.58005	7.42999	9.75326	9.55486	8.00681	7.889	1.0957511	0.026682
NUSAP1	11.8075	11.8495	11.1169	11.2731	9.29197	9.77055	10.2765	10.2006	0.8586796	0.026812
SUV39H1	7.75651	7.64472	7.16245	7.28874	5.80722	6.12602	6.44042	6.55149	0.8349457	0.026837
SNORD28	10.31	9.68607	11.3412	11.169	8.77867	8.30888	10.6992	10.628	0.9037431	0.02692
DNAJC9	9.63905	9.31188	8.18807	8.39238	8.33614	7.9073	7.7739	7.67422	0.8919316	0.026978
CASC5	10.2944	10.6768	9.68332	9.78106	7.9213	8.66099	8.84916	8.81413	0.846917	0.027007
TTF2	8.93357	9.17868	7.96723	8.00542	7.12392	7.70208	7.21182	7.39467	0.8635052	0.027036
SUV39H2	10.1439	10.4261	9.64994	9.61104	8.98574	8.92261	9.09585	9.04499	0.9050541	0.027101
C15orf42	10.059	10.1243	9.54732	9.51855	8.42297	8.60157	8.95105	8.847	0.8872185	0.027398
CACNG6	6.72921	8.11314	6.09131	6.44584	7.22566	8.81887	7.02241	6.68674	1.0867138	0.027467



TAF5	8.19437	7.96517	7.65474	7.72762	6.8462	6.75198	7.07549	7.27231	0.8859955	0.027613
GGA2	8.82473	9.21323	9.23109	9.21624	7.94068	7.78962	8.59537	8.76457	0.9069474	0.027633
RUNDC3A	5.0988	5.03425	5.89552	6.06424	5.6597	5.17234	6.58805	6.72196	1.092756	0.027856
PANK1	6.96122	6.68708	7.28748	7.23941	8.02808	8.10646	7.77242	7.7993	1.1253255	0.028002
ZNF695	7.6878	7.53178	6.15775	6.49539	6.25172	6.20588	5.74253	5.77741	0.8602512	0.028211
TUBD1	7.82115	8.616	8.19442	8.16544	6.73963	7.35437	7.76466	7.6517	0.8997881	0.028237
PVRL4	5.42904	5.37912	5.19324	5.14614	5.61842	6.30754	5.83343	5.84336	1.1160991	0.028555
KIF11	11.1873	10.7561	10.4074	10.4208	8.43797	8.54533	9.38848	9.42632	0.8369596	0.028597
CDCA7	9.79459	9.8687	8.81234	9.0765	9.19797	8.91812	7.13619	7.02041	0.8594104	0.028624
CEP135	8.03132	7.84027	8.06945	8.05585	6.68733	6.63987	7.54129	7.5771	0.8890111	0.028711
H2AFX	9.63061	9.75955	8.74912	8.9304	8.18423	8.15544	8.31287	8.10626	0.8837087	0.028753
SMC1A	8.69567	9.39833	9.49869	9.48095	7.43514	8.26069	8.95561	9.07153	0.9096212	0.028896
GRHL3	5.26427	5.2252	7.65721	7.7215	8.26758	7.97146	8.91356	8.73542	1.3100272	0.028909
LOC645978	7.13493	6.74973	6.11324	6.22357	8.0009	7.9873	6.57041	6.66316	1.1144215	0.028994
HIST1H2AJ	7.46924	7.61869	7.88755	7.66185	5.98825	5.94575	7.10752	7.16919	0.8555155	0.029047
KNTC1	9.27653	9.68172	9.17863	9.29351	7.34816	7.90683	8.49314	8.52798	0.8622969	0.029125
GTSE1	9.09335	9.24271	8.09069	8.16089	7.05049	7.39238	7.33403	7.39436	0.8434013	0.029282
CDCA3	9.82437	9.65726	8.30811	8.14573	7.22111	7.56465	7.30771	7.25881	0.8168052	0.029408
C13orf34	8.96918	8.89258	8.10653	8.11013	6.9518	7.28071	7.42735	7.32697	0.850592	0.02941
EXOSC8	10.4274	10.5462	10.7484	10.9143	8.72434	8.67703	10.215	10.0149	0.8826111	0.029601
KIF4A	9.58012	9.97928	8.70812	8.82629	6.88309	8.005	7.89359	7.68665	0.8213858	0.029835
OCLM	7.69568	7.78674	6.65806	6.79238	7.05885	6.63355	6.30437	6.25823	0.9074457	0.029864
SPC25	9.95439	9.69942	9.3228	9.42576	6.81387	7.23599	8.31246	8.17768	0.7952634	0.030016
KIFC1	9.91455	9.67648	8.27362	8.23089	7.3035	7.47029	7.1997	7.40175	0.8138191	0.030062
CENPI	10.1801	9.92911	8.64186	8.70023	7.59711	7.74706	7.68137	7.79159	0.8228588	0.030066
WDR62	8.15259	8.17992	6.72233	6.666	6.44836	6.75359	6.07495	6.08287	0.8532656	0.030145
BUB1	12.0055	11.9914	10.4474	10.5032	9.47756	10.0376	9.51755	9.63163	0.8602111	0.030239
DEPDC1	10.8459	11.3378	10.1186	10.1467	8.45843	9.52033	9.28916	9.28291	0.8610528	0.030484
ANP32E	10.1796	10.1266	9.48315	9.52831	8.73357	8.81847	8.86158	9.07848	0.9027012	0.03049
MKI67	10.7864	10.7426	9.62881	9.8121	8.04379	8.36751	8.82172	8.59943	0.8257878	0.030496
ARHGEF3	7.27925	7.62147	5.32066	5.33989	7.99059	7.99438	6.78091	6.4642	1.14353	0.030667
ANKRD20B	6.9801	7.40022	6.62129	6.71228	7.35734	8.00333	7.94824	7.86132	1.1247151	0.030682
JUP	6.18129	5.65499	7.08746	7.03186	7.6298	7.3219	7.68043	7.64189	1.1663772	0.030716
DNAJB5	9.34419	9.44532	6.53409	6.61368	9.72874	10.2814	8.12338	7.98738	1.1309949	0.030873
TROAP	10.0102	9.81478	8.48162	8.53885	7.7569	7.88014	7.74468	7.65893	0.8424554	0.031144
CENPF	10.4389	10.7007	10.2247	10.2507	8.20868	8.85161	9.51916	9.36541	0.8637477	0.03119

SLC19A3	6.50769	6.77401	6.14697	6.33646	6.13031	5.96665	5.8935	5.50085	0.9117482	0.031334
SERPINE1	12.1808	12.0129	6.01732	6.06725	12.9141	13.0006	8.35133	8.23799	1.171611	0.031386
POLA1	8.71007	8.85548	9.40215	9.3312	7.0248	7.1684	8.54957	8.86372	0.8707286	0.031409
KIF18A	10.7171	10.5829	9.99223	9.92214	8.55945	8.94953	9.16402	9.23963	0.8713619	0.031667
ACBD4	5.77766	5.75061	5.34632	5.16919	6.47187	6.39531	5.47548	5.65093	1.0884517	0.031674
ZNF749	7.04452	7.11958	7.40709	7.49802	6.06423	5.82189	7.02919	6.95876	0.8900851	0.031701
OIP5	9.04547	9.27174	8.75288	8.7304	6.73859	7.13869	7.88854	7.92212	0.8292607	0.031804
RAB6B	7.38184	7.58935	5.84713	5.8952	8.07931	8.58637	6.21186	6.22537	1.089445	0.031827
TEX9	8.30313	8.72636	6.8214	6.75028	8.87118	9.4547	8.56607	8.44231	1.1546702	0.03186
KIF14	10.0258	9.90054	9.25808	9.34936	7.27329	7.67235	8.25141	8.43585	0.8209135	0.032172
LOC1720	12.3282	12.003	11.9898	11.957	10.7126	10.3983	11.3521	11.3934	0.9084138	0.032268
C5orf34	9.33357	9.05116	8.07225	8.30167	7.30377	6.98503	7.40068	7.44045	0.8380628	0.032394
PLK1	11.9187	12.2916	11.2532	11.388	9.69511	10.6372	10.554	10.5499	0.8844159	0.032499
DBF4	8.06607	7.90635	6.96461	7.00538	6.70492	7.09183	6.57416	6.41538	0.8945937	0.032731
ZWILCH	10.373	10.4502	10.3386	10.4473	9.12095	8.91935	9.86932	9.85011	0.9074873	0.032755
AK1	8.76329	8.50593	6.42859	6.30092	9.6459	9.72103	6.87156	6.68868	1.0976188	0.033185
STARD4	8.85891	7.86569	5.73265	5.73183	9.31641	8.28795	6.49837	6.99278	1.1031048	0.033265
CDH3	5.24986	5.25862	6.19739	6.31974	7.12968	5.99273	7.34998	6.90097	1.1888224	0.03333
TFR2	7.12828	7.28433	5.64072	5.31248	6.14121	6.02351	5.04325	5.00935	0.8758766	0.033592
ARHGAP11B	9.89328	9.96597	9.2939	9.43041	7.8517	8.13315	8.68581	8.59864	0.8622662	0.033749
ECT2	11.5998	11.6554	9.97839	9.95417	9.54535	9.81285	9.27367	9.22699	0.8766109	0.033887
HIST1H3G	9.38576	9.86159	6.3334	6.46947	7.26006	8.30993	5.69171	5.66696	0.840202	0.033894
INPP5D	5.72543	5.63523	7.32465	7.40961	8.46106	8.10205	8.3705	8.27706	1.2726872	0.034004
KIF4B	7.3055	7.48655	6.67696	6.62716	5.90754	6.22072	6.23839	6.08602	0.8703204	0.034021
ARHGAP19	8.7152	8.54864	9.0738	9.16637	7.28793	7.29004	8.59904	8.65299	0.8965184	0.034043
DLEU1	8.50279	8.51817	9.13143	9.07395	7.5141	6.99129	8.56609	8.59906	0.8990585	0.034303
REEP4	9.74357	10.1349	9.03533	9.09018	8.45371	8.99312	8.541	8.69132	0.9125136	0.034395
ASPM	9.94461	9.79456	10.0364	10.0708	7.30845	7.69887	9.11413	9.21445	0.8366107	0.034401
TNFRSF10A	7.75369	8.02326	5.76477	5.60945	8.57041	8.76075	5.88347	6.27046	1.0859602	0.034533
ASTN2	5.63742	5.71787	5.3352	5.28982	6.37635	6.46108	5.54558	5.62586	1.0922899	0.034542
FBXO43	8.09501	7.94301	6.22614	6.56012	5.9194	6.1301	5.6563	5.61992	0.8092386	0.034642
C2orf66	5.51494	5.64435	5.20062	5.03307	5.84464	6.47746	5.47238	5.46288	1.0871491	0.034731
ZNF561	8.68771	8.38568	7.3854	7.38122	9.81798	9.71292	7.78747	7.88434	1.1056124	0.034806
ZNF564	7.94077	7.57927	6.71383	6.7969	8.86625	8.83391	7.24455	7.12338	1.1046242	0.034901
SPC24	9.06331	9.0427	8.14273	8.26999	7.09613	7.21796	7.56805	7.4631	0.8501251	0.034975
CSDM3	4.87779	4.71788	6.0688	6.09587	5.86684	6.3729	6.61418	6.67352	1.1731177	0.035593

FLJ41484	4.85793	5.04124	5.02262	4.90315	6.27651	6.3276	5.52023	5.37342	1.1852626	0.035734
LMNB1	8.89751	8.85105	9.26981	9.29806	6.55464	7.07918	8.40748	8.60834	0.8439607	0.035792
MSH5	8.29039	8.21684	6.5491	6.18564	7.36831	7.14792	5.90654	5.99937	0.9035691	0.03599
CENPH	9.39524	9.19967	8.91019	9.04454	7.80307	7.55904	8.4737	8.30851	0.8794702	0.036103
RFNG	7.56659	7.49535	6.63641	6.73184	8.71025	8.67024	7.08412	7.10554	1.1104446	0.036191
SNORD26	10.4302	9.82407	11.2699	10.9722	8.78579	8.18916	10.578	10.4927	0.8952682	0.036236
PLEKHM1	6.84672	7.21334	5.45519	5.18526	7.58483	8.18058	5.63565	5.71515	1.0977996	0.036361
PDE7B	5.10055	4.94259	5.0357	4.76834	5.32758	5.22028	5.51483	5.52698	1.0877953	0.03649
EML2	6.03312	5.8212	5.44633	5.33026	7.23074	6.80032	5.80756	5.75944	1.1311105	0.036502
KCNH8	6.17689	5.57347	5.66583	5.7045	7.18233	6.79601	6.11329	6.06251	1.1312007	0.036845
FADS3	8.74734	8.17095	9.3613	9.40364	10.6736	10.1538	10.2105	9.94617	1.1485527	0.036959
NUP107	10.1684	10.3675	10.2632	10.1847	8.48872	8.80067	9.62877	9.67876	0.8929606	0.037177
BBS1	7.70433	7.52758	7.00188	7.26871	8.64665	8.6462	7.90087	7.41089	1.1051474	0.037183
SHCBP1	10.9139	10.785	9.15532	9.18303	8.06329	8.58431	8.09455	8.38379	0.827378	0.037223
RFC3	9.86227	10.5608	10.5184	10.5863	7.45163	8.3824	9.78531	9.70501	0.85062	0.037248
TRIM5	8.84411	9.1185	6.877	6.84734	9.33978	9.37302	7.81266	7.94393	1.0878103	0.037275
PLXNB3	5.95524	5.55257	5.49318	5.37453	7.94556	7.61672	6.17942	6.10014	1.2442991	0.037308
EDNRA	6.70994	7.51171	10.1719	10.1822	8.423	9.14298	10.7093	10.8103	1.1304333	0.037449
CTSO	6.85698	7.09646	5.48956	5.34313	7.55493	8.30893	5.79002	5.88754	1.1111626	0.03747
MXD1	10.1944	10.0584	5.69498	5.58663	10.4542	10.5963	6.73338	6.72746	1.0944026	0.037512
STX6	7.653	7.61865	7.46481	7.38765	8.73623	8.80424	7.75422	7.91512	1.1024329	0.037577
DOC2A	6.56586	6.76929	7.0637	7.17988	6.17335	6.49429	6.07706	6.27162	0.9070875	0.037578
C13orf31	7.52185	7.46965	5.11384	5.2351	9.41155	9.29203	5.89891	5.75681	1.1980573	0.037585
FBXO25	7.1247	7.16575	6.0711	6.41952	8.19782	8.36241	6.7399	6.63696	1.1178452	0.037706
ERO1LB	6.65374	6.25575	5.96006	6.15936	7.90423	7.29239	6.42748	6.50965	1.1240501	0.03774
AGRN	8.19842	7.80533	6.71588	6.69297	9.53162	9.3765	7.25623	7.17482	1.1334996	0.037992
AURKA	11.4238	11.618	10.3242	10.3621	9.56043	10.0144	9.74649	9.72405	0.8929126	0.038001
APOD	5.46392	5.48742	6.93813	7.08398	5.85104	6.14849	8.51373	8.1105	1.1461676	0.038027
BBC3	6.09495	5.87627	5.78877	5.43548	6.85226	6.80857	5.90728	6.12588	1.1077159	0.038252
ZWINT	10.1402	10.1081	9.30954	9.44887	7.89138	7.99392	8.66964	8.57426	0.8493205	0.038307
KSR1	6.08155	6.51988	7.41103	7.34538	7.86241	8.0538	7.92214	7.9963	1.163639	0.038338
SPAG5	10.3611	10.3468	9.44684	9.42389	7.87169	8.46384	8.59476	8.69125	0.8494872	0.038591
HSD17B7	7.37324	7.02437	7.0102	7.04108	8.25053	8.21086	7.41076	7.39296	1.0989923	0.038796
KYNU	4.47783	4.42754	4.51942	4.39613	5.02058	5.28726	4.79952	4.66825	1.1096851	0.038858
XCL1	6.38654	6.2804	4.50012	4.51925	7.57476	7.24756	4.96658	4.82246	1.13488	0.038909
CPEB4	9.25368	9.15322	5.67091	5.79551	9.46126	9.74572	6.81524	6.63622	1.093231	0.039093

UBE2C	10.2513	10.1758	8.95704	8.97009	7.9281	8.52611	8.36718	8.07042	0.8575797	0.039202
CEP152	8.02059	8.20316	7.3991	7.57015	6.3341	6.65064	6.93262	6.92257	0.8604472	0.039227
ANKRD20B	6.05883	6.3986	6.62129	6.71228	6.24853	7.24044	7.94824	7.86132	1.1359982	0.039273
LAPTM5	5.46047	5.28263	5.32788	5.30021	7.91386	7.21433	6.16644	6.01353	1.2778025	0.039312
CCNB1	10.528	10.7335	10.6568	10.7014	8.13618	8.83321	9.90503	9.94256	0.8638489	0.039324
UBL4A	7.57368	7.32743	6.75947	6.91006	7.32327	6.92466	5.74563	6.07608	0.9124626	0.039691
XKR4	6.34811	6.08749	5.42913	5.24624	7.29781	7.40469	5.7499	5.76854	1.1345668	0.039691
CXXC4	6.49455	6.15898	5.79096	5.68904	7.43863	7.47358	6.18075	6.12042	1.1276171	0.039942
SPINK5	5.76532	5.55891	5.21719	5.6437	6.58464	6.34002	5.80167	5.74764	1.1031705	0.040007
NCAPG2	10.6251	10.2861	9.34905	9.19219	8.39331	8.59465	8.42061	8.68827	0.8642517	0.040365
SGOL1	10.5035	10.5363	9.31768	9.51386	7.58665	8.0371	8.57396	8.40286	0.8176442	0.04085
ADAM23	8.34095	8.93519	7.64013	7.678	9.67754	10.3109	7.98862	8.24624	1.1113395	0.041003
MDC1	10.3788	10.5335	7.77848	7.89143	8.44856	8.89572	7.34771	7.07671	0.8684194	0.041114
DRP2	5.54751	5.61066	5.16919	5.42815	5.16685	4.84849	5.03102	4.7693	0.9108341	0.041177
ELL3	5.72829	5.74521	5.1541	5.39059	6.21051	6.72928	5.71142	5.59285	1.1010923	0.041205
KIAA1324	5.97982	6.30536	4.61933	4.53585	7.19395	7.31294	5.05309	4.85945	1.1389468	0.041328
TBC1D2	7.08241	6.54488	5.14251	4.93975	8.02736	7.66316	5.47249	5.30451	1.1163232	0.041422
TTL1	6.65796	6.82149	5.73832	5.84679	7.37113	7.74673	6.22312	5.99794	1.0907401	0.041479
NET1	8.15145	8.7471	8.5683	8.52596	6.22257	6.97387	7.91292	7.95541	0.855027	0.041551
TRIM22	4.87607	4.84139	4.80174	4.82407	7.43886	6.83778	5.67223	5.52637	1.3170079	0.041693
MAN2B1	9.13357	8.51998	7.56826	7.63472	10.3211	9.69219	8.09507	7.90891	1.0961982	0.041748
DLEU2	9.33875	8.21318	9.22316	9.20847	7.55908	6.55823	8.44579	8.81289	0.8719535	0.041772
NEK2	9.89986	9.99117	8.51734	8.42479	7.42368	7.88888	7.63003	7.76925	0.8338095	0.041795
ZC3H6	8.36151	7.48056	5.93737	5.71265	9.25674	8.98513	6.28068	6.34883	1.1229186	0.041886
MAGED2	8.07401	8.40775	7.90438	8.10405	9.55128	9.86724	8.47347	8.50595	1.1202748	0.041897
PCLO	6.74893	6.65015	5.37444	5.24923	8.08716	8.09949	5.83217	5.70469	1.1540523	0.042219
CFHR3	4.73566	4.627	4.81861	4.88837	4.80379	5.21953	5.3885	5.60101	1.1018997	0.042328
MND1	8.85433	8.97745	9.28301	9.26429	6.29144	6.79501	8.59765	8.36789	0.8260789	0.04245
C10orf32	5.96144	6.07324	6.37016	6.80831	6.77827	6.87831	7.11818	6.88171	1.0969066	0.04253
C17orf53	8.91975	8.88336	7.55156	7.66447	7.30526	7.30278	7.16882	6.98677	0.8711199	0.042837
C11orf82	9.376	9.53725	9.39804	9.58509	6.6526	6.93424	8.68182	8.56288	0.8135748	0.043022
GPR19	7.91159	8.71548	6.22152	6.08269	6.3517	6.90642	5.70557	5.49254	0.8453214	0.04306
TAF1A	8.10954	8.23806	7.43353	7.51208	6.96775	6.85906	7.09355	7.01361	0.8926528	0.043632
ID2	7.15709	7.32566	10.1784	10.0557	8.84679	9.23576	10.6367	10.7819	1.1378092	0.043661
NUF2	10.7074	10.7431	10.0682	10.0128	7.867	8.33519	9.2097	9.15925	0.8324077	0.043757
NINJ1	8.60486	8.5207	7.61903	7.82958	9.8157	10.129	8.31617	8.13937	1.1174572	0.043875

ANKRD32	7.47207	7.61888	6.95337	6.8446	6.21214	6.20903	6.36168	6.5508	0.8769331	0.0445
ZNF92	9.65726	9.45679	8.22412	8.31906	8.40148	8.22752	8.00228	7.69382	0.9065511	0.04483
BCL6	8.31008	8.14941	5.66717	5.67919	9.38574	9.5214	6.22792	5.95208	1.1180072	0.045358
ABCA1	5.79773	7.22592	4.94374	4.80489	8.09138	9.17917	5.48504	5.63864	1.2468769	0.045365
MFSD4	5.86075	5.55522	5.50677	5.44234	6.314	6.47474	5.70445	5.8725	1.0894524	0.045489
FBXO32	6.3442	6.72593	5.34589	5.28591	7.87716	8.9932	6.08743	5.87286	1.2163841	0.045651
GDF9	5.76705	6.163	5.10792	5.21182	6.66547	6.45855	5.88232	5.44735	1.0990526	0.04588
C9orf9	6.63197	6.95826	5.87353	5.81067	7.25039	8.04693	6.20162	6.13842	1.0934909	0.046074
TTK	10.3626	10.2849	10.2571	10.2763	7.57486	7.90361	9.40858	9.50041	0.8350342	0.046586
HIST1H2AH	6.74631	6.82031	6.27934	6.52776	4.99378	5.10894	5.94281	5.74454	0.8262039	0.046806
SLC25A21	5.37013	5.63159	6.7929	6.98937	6.33011	6.41146	7.12425	7.21558	1.0926973	0.046932
TEX15	8.62552	9.20574	9.97174	10.0105	7.2054	7.72149	9.42205	9.65628	0.8992878	0.047025
FAM64A	10.6998	9.97036	7.58881	7.7325	8.81534	8.09593	7.0304	7.14399	0.8636952	0.047394
CCL28	7.50933	8.028	6.09279	6.42585	6.8804	7.76498	5.63665	5.26294	0.9105003	0.047643
TSHZ1	7.04178	7.64276	6.02647	5.83498	6.11262	6.59502	5.70894	5.54574	0.9026719	0.047829
DQX1	4.80875	4.73692	4.74457	4.80676	7.51553	6.6109	5.60594	5.48246	1.3203556	0.047983
SCLT1	8.93552	8.97905	7.85329	7.95404	7.44434	7.59171	7.53112	7.38253	0.888138	0.048126
BACE1	7.99895	7.0693	5.49527	5.50386	9.28122	8.55906	5.97307	5.872	1.138793	0.049097
CCS	6.78694	6.47582	6.6595	6.58445	7.83489	7.37562	6.89358	6.95058	1.0961251	0.049099
PBXIP1	6.32698	6.17848	5.42159	5.36301	7.10356	7.07039	5.66822	5.61988	1.0932582	0.049416
FCGRT	7.51966	7.28167	8.30479	8.37814	8.69275	8.26338	8.73587	8.61797	1.0897499	0.049566