

**Table S4 mRNAs differentially expressed with CMH and their statistics**

gene	Moderate/severe CMH vs No CMH (definition A)				Moderate/severe CMH vs No CMH (definition B)		
	t-value	FC	p-value	FDR	t-value	FC	p-value
AIG1	4.667	1.355	0.000	0.225	2.548	1.213	0.014
LRRC8B	4.498	1.487	0.000	0.225	3.117	1.359	0.003
ROD1	4.410	1.538	0.000	0.225	3.515	1.461	0.001
OSBPL3	4.402	1.671	0.000	0.225	3.130	1.522	0.003
RC3H1	4.345	1.238	0.000	0.225	2.760	1.173	0.008
RQCD1	4.082	1.264	0.000	0.231	4.512	1.316	0.000
LIAS	4.030	1.193	0.000	0.231	2.254	1.124	0.029
USP46	3.884	1.270	0.000	0.231	2.608	1.193	0.012
MTF1	3.873	1.289	0.000	0.231	2.842	1.227	0.006
CSNK1A1	3.834	1.400	0.000	0.231	2.724	1.298	0.009
ZDHHC13	3.795	1.579	0.000	0.231	2.974	1.468	0.005
MARVELD2	3.728	1.554	0.000	0.231	3.236	1.478	0.002
FAM60A	3.722	1.627	0.001	0.231	3.614	1.637	0.001
NEBL	3.696	1.368	0.001	0.231	2.757	1.277	0.008
HNRNPF	3.654	1.229	0.001	0.231	2.967	1.210	0.005
WDR45L	3.638	1.239	0.001	0.231	3.640	1.256	0.001
ADAT1	3.629	1.204	0.001	0.231	3.165	1.200	0.003
SRI	3.617	1.534	0.001	0.231	2.702	1.435	0.009
SS18	3.614	1.253	0.001	0.231	3.093	1.241	0.003
TTC39C	3.584	1.325	0.001	0.231	3.012	1.283	0.004
LRBA	3.580	1.360	0.001	0.231	2.751	1.297	0.008
WDR51B	3.574	1.322	0.001	0.231	3.196	1.301	0.002
TMEM14B	3.571	1.396	0.001	0.231	2.837	1.322	0.007
KATNA1	3.570	1.338	0.001	0.231	3.588	1.365	0.001
NFX1	3.568	1.212	0.001	0.231	2.588	1.163	0.013
GTF2E2	3.562	1.297	0.001	0.231	2.936	1.259	0.005
USP6NL	3.559	1.248	0.001	0.231	3.508	1.257	0.001
POLR2H	3.547	1.287	0.001	0.231	2.527	1.220	0.015
AZIN1	3.530	1.604	0.001	0.231	2.158	1.398	0.036
FANCF	3.514	1.415	0.001	0.231	2.982	1.396	0.004
DYRK1A	3.490	1.232	0.001	0.231	2.094	1.155	0.041
C3orf52	3.477	1.530	0.001	0.231	2.461	1.385	0.017
SAT1	3.475	1.363	0.001	0.231	2.330	1.254	0.024
IDH3A	3.473	1.355	0.001	0.231	3.234	1.360	0.002
PRDM4	3.467	1.160	0.001	0.231	3.262	1.167	0.002
B3GNT5	3.457	1.816	0.001	0.231	2.796	1.691	0.007
FLJ11506	3.451	1.207	0.001	0.231	3.179	1.198	0.003
INPP4B	3.446	1.296	0.001	0.231	2.425	1.233	0.019
CSNK2A1	3.431	1.207	0.001	0.231	2.483	1.166	0.016
RAB28	3.429	1.395	0.001	0.231	2.087	1.264	0.042
KIAA0232	3.420	1.293	0.001	0.231	2.193	1.208	0.033
C11orf30	3.419	1.279	0.001	0.231	2.989	1.262	0.004
COMMD2	3.413	1.317	0.001	0.231	2.462	1.258	0.017
SNX24	3.374	1.284	0.001	0.231	2.618	1.237	0.012
MRP63	3.370	1.194	0.001	0.231	2.804	1.166	0.007

NUP153	3.366	1.244	0.001	0.231	3.146	1.242	0.003
WDR33	3.361	1.169	0.001	0.231	2.188	1.131	0.033
GFM2	3.351	1.407	0.002	0.231	2.452	1.313	0.018
SMG7	3.346	1.218	0.002	0.231	3.030	1.207	0.004
LOC100133333	3.337	1.560	0.002	0.231	2.090	1.360	0.042
CXorf39	3.336	1.174	0.002	0.231	3.430	1.183	0.001
C17orf75	3.334	1.289	0.002	0.231	2.310	1.221	0.025
H2AFY	3.327	1.190	0.002	0.231	2.993	1.178	0.004
LARP5	3.313	1.235	0.002	0.231	2.437	1.179	0.018
MAP3K7IP3	3.310	1.206	0.002	0.231	3.080	1.202	0.003
MAL2	3.308	1.583	0.002	0.231	3.160	1.538	0.003
DNAJC16	3.306	1.279	0.002	0.231	2.986	1.260	0.004
CDS1	3.298	1.512	0.002	0.231	2.138	1.349	0.037
PPP4R1	3.295	1.344	0.002	0.231	2.722	1.299	0.009
LCOR	3.291	1.256	0.002	0.231	2.961	1.246	0.005
DAPP1	3.290	1.491	0.002	0.231	2.009	1.312	0.050
DAZAP2	3.289	1.291	0.002	0.231	2.443	1.234	0.018
SEMA3A	3.276	1.793	0.002	0.234	2.891	1.756	0.006
TRIM37	3.270	1.236	0.002	0.237	2.944	1.230	0.005
UBL3	3.267	1.486	0.002	0.238	2.167	1.343	0.035
PGM2L1	3.264	1.460	0.002	0.238	2.635	1.388	0.011
CSTB	3.257	1.402	0.002	0.238	2.758	1.334	0.008
CNOT7	3.257	1.354	0.002	0.238	2.057	1.242	0.045
MRPS21	3.255	1.178	0.002	0.238	2.705	1.162	0.009
ERLIN1	3.254	1.415	0.002	0.238	3.540	1.451	0.001
LOC100133422	3.249	1.307	0.002	0.239	2.344	1.223	0.023
AMPD3	3.238	1.285	0.002	0.241	2.369	1.221	0.022
EIF5	3.227	1.265	0.002	0.242	2.251	1.197	0.029
MUC15	3.202	2.038	0.002	0.243	2.659	1.892	0.011
TC2N	3.198	1.400	0.002	0.243	2.100	1.277	0.041
MRPS31	3.193	1.258	0.002	0.243	2.385	1.218	0.021
USP42	3.192	1.147	0.002	0.243	3.559	1.175	0.001
PEX13	3.191	1.271	0.002	0.243	2.557	1.225	0.014
PIGU	3.182	1.335	0.003	0.243	3.588	1.390	0.001
DPY30	3.177	1.340	0.003	0.243	2.199	1.250	0.033
KIAA1279	3.174	1.297	0.003	0.243	2.876	1.279	0.006
CAST	3.174	1.288	0.003	0.243	2.891	1.283	0.006
C10orf57	3.160	1.567	0.003	0.243	2.208	1.402	0.032
TRIM2	3.160	1.312	0.003	0.243	2.155	1.223	0.036
LGALS3	3.158	1.297	0.003	0.243	2.765	1.266	0.008
RAB2B	3.151	1.174	0.003	0.243	2.047	1.133	0.046
C9orf6	3.148	1.378	0.003	0.243	2.375	1.305	0.021
DAP3	3.145	1.199	0.003	0.243	2.894	1.197	0.006
IPMK	3.131	1.361	0.003	0.244	2.319	1.283	0.025
ELF1	3.109	1.254	0.003	0.244	2.594	1.225	0.012
IMPA1	3.102	1.419	0.003	0.244	2.491	1.348	0.016
DOPEY1	3.099	1.232	0.003	0.244	2.118	1.181	0.039
TDP1	3.096	1.193	0.003	0.244	3.002	1.202	0.004
UTX	3.094	1.283	0.003	0.244	3.051	1.305	0.004
FYTTD1	3.091	1.281	0.003	0.244	2.521	1.250	0.015

ZNF410	3.087	1.189	0.003	0.244	3.364	1.223	0.001
IPP	3.087	1.346	0.003	0.244	2.678	1.313	0.010
CHD7	3.087	1.171	0.003	0.244	2.719	1.164	0.009
METTL5	3.083	1.354	0.003	0.244	2.072	1.249	0.043
MIS12	3.080	1.349	0.003	0.244	2.268	1.284	0.028
TMEM154	3.075	1.611	0.003	0.244	2.388	1.485	0.021
RPP40	3.067	1.237	0.003	0.244	2.363	1.187	0.022
STAM2	3.064	1.361	0.004	0.244	2.469	1.320	0.017
TAX1BP1	3.063	1.400	0.004	0.244	2.476	1.353	0.017
USP10	3.060	1.283	0.004	0.244	3.043	1.293	0.004
OXNAD1	3.060	1.174	0.004	0.244	2.444	1.160	0.018
ABHD6	3.055	1.373	0.004	0.244	2.185	1.277	0.034
CBFB	3.055	1.211	0.004	0.244	3.389	1.248	0.001
EPS8	3.055	1.243	0.004	0.244	2.353	1.198	0.023
VAPA	3.054	1.320	0.004	0.244	2.492	1.291	0.016
DNAJA4	3.046	1.540	0.004	0.244	2.114	1.406	0.040
C10orf46	3.044	1.120	0.004	0.244	2.544	1.106	0.014
KRAS	3.040	1.416	0.004	0.244	2.500	1.340	0.016
CCDC109A	3.036	1.300	0.004	0.244	3.694	1.358	0.001
ANK3	3.034	1.295	0.004	0.244	2.402	1.260	0.020
LZTFL1	3.032	1.669	0.004	0.244	2.083	1.495	0.042
MSL3	3.030	1.182	0.004	0.244	2.193	1.145	0.033
TAF5L	3.021	1.156	0.004	0.244	2.608	1.137	0.012
PCSK5	3.017	1.436	0.004	0.244	2.228	1.338	0.030
PARD6B	3.014	1.186	0.004	0.244	2.080	1.149	0.043
TOMM34	3.012	1.330	0.004	0.244	2.716	1.305	0.009
WDR26	3.002	1.249	0.004	0.244	2.504	1.241	0.016
VDAC3	2.999	1.330	0.004	0.244	2.262	1.265	0.028
RTCD1	2.999	1.229	0.004	0.244	2.030	1.170	0.048
C1orf25	2.996	1.453	0.004	0.244	2.215	1.358	0.031
CBLB	2.981	1.236	0.004	0.244	2.064	1.176	0.044
HIPK3	2.978	1.294	0.004	0.244	2.639	1.301	0.011
PLAC8	2.975	1.825	0.005	0.244	2.105	1.629	0.040
GLIPR2	2.973	1.331	0.005	0.244	2.170	1.261	0.035
FAM149B1	2.972	1.216	0.005	0.244	2.184	1.175	0.034
KIAA1012	2.972	1.315	0.005	0.244	2.771	1.320	0.008
BTBD9	2.970	1.273	0.005	0.244	2.222	1.225	0.031
PSD3	2.958	1.375	0.005	0.244	2.329	1.288	0.024
MRPL39	2.957	1.188	0.005	0.244	3.052	1.222	0.004
KIAA2018	2.955	1.286	0.005	0.244	2.417	1.249	0.019
TDRD7	2.954	1.240	0.005	0.244	2.408	1.211	0.020
SLC15A2	2.949	1.464	0.005	0.244	2.053	1.327	0.045
RALGPS2	2.944	1.366	0.005	0.244	3.050	1.394	0.004
ATXN2	2.942	1.248	0.005	0.244	2.260	1.210	0.028
ANXA2	2.942	1.344	0.005	0.244	3.003	1.352	0.004
SOD1	2.940	1.401	0.005	0.244	2.199	1.305	0.033
SFMBT1	2.929	1.154	0.005	0.244	2.069	1.125	0.044
MRPS10	2.928	1.302	0.005	0.244	2.608	1.286	0.012
QRSL1	2.911	1.196	0.005	0.244	2.234	1.159	0.030
USP9Y	2.910	1.316	0.005	0.244	2.010	1.229	0.050

ALPK1	2.906	1.271	0.005	0.244	2.029	1.207	0.048
USP38	2.898	1.249	0.006	0.244	2.251	1.198	0.029
RP2	2.898	1.211	0.006	0.244	2.064	1.156	0.044
C1orf110	2.894	2.249	0.006	0.244	2.301	1.992	0.026
MOCS3	2.891	1.304	0.006	0.244	2.451	1.263	0.018
JHDM1D	2.888	1.337	0.006	0.244	2.349	1.292	0.023
KIAA0317	2.882	1.170	0.006	0.244	2.214	1.138	0.031
KIAA1468	2.876	1.247	0.006	0.244	2.339	1.212	0.023
RNF2	2.874	1.296	0.006	0.244	2.778	1.305	0.008
CCNY	2.873	1.150	0.006	0.244	2.839	1.157	0.007
ASCC1	2.870	1.273	0.006	0.244	2.642	1.274	0.011
MYB	2.868	1.779	0.006	0.244	2.125	1.599	0.039
ZNF823	2.866	1.198	0.006	0.244	3.705	1.251	0.001
ASXL2	2.864	1.181	0.006	0.244	2.168	1.141	0.035
STRBP	2.863	1.499	0.006	0.244	2.405	1.439	0.020
IKZF2	2.861	1.374	0.006	0.244	2.934	1.376	0.005
DLAT	2.858	1.218	0.006	0.244	3.782	1.306	0.000
EZR	2.856	1.458	0.006	0.244	2.680	1.476	0.010
RNF6	2.853	1.296	0.006	0.244	2.865	1.314	0.006
EIF4G2	2.847	1.213	0.006	0.244	3.046	1.230	0.004
TRIP4	2.845	1.247	0.006	0.244	3.037	1.276	0.004
PIGF	2.844	1.457	0.006	0.244	2.214	1.365	0.031
ZNF33B	2.843	1.363	0.006	0.244	2.038	1.277	0.047
SKP2	2.840	1.220	0.007	0.244	2.179	1.174	0.034
OMA1	2.835	1.398	0.007	0.244	2.022	1.300	0.049
MED6	2.830	1.268	0.007	0.244	2.119	1.210	0.039
PBRM1	2.827	1.213	0.007	0.244	2.761	1.219	0.008
ADIPOR1	2.820	1.240	0.007	0.244	2.063	1.190	0.044
ECHDC1	2.819	1.328	0.007	0.244	2.889	1.352	0.006
N4BP1	2.815	1.193	0.007	0.244	2.602	1.172	0.012
THRAP3	2.814	1.199	0.007	0.244	2.192	1.166	0.033
WDR47	2.809	1.335	0.007	0.244	2.143	1.266	0.037
VTA1	2.808	1.356	0.007	0.244	2.990	1.393	0.004
HECTD1	2.806	1.256	0.007	0.244	2.738	1.275	0.009
TMEM131	2.805	1.254	0.007	0.244	2.226	1.213	0.031
NUFIP2	2.804	1.213	0.007	0.244	2.830	1.233	0.007
DHRS9	2.793	1.962	0.007	0.244	2.442	1.794	0.018
CNOT1	2.791	1.222	0.007	0.244	2.928	1.243	0.005
TTC39B	2.787	1.325	0.007	0.244	2.427	1.288	0.019
GOLPH3L	2.786	1.314	0.008	0.244	2.457	1.281	0.018
C2orf86	2.780	1.419	0.008	0.244	2.094	1.347	0.041
CCDC138	2.776	1.448	0.008	0.244	2.330	1.412	0.024
YWHAE	2.775	1.300	0.008	0.244	2.630	1.300	0.011
HSPA4L	2.774	1.424	0.008	0.244	3.142	1.490	0.003
HSBP1	2.773	1.261	0.008	0.244	2.255	1.226	0.029
INADL	2.771	1.184	0.008	0.244	2.816	1.202	0.007
RICS	2.769	1.357	0.008	0.244	2.721	1.331	0.009
AFTPH	2.766	1.154	0.008	0.244	2.637	1.153	0.011
GCLC	2.764	1.669	0.008	0.244	3.277	1.744	0.002
CBLL1	2.758	1.171	0.008	0.244	3.174	1.200	0.003

TMEM220	2.757	1.206	0.008	0.244	2.013	1.162	0.050
NQO1	2.753	1.956	0.008	0.244	2.081	1.613	0.043
ABII	2.751	1.323	0.008	0.244	2.353	1.292	0.023
RAB11A	2.750	1.305	0.008	0.244	2.645	1.299	0.011
CHMP5	2.750	1.339	0.008	0.244	2.029	1.271	0.048
NUPL1	2.750	1.190	0.008	0.244	2.783	1.211	0.008
APTX	2.749	1.132	0.008	0.244	2.229	1.120	0.030
MLLT4	2.747	1.344	0.008	0.244	2.118	1.294	0.039
MUDENG	2.746	1.371	0.008	0.244	2.025	1.292	0.048
TMOD3	2.745	1.297	0.008	0.244	2.357	1.254	0.022
FRK	2.743	1.318	0.008	0.244	2.333	1.264	0.024
MAK10	2.742	1.209	0.008	0.244	2.607	1.214	0.012
ZNF607	2.741	1.266	0.008	0.244	2.108	1.227	0.040
IFT52	2.735	1.296	0.009	0.244	2.321	1.278	0.024
ARID2	2.734	1.223	0.009	0.244	2.313	1.201	0.025
SEC23IP	2.729	1.207	0.009	0.244	2.652	1.197	0.011
TGFA	2.724	1.281	0.009	0.244	2.538	1.254	0.014
EVI1	2.723	1.271	0.009	0.244	2.198	1.223	0.033
PDIK1L	2.716	1.202	0.009	0.244	2.901	1.218	0.006
TET2	2.715	1.193	0.009	0.244	2.191	1.179	0.033
BTBD1	2.714	1.204	0.009	0.244	2.150	1.167	0.036
PTGR1	2.713	1.500	0.009	0.244	3.403	1.610	0.001
RMND5A	2.711	1.351	0.009	0.244	2.266	1.311	0.028
IVNS1ABP	2.710	1.223	0.009	0.244	3.146	1.275	0.003
HEBP2	2.710	1.169	0.009	0.244	2.120	1.134	0.039
KLHDC10	2.706	1.179	0.009	0.244	2.244	1.161	0.029
TRIP13	2.705	1.245	0.009	0.244	2.725	1.256	0.009
BAZ1A	2.699	1.242	0.009	0.245	2.951	1.266	0.005
TTC9C	2.697	1.120	0.010	0.245	2.187	1.103	0.033
CHMP2B	2.695	1.397	0.010	0.245	2.210	1.351	0.032
ZNF398	2.691	1.132	0.010	0.245	3.295	1.166	0.002
POLR1C	2.689	1.169	0.010	0.245	2.497	1.166	0.016
BRP44	2.684	1.227	0.010	0.245	2.114	1.187	0.040
S100A11	2.683	1.303	0.010	0.245	2.011	1.229	0.050
LOC552889	2.683	1.197	0.010	0.245	2.283	1.190	0.027
MORF4L2	2.680	1.308	0.010	0.245	2.805	1.346	0.007
EXPH5	2.679	1.391	0.010	0.245	2.742	1.413	0.008
LASS6	2.679	1.320	0.010	0.245	2.103	1.268	0.041
ZNF561	2.679	1.206	0.010	0.245	3.067	1.243	0.003
NBEAL1	2.679	1.268	0.010	0.245	2.702	1.300	0.009
HCCS	2.678	1.254	0.010	0.245	2.831	1.262	0.007
BAIAP2L1	2.667	1.390	0.010	0.247	2.010	1.308	0.050
ANXA4	2.658	1.306	0.011	0.248	2.078	1.265	0.043
SGMS2	2.658	1.395	0.011	0.248	2.382	1.361	0.021
EIF4G3	2.657	1.219	0.011	0.248	2.322	1.192	0.024
FBXO28	2.657	1.230	0.011	0.248	2.696	1.247	0.010
CNOT6	2.656	1.229	0.011	0.248	2.332	1.213	0.024
DHX32	2.655	1.275	0.011	0.248	2.179	1.238	0.034
CLIP1	2.654	1.214	0.011	0.248	2.939	1.243	0.005
SAPS3	2.654	1.138	0.011	0.248	2.317	1.127	0.025

POLR3C	2.650	1.163	0.011	0.248	2.958	1.184	0.005
OTUD4	2.643	1.358	0.011	0.248	2.184	1.329	0.034
ANXA2P2	2.642	1.288	0.011	0.248	2.515	1.273	0.015
SPAG1	2.640	1.569	0.011	0.248	2.025	1.465	0.048
TLE4	2.639	1.163	0.011	0.248	2.271	1.140	0.028
TTLL5	2.635	1.351	0.011	0.248	2.153	1.306	0.036
PRKAR2A	2.634	1.153	0.011	0.248	2.704	1.162	0.009
NEK4	2.630	1.262	0.011	0.248	2.483	1.281	0.016
SLMO2	2.627	1.334	0.011	0.248	2.879	1.367	0.006
GSK3B	2.627	1.184	0.011	0.248	2.812	1.203	0.007
ZNF507	2.626	1.221	0.011	0.248	2.147	1.201	0.037
DDX3X	2.625	1.207	0.011	0.248	2.759	1.235	0.008
SECISBP2	2.624	1.174	0.012	0.248	2.442	1.184	0.018
PAPOLA	2.622	1.265	0.012	0.248	2.126	1.236	0.038
MYO6	2.620	1.246	0.012	0.248	2.483	1.231	0.016
PDCD6IP	2.619	1.181	0.012	0.248	2.266	1.166	0.028
VRK2	2.618	1.253	0.012	0.248	2.804	1.291	0.007
C1orf58	2.616	1.309	0.012	0.248	2.466	1.297	0.017
NXT2	2.615	1.259	0.012	0.248	3.511	1.345	0.001
TESC	-2.614	-1.497	0.012	0.248	-2.793	-1.556	0.007
ZNF775	-2.615	-1.167	0.012	0.248	-2.377	-1.162	0.021
ADAD2	-2.616	-1.206	0.012	0.248	-2.114	-1.183	0.039
MRGPRF	-2.617	-1.291	0.012	0.248	-2.375	-1.262	0.021
VASN	-2.624	-1.189	0.011	0.248	-3.115	-1.240	0.003
PLXND1	-2.624	-1.375	0.011	0.248	-3.365	-1.457	0.001
NAPSA	-2.625	-1.202	0.011	0.248	-2.605	-1.214	0.012
C1QTNF5	-2.625	-1.212	0.011	0.248	-3.208	-1.267	0.002
LOC100132755	-2.626	-1.313	0.011	0.248	-2.181	-1.279	0.034
FAM70B	-2.629	-1.264	0.011	0.248	-3.429	-1.354	0.001
PARVB	-2.633	-1.180	0.011	0.248	-3.556	-1.252	0.001
SLC26A3	-2.634	-1.161	0.011	0.248	-2.181	-1.147	0.034
INMT	-2.635	-1.352	0.011	0.248	-2.514	-1.320	0.015
CDR2L	-2.639	-1.253	0.011	0.248	-2.129	-1.216	0.038
MYO7B	-2.641	-1.143	0.011	0.248	-2.548	-1.153	0.014
PTGER1	-2.645	-1.229	0.011	0.248	-2.355	-1.209	0.023
GPR124	-2.647	-1.301	0.011	0.248	-2.751	-1.312	0.008
EXD3	-2.650	-1.164	0.011	0.248	-2.068	-1.140	0.044
EMILIN3	-2.650	-1.178	0.011	0.248	-2.373	-1.174	0.022
NRTN	-2.650	-1.207	0.011	0.248	-2.544	-1.211	0.014
LCN10	-2.652	-1.319	0.011	0.248	-2.010	-1.240	0.050
TAL1	-2.654	-1.218	0.011	0.248	-2.643	-1.222	0.011
TMEM38A	-2.654	-1.165	0.011	0.248	-2.769	-1.185	0.008
GNB5	-2.658	-1.113	0.011	0.248	-2.097	-1.090	0.041
FLJ42957	-2.662	-1.194	0.010	0.248	-2.665	-1.223	0.010
FAM9C	-2.664	-1.166	0.010	0.247	-2.043	-1.146	0.046
LPAR4	-2.665	-1.190	0.010	0.247	-2.220	-1.161	0.031
LOC100133397	-2.665	-1.215	0.010	0.247	-2.043	-1.174	0.046
NFATC4	-2.669	-1.241	0.010	0.247	-2.214	-1.213	0.031
TUBB6	-2.671	-1.202	0.010	0.247	-2.473	-1.198	0.017
PTMS	-2.672	-1.212	0.010	0.247	-2.381	-1.211	0.021

FAM69B	-2.677	-1.191	0.010	0.245	-2.962	-1.224	0.005
KLHL34	-2.678	-1.170	0.010	0.245	-2.132	-1.148	0.038
NUP210L	-2.680	-1.228	0.010	0.245	-2.531	-1.223	0.015
NPFFR1	-2.685	-1.271	0.010	0.245	-2.149	-1.234	0.037
SNORD114-3	-2.685	-1.500	0.010	0.245	-2.467	-1.464	0.017
SH3BP2	-2.690	-1.231	0.010	0.245	-3.186	-1.270	0.002
C11orf20	-2.691	-1.393	0.010	0.245	-2.120	-1.328	0.039
GDNF	-2.695	-1.165	0.010	0.245	-2.148	-1.146	0.037
IL2RA	-2.699	-1.213	0.009	0.245	-2.408	-1.189	0.020
FEZ1	-2.701	-1.284	0.009	0.244	-2.558	-1.282	0.014
DSCR6	-2.702	-1.216	0.009	0.244	-2.571	-1.220	0.013
PCBP4	-2.706	-1.216	0.009	0.244	-2.133	-1.173	0.038
EBF3	-2.706	-1.307	0.009	0.244	-3.397	-1.363	0.001
SNORD116-25	-2.707	-1.262	0.009	0.244	-2.292	-1.219	0.026
SRY	-2.708	-1.124	0.009	0.244	-2.629	-1.131	0.011
CHRD	-2.710	-1.175	0.009	0.244	-2.274	-1.160	0.027
TTYH1	-2.711	-1.346	0.009	0.244	-2.581	-1.356	0.013
LRRN3	-2.713	-1.159	0.009	0.244	-2.030	-1.132	0.048
SEMA3G	-2.713	-1.247	0.009	0.244	-2.918	-1.280	0.005
DHH	-2.716	-1.223	0.009	0.244	-2.437	-1.216	0.018
ZNF358	-2.721	-1.152	0.009	0.244	-2.598	-1.149	0.012
RCOR2	-2.722	-1.207	0.009	0.244	-2.231	-1.189	0.030
FAM43A	-2.726	-1.223	0.009	0.244	-2.175	-1.187	0.034
SMTN	-2.727	-1.431	0.009	0.244	-2.424	-1.385	0.019
TNFRSF18	-2.728	-1.208	0.009	0.244	-2.075	-1.174	0.043
ROBO4	-2.729	-1.245	0.009	0.244	-3.132	-1.278	0.003
SLC45A1	-2.730	-1.221	0.009	0.244	-2.036	-1.177	0.047
UAP1L1	-2.730	-1.195	0.009	0.244	-2.905	-1.222	0.005
IRF2BP1	-2.734	-1.147	0.009	0.244	-2.513	-1.144	0.015
FBXO43	-2.737	-1.149	0.009	0.244	-2.131	-1.128	0.038
PKHD1L1	-2.739	-1.285	0.009	0.244	-2.339	-1.264	0.023
SPNS2	-2.752	-1.288	0.008	0.244	-2.146	-1.243	0.037
CCDC50	-2.757	-1.142	0.008	0.244	-2.623	-1.130	0.012
SPTB	-2.757	-1.172	0.008	0.244	-2.634	-1.174	0.011
COL6A1	-2.757	-1.449	0.008	0.244	-2.476	-1.404	0.017
SERPINA3	-2.760	-3.099	0.008	0.244	-2.079	-2.488	0.043
EGFL7	-2.763	-1.280	0.008	0.244	-3.411	-1.344	0.001
LOC100133142	-2.765	-1.271	0.008	0.244	-2.416	-1.265	0.019
HEXDC	-2.767	-1.158	0.008	0.244	-2.667	-1.158	0.010
UNC45B	-2.767	-1.220	0.008	0.244	-2.401	-1.188	0.020
KLHL4	-2.772	-1.183	0.008	0.244	-2.771	-1.189	0.008
SPSB4	-2.773	-1.232	0.008	0.244	-2.040	-1.190	0.047
EBF1	-2.780	-1.553	0.008	0.244	-2.551	-1.495	0.014
LOC100130518	-2.781	-1.173	0.008	0.244	-2.149	-1.146	0.036
SNTA1	-2.782	-1.207	0.008	0.244	-2.307	-1.192	0.025
C9orf4	-2.783	-1.193	0.008	0.244	-3.379	-1.241	0.001
DAAM2	-2.786	-1.418	0.008	0.244	-2.203	-1.324	0.032
HSD17B14	-2.787	-1.280	0.007	0.244	-2.412	-1.234	0.020
SCARNA4	-2.788	-1.297	0.007	0.244	-2.805	-1.299	0.007
DBN1	-2.793	-1.232	0.007	0.244	-2.151	-1.190	0.036

ACTRT2	-2.794	-1.209	0.007	0.244	-2.353	-1.195	0.023
PLVAP	-2.796	-1.440	0.007	0.244	-2.745	-1.419	0.008
MRC2	-2.796	-1.291	0.007	0.244	-2.031	-1.221	0.048
SGK493	-2.806	-1.571	0.007	0.244	-2.284	-1.471	0.027
FLJ46838	-2.807	-1.131	0.007	0.244	-2.591	-1.130	0.012
GRASP	-2.809	-1.295	0.007	0.244	-3.290	-1.338	0.002
MN1	-2.810	-1.218	0.007	0.244	-2.732	-1.219	0.009
GEFT	-2.812	-1.443	0.007	0.244	-2.304	-1.354	0.025
EFEMP2	-2.813	-1.302	0.007	0.244	-2.618	-1.272	0.012
PCP2	-2.814	-1.202	0.007	0.244	-2.953	-1.234	0.005
MPP2	-2.815	-1.171	0.007	0.244	-2.167	-1.143	0.035
CLEC14A	-2.820	-1.415	0.007	0.244	-3.219	-1.449	0.002
EDA	-2.821	-1.161	0.007	0.244	-2.748	-1.163	0.008
ENPEP	-2.822	-1.212	0.007	0.244	-3.186	-1.236	0.002
GLI1	-2.824	-1.213	0.007	0.244	-2.963	-1.242	0.005
CRTC1	-2.825	-1.186	0.007	0.244	-2.758	-1.193	0.008
SMARCD3	-2.829	-1.193	0.007	0.244	-2.843	-1.199	0.006
SLC17A7	-2.832	-1.203	0.007	0.244	-2.193	-1.167	0.033
LOC124220	-2.837	-2.199	0.007	0.244	-2.062	-1.913	0.044
CD22	-2.838	-1.380	0.007	0.244	-2.304	-1.324	0.025
OPRK1	-2.839	-1.157	0.007	0.244	-2.786	-1.167	0.008
FBXO44	-2.840	-1.175	0.007	0.244	-2.742	-1.174	0.008
REN	-2.844	-1.157	0.006	0.244	-2.256	-1.142	0.028
ProSAPiP1	-2.844	-1.261	0.006	0.244	-2.126	-1.204	0.038
SNORA20	-2.844	-1.455	0.006	0.244	-2.123	-1.320	0.039
GGTLC1	-2.846	-1.145	0.006	0.244	-3.238	-1.177	0.002
LMCD1	-2.849	-1.376	0.006	0.244	-2.773	-1.345	0.008
NPPB	-2.854	-1.219	0.006	0.244	-2.824	-1.230	0.007
SLC6A17	-2.856	-1.193	0.006	0.244	-2.056	-1.158	0.045
KIAA0427	-2.856	-1.193	0.006	0.244	-2.072	-1.146	0.043
KIAA1045	-2.861	-1.186	0.006	0.244	-2.473	-1.175	0.017
ADAMTSL1	-2.862	-1.247	0.006	0.244	-2.182	-1.190	0.034
PGF	-2.866	-1.217	0.006	0.244	-2.393	-1.200	0.021
RAPGEF3	-2.867	-1.351	0.006	0.244	-3.671	-1.434	0.001
REXO1	-2.873	-1.200	0.006	0.244	-2.633	-1.202	0.011
GALNTL1	-2.876	-1.376	0.006	0.244	-3.391	-1.466	0.001
NENF	-2.878	-1.174	0.006	0.244	-2.121	-1.137	0.039
ADRA2C	-2.879	-1.183	0.006	0.244	-2.954	-1.190	0.005
NRGN	-2.880	-1.536	0.006	0.244	-2.085	-1.387	0.042
TUBB2B	-2.884	-1.263	0.006	0.244	-2.037	-1.194	0.047
TRIM54	-2.891	-1.166	0.006	0.244	-2.943	-1.189	0.005
VWA1	-2.895	-1.223	0.006	0.244	-2.594	-1.211	0.012
LRRC4B	-2.895	-1.224	0.006	0.244	-2.010	-1.170	0.050
CLTCL1	-2.897	-1.131	0.006	0.244	-2.177	-1.100	0.034
RASL10B	-2.898	-1.221	0.006	0.244	-2.677	-1.217	0.010
DLK2	-2.898	-1.232	0.006	0.244	-2.063	-1.174	0.044
TMEM150	-2.901	-1.210	0.006	0.244	-2.040	-1.153	0.047
NPDC1	-2.903	-1.366	0.005	0.244	-2.409	-1.335	0.020
CRH	-2.906	-1.161	0.005	0.244	-2.205	-1.138	0.032
SLC26A10	-2.908	-1.296	0.005	0.244	-3.262	-1.335	0.002



DGKG	-2.909	-1.283	0.005	0.244	-2.885	-1.293	0.006
OR2B11	-2.913	-1.231	0.005	0.244	-2.248	-1.192	0.029
PKN3	-2.914	-1.253	0.005	0.244	-2.912	-1.262	0.005
ART4	-2.915	-1.205	0.005	0.244	-2.365	-1.181	0.022
METTL7B	-2.918	-1.210	0.005	0.244	-2.726	-1.208	0.009
USHBP1	-2.925	-1.162	0.005	0.244	-2.436	-1.154	0.018
RNASE1	-2.927	-1.574	0.005	0.244	-2.612	-1.522	0.012
CLEC11A	-2.927	-1.234	0.005	0.244	-3.236	-1.282	0.002
FAM65A	-2.930	-1.234	0.005	0.244	-2.473	-1.200	0.017
ITGA7	-2.930	-1.480	0.005	0.244	-3.814	-1.589	0.000
ADAMTS10	-2.932	-1.244	0.005	0.244	-3.176	-1.254	0.003
GNAO1	-2.932	-1.283	0.005	0.244	-2.137	-1.221	0.037
NFE2	-2.937	-1.242	0.005	0.244	-2.654	-1.219	0.011
CLDN11	-2.939	-1.291	0.005	0.244	-3.229	-1.340	0.002
BLOC1S3	-2.940	-1.229	0.005	0.244	-2.526	-1.204	0.015
A1BG	-2.954	-1.197	0.005	0.244	-2.225	-1.160	0.031
ADCY1	-2.956	-1.147	0.005	0.244	-2.816	-1.146	0.007
HAS1	-2.957	-1.204	0.005	0.244	-3.122	-1.234	0.003
COL4A1	-2.959	-1.477	0.005	0.244	-2.896	-1.473	0.006
HOXC12	-2.959	-1.219	0.005	0.244	-2.446	-1.194	0.018
TGFB1I1	-2.961	-1.299	0.005	0.244	-3.365	-1.333	0.001
ARL10	-2.961	-1.230	0.005	0.244	-2.142	-1.177	0.037
JPH2	-2.970	-1.257	0.005	0.244	-2.607	-1.235	0.012
C9orf142	-2.973	-1.189	0.005	0.244	-2.069	-1.139	0.044
CDX1	-2.977	-1.187	0.004	0.244	-2.527	-1.172	0.015
EPHB1	-2.978	-1.220	0.004	0.244	-3.001	-1.233	0.004
TRPV2	-2.983	-1.263	0.004	0.244	-2.655	-1.231	0.011
HOXD4	-2.988	-1.268	0.004	0.244	-2.564	-1.249	0.013
FAM71A	-2.992	-1.161	0.004	0.244	-2.790	-1.158	0.007
SPEG	-2.993	-1.244	0.004	0.244	-2.993	-1.258	0.004
DLX2	-2.993	-1.223	0.004	0.244	-2.014	-1.171	0.049
THY1	-2.993	-1.435	0.004	0.244	-3.574	-1.550	0.001
MAP3K11	-2.996	-1.233	0.004	0.244	-2.705	-1.217	0.009
LCN6	-3.003	-1.312	0.004	0.244	-2.397	-1.245	0.020
PITPNM2	-3.005	-1.252	0.004	0.244	-2.048	-1.185	0.046
SELM	-3.005	-1.408	0.004	0.244	-2.397	-1.318	0.020
SEMA6B	-3.007	-1.276	0.004	0.244	-2.643	-1.252	0.011
PTRF	-3.008	-1.514	0.004	0.244	-2.900	-1.471	0.006
PDLIM7	-3.018	-1.334	0.004	0.244	-2.727	-1.308	0.009
CLEC3B	-3.019	-1.255	0.004	0.244	-3.526	-1.309	0.001
SPTA1	-3.022	-1.153	0.004	0.244	-2.358	-1.129	0.022
GDF11	-3.025	-1.290	0.004	0.244	-2.779	-1.286	0.008
FBXO10	-3.027	-1.176	0.004	0.244	-2.889	-1.186	0.006
HES3	-3.028	-1.251	0.004	0.244	-2.921	-1.254	0.005
CRHBP	-3.044	-1.202	0.004	0.244	-2.116	-1.150	0.039
HOXB6	-3.062	-1.248	0.004	0.244	-2.098	-1.178	0.041
RAMP1	-3.063	-1.244	0.004	0.244	-2.487	-1.209	0.016
WFDC1	-3.063	-1.304	0.004	0.244	-3.608	-1.374	0.001
RPL23AP71	-3.064	-1.241	0.004	0.244	-2.166	-1.184	0.035
COL4A2	-3.066	-1.413	0.003	0.244	-3.547	-1.483	0.001

ADRA1A	-3.072	-1.241	0.003	0.244	-2.302	-1.201	0.026
PNCK	-3.082	-1.223	0.003	0.244	-2.639	-1.210	0.011
MAPK11	-3.083	-1.230	0.003	0.244	-3.402	-1.264	0.001
FSTL3	-3.084	-1.270	0.003	0.244	-2.618	-1.225	0.012
DYSF	-3.089	-1.353	0.003	0.244	-4.036	-1.434	0.000
CCDC9	-3.092	-1.233	0.003	0.244	-2.047	-1.169	0.046
SETD1B	-3.093	-1.185	0.003	0.244	-2.470	-1.162	0.017
PLAC9	-3.093	-1.296	0.003	0.244	-2.313	-1.229	0.025
PP13004	-3.097	-1.246	0.003	0.244	-2.615	-1.231	0.012
SPHK1	-3.098	-1.408	0.003	0.244	-2.603	-1.356	0.012
SHROOM4	-3.102	-1.213	0.003	0.244	-2.668	-1.176	0.010
PLXNB3	-3.103	-1.295	0.003	0.244	-2.717	-1.296	0.009
SNX15	-3.108	-1.189	0.003	0.244	-2.832	-1.186	0.007
C8orf82	-3.119	-1.209	0.003	0.244	-2.781	-1.198	0.008
NME4	-3.131	-1.197	0.003	0.244	-2.027	-1.137	0.048
GAL3ST4	-3.136	-1.226	0.003	0.243	-3.079	-1.241	0.003
CARD10	-3.138	-1.228	0.003	0.243	-2.177	-1.174	0.034
TBC1D4	-3.140	-1.228	0.003	0.243	-2.124	-1.162	0.039
COPZ2	-3.142	-1.265	0.003	0.243	-3.678	-1.320	0.001
PLK5P	-3.143	-1.204	0.003	0.243	-3.472	-1.235	0.001
GGT5	-3.143	-1.321	0.003	0.243	-3.736	-1.372	0.000
LEPRE1	-3.145	-1.188	0.003	0.243	-2.762	-1.178	0.008
SYDE1	-3.151	-1.270	0.003	0.243	-2.159	-1.197	0.036
CDH23	-3.151	-1.221	0.003	0.243	-2.186	-1.148	0.034
CCDC141	-3.157	-1.241	0.003	0.243	-2.794	-1.224	0.007
DPF3	-3.160	-1.248	0.003	0.243	-2.487	-1.208	0.016
C20orf160	-3.161	-1.232	0.003	0.243	-2.905	-1.219	0.005
COL8A2	-3.168	-1.211	0.003	0.243	-2.411	-1.179	0.020
PPP1R12C	-3.170	-1.246	0.003	0.243	-2.149	-1.182	0.037
FRAT1	-3.172	-1.226	0.003	0.243	-2.162	-1.165	0.035
F2RL3	-3.189	-1.250	0.002	0.243	-2.671	-1.228	0.010
CHST10	-3.195	-1.236	0.002	0.243	-2.597	-1.193	0.012
FLT4	-3.202	-1.254	0.002	0.243	-3.553	-1.284	0.001
ACVRL1	-3.204	-1.311	0.002	0.243	-2.941	-1.292	0.005
FAM101B	-3.223	-1.283	0.002	0.243	-2.960	-1.275	0.005
EVX2	-3.229	-1.236	0.002	0.242	-2.280	-1.193	0.027
RASL12	-3.233	-1.345	0.002	0.242	-2.558	-1.278	0.014
ARPP-21	-3.242	-1.160	0.002	0.239	-2.014	-1.108	0.049
COL6A2	-3.252	-1.343	0.002	0.238	-3.040	-1.330	0.004
TLN2	-3.283	-1.278	0.002	0.233	-2.477	-1.218	0.017
UNKL	-3.295	-1.213	0.002	0.231	-3.299	-1.224	0.002
SLC22A17	-3.304	-1.339	0.002	0.231	-2.698	-1.278	0.009
TBX2	-3.311	-1.295	0.002	0.231	-2.907	-1.254	0.005
GPD1	-3.312	-1.393	0.002	0.231	-2.222	-1.289	0.031
CNTNAP1	-3.330	-1.230	0.002	0.231	-2.921	-1.218	0.005
IL34	-3.338	-1.213	0.002	0.231	-2.429	-1.170	0.019
TNFRSF10D	-3.360	-1.241	0.001	0.231	-2.861	-1.223	0.006
ST3GAL2	-3.361	-1.277	0.001	0.231	-3.817	-1.308	0.000
LOC375295	-3.376	-1.251	0.001	0.231	-3.003	-1.232	0.004
MEP1B	-3.391	-1.188	0.001	0.231	-3.247	-1.197	0.002

ADAM33	-3.411	-1.254	0.001	0.231	-3.175	-1.242	0.003
SHANK3	-3.412	-1.406	0.001	0.231	-3.982	-1.469	0.000
RASIP1	-3.419	-1.337	0.001	0.231	-3.612	-1.369	0.001
DOK1	-3.430	-1.288	0.001	0.231	-2.829	-1.252	0.007
TPO	-3.456	-1.374	0.001	0.231	-3.408	-1.385	0.001
SLC25A42	-3.457	-1.213	0.001	0.231	-3.371	-1.221	0.001
COL5A1	-3.461	-1.285	0.001	0.231	-3.790	-1.323	0.000
SEP04	-3.461	-1.243	0.001	0.231	-2.815	-1.197	0.007
LIX1L	-3.467	-1.242	0.001	0.231	-2.818	-1.198	0.007
NES	-3.473	-1.309	0.001	0.231	-2.571	-1.234	0.013
FBRSL1	-3.473	-1.217	0.001	0.231	-2.697	-1.184	0.010
RUSC2	-3.496	-1.249	0.001	0.231	-3.237	-1.237	0.002
REG1A	-3.501	-1.174	0.001	0.231	-2.354	-1.128	0.023
FADS3	-3.503	-1.328	0.001	0.231	-2.115	-1.204	0.039
GUCA1A	-3.504	-1.242	0.001	0.231	-2.346	-1.175	0.023
FLJ10404	-3.525	-1.169	0.001	0.231	-2.672	-1.140	0.010
LOC100133404	-3.536	-1.379	0.001	0.231	-3.358	-1.382	0.002
ACHE	-3.536	-1.234	0.001	0.231	-3.286	-1.229	0.002
FKBP10	-3.541	-1.287	0.001	0.231	-2.738	-1.229	0.009
XKR6	-3.615	-1.223	0.001	0.231	-2.324	-1.170	0.024
LOC401097	-3.616	-1.175	0.001	0.231	-3.211	-1.171	0.002
SLC2A6	-3.653	-1.377	0.001	0.231	-2.817	-1.318	0.007
TRAM1L1	-3.669	-1.198	0.001	0.231	-2.458	-1.149	0.017
SNAPC2	-3.677	-1.231	0.001	0.231	-2.684	-1.197	0.010
LSM11	-3.682	-1.177	0.001	0.231	-3.324	-1.173	0.002
PEAR1	-3.780	-1.361	0.000	0.231	-4.382	-1.427	0.000
PDE9A	-3.784	-1.273	0.000	0.231	-2.762	-1.217	0.008
RASGRP2	-3.795	-1.322	0.000	0.231	-3.599	-1.311	0.001
ARHGEF15	-3.801	-1.284	0.000	0.231	-2.956	-1.229	0.005
SLCO4A1	-3.822	-1.355	0.000	0.231	-2.288	-1.226	0.026
SCARNA16	-3.842	-1.347	0.000	0.231	-3.215	-1.303	0.002
RGS11	-3.852	-1.303	0.000	0.231	-3.830	-1.328	0.000
HTRA1	-3.867	-1.516	0.000	0.231	-2.372	-1.330	0.022
EDN1	-3.884	-1.357	0.000	0.231	-2.098	-1.207	0.041
C15orf60	-3.916	-1.223	0.000	0.231	-2.902	-1.180	0.005
PDGFB	-3.929	-1.320	0.000	0.231	-3.030	-1.262	0.004
BTN2A3	-3.961	-1.355	0.000	0.231	-2.889	-1.296	0.006
LIMS2	-4.010	-1.326	0.000	0.231	-4.282	-1.342	0.000
WTIP	-4.039	-1.267	0.000	0.231	-2.435	-1.167	0.018
RPL23AP64	-4.075	-1.183	0.000	0.231	-2.915	-1.142	0.005
C1QTNF1	-4.222	-1.328	0.000	0.225	-3.233	-1.270	0.002
FAM115A	-4.223	-1.386	0.000	0.225	-2.518	-1.266	0.015
NKD1	-4.249	-1.312	0.000	0.225	-2.552	-1.197	0.014
LOC100133388	-4.265	-1.306	0.000	0.225	-2.072	-1.173	0.043

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