

Supplementary Table 1: Gene transcripts correlated with age*

Gene symbol	P value	r	Gene symbol	P value	r
<i>Gene transcripts positively correlated</i>			<i>Gene transcripts negatively correlated</i>		
TSC2	0.004	0.81	PFKFB2	0.001	-0.87
SNAI2	0.004	0.81	PSMD5-AS1	0.001	-0.87
SLC35E1	0.003	0.81	CD14	0.001	-0.84
TBC1D3P1-DHX40P1	0.004	0.81	FCGR2B	0.002	-0.82
DCUN1D2-AS2	0.004	0.80	TAGAP	0.003	-0.82
PREX2	0.005	0.80	OR2M3	0.002	-0.82
IFITM2	0.004	0.79	SLC8A1-AS1	0.003	-0.82
DOT1L	0.004	0.79	DIRC3	0.003	-0.81
STXBP4	0.002	0.79	ATP8B4	0.003	-0.81
MOV10	0.005	0.79	RASSF2	0.004	-0.80
CNNM3	0.006	0.78	MMP24-AS1	0.000	-0.80
CDK2	0.005	0.78	FGD2	0.005	-0.79
RAD51-AS1	0.007	0.78	LINC00489	0.005	-0.79
ZNF546	0.005	0.77	HNF1A-AS1	0.006	-0.78
TRIB2	0.005	0.77	TCEAL3	0.007	-0.77
SLC25A37	0.007	0.77	CYTIP	0.007	-0.77
MIR4465	0.006	0.77	NCF1B	0.007	-0.77
SLC39A1	0.005	0.77	SLC5A8	0.007	-0.77
XAB2	0.007	0.76	RAB11FIP1	0.007	-0.77
TAF6L	0.008	0.76	RNU7-25P	0.009	-0.77
GMCL1	0.006	0.75	POTEE	0.007	-0.76
RING1	0.009	0.75	LINC00891	0.010	-0.76
DTWD1	0.007	0.75	PPEF1-AS1	0.011	-0.76
TACSTD2	0.007	0.75	EFHC2	0.010	-0.76
C6orf165	0.007	0.74	GPBAR1	0.009	-0.76
DKAKD	0.011	0.74	HAVCR2	0.010	-0.75
IRF2BP1	0.010	0.74	GAGE2A	0.006	-0.75
FAM215B	0.009	0.74	FCER1A	0.009	-0.75
RPL36	0.008	0.73	THEG	0.010	-0.74
TMUB2	0.011	0.73	SERPINB13	0.010	-0.74
ANGPTL7	0.009	0.73	C19orf57	0.006	-0.74
SYNGAP1	0.009	0.73	BTNL3	0.012	-0.74
C17orf100	0.010	0.73	PBOV1	0.011	-0.74
ADARB1	0.016	0.73	CEACAM18	0.013	-0.74
ANKZF1	0.004	0.73	BTC	0.007	-0.74
MIR4671	0.015	0.73	HBG2	0.012	-0.74
FXYD6	0.014	0.73	MS4A4E	0.012	-0.74
CLIP3	0.011	0.73	IL2RG	0.014	-0.74
USP20	0.010	0.73	TRBV30	0.014	-0.74
GATSL3	0.016	0.73	HPGDS	0.008	-0.74
KIAA0355	0.012	0.73	NRG1	0.009	-0.74
PVRIG	0.005	0.73	LCE1C	0.008	-0.74
FOXO3	0.016	0.72	IGKV1-37	0.015	-0.74

SSBP3	0.018	0.72	RNU1-15P	0.012	-0.73
POLE2	0.006	0.72	GLT6D1	0.011	-0.73
RNU5A-2P	0.006	0.72	XIRP2-AS1	0.008	-0.73
DRD4	0.016	0.72	CD226	0.013	-0.73
SLC7A2	0.015	0.72	SNORD46	0.012	-0.73
MIR485	0.012	0.72	PRKXP1	0.014	-0.73
ZNF532	0.015	0.72	DAB1	0.016	-0.73
SCARNA8	0.017	0.72	RFX4	0.014	-0.73
PTP4A3	0.012	0.72	TMCO5B	0.015	-0.73
TMEM99	0.018	0.71	SLC22A1	0.016	-0.73
SGSM3	0.017	0.71	FAM133A	0.016	-0.73
GPR21	0.012	0.71	CD83	0.012	-0.72
HOXC-AS1	0.022	0.71	PER4	0.015	-0.72
RGMA	0.022	0.71	MT1B	0.006	-0.72
FBXL13	0.007	0.70	IL1RN	0.016	-0.72
KPNA5	0.019	0.70	RNA5SP44	0.016	-0.72
C1GALT1C1	0.019	0.70	SPINT1	0.006	-0.72
TRMT2A	0.023	0.70	C2CD4A	0.018	-0.72
LIN37	0.014	0.70	KCNJ9	0.004	-0.72
NUDT4	0.009	0.70	LTA4H	0.011	-0.71
ZBTB11-AS1	0.021	0.69	CLEC12A	0.018	-0.71
MAK	0.024	0.69	ARMCX3-AS1	0.018	-0.71
CHRNE	0.020	0.69	C11orf86	0.020	-0.71
SEC31A	0.023	0.69	GUCD1	0.017	-0.71
CACHD1	0.027	0.69	GAGE12H	0.011	-0.71
NKAIN4	0.022	0.69	ARHGEF5	0.017	-0.71
TDH	0.026	0.69	CD3EAP	0.012	-0.71
FAM194A	0.024	0.69	FABP2	0.019	-0.71
MIR1224	0.011	0.69	CD200R1	0.016	-0.71
DDIT4L	0.028	0.69	NTN3	0.010	-0.71
LIPC	0.025	0.68	RPS6KA5	0.016	-0.71
RCAN2	0.015	0.68	SPIN2A	0.016	-0.71
IL6ST	0.024	0.68	P2RX7	0.014	-0.71
PCDHB9	0.027	0.68	HLA-DQA2	0.010	-0.71
TRAF7	0.028	0.68	SNX10	0.015	-0.71
IFITM4P	0.026	0.68	SNN	0.018	-0.71
HIC2	0.001	0.68	LRRC8D	0.013	-0.71
MIR543	0.024	0.68	ANKRD18B	0.018	-0.70
FAM195A	0.027	0.68	EPB41L3	0.012	-0.70
FOXN4	0.011	0.68	TRAJ56	0.018	-0.70
RANGRF	0.032	0.67	TEKT2	0.023	-0.70
TTC38	0.033	0.67	GOLGA6L4	0.008	-0.70
B3GNT8	0.028	0.67	FAM90A12P	0.009	-0.70
GNG8	0.019	0.67	VCX3A	0.008	-0.70
BIRC3	0.022	0.67	HLA-DPB1	0.020	-0.70
SLC25A38	0.021	0.67	NCEH1	0.015	-0.70
CTGF	0.019	0.67	MS4A6A	0.014	-0.70

GPR56	0.031	0.67	CERS4	0.024	-0.70
GATM-AS1	0.028	0.67	KIAA1656	0.021	-0.70
PER1	0.020	0.67	LRP5	0.020	-0.70
OR2A1	0.032	0.67	ALDH1A1	0.015	-0.69
PRDM15	0.033	0.67	MAP7D2	0.007	-0.69
RNU12	0.025	0.67	APOBEC4	0.014	-0.69
ISG20	0.014	0.67	ADAMTS3	0.025	-0.69
TMEM240	0.027	0.67	RNA5-8SP3	0.019	-0.69
ACOT4	0.026	0.67	LGALS2	0.019	-0.69
LINC00568	0.035	0.66	ACP2	0.026	-0.69
CNOT3	0.033	0.66	PARP15	0.020	-0.69
C4BPA	0.024	0.66	NOD2	0.020	-0.69
HIST1H4B	0.032	0.66	ALOX5AP	0.020	-0.69
GUSBP9	0.030	0.66	SNCA	0.016	-0.69
OR52H1	0.029	0.66	CES1	0.020	-0.69
LDLRAP1	0.035	0.66	LINC00656	0.025	-0.69
YPEL3	0.032	0.66	LILRB3	0.017	-0.68
SYMPK	0.021	0.66	RNASE2	0.026	-0.68
ABCD4	0.038	0.66	SNORA22	0.026	-0.68
MIR938	0.031	0.66	IGHV3-43	0.027	-0.68
ARFGAP1	0.038	0.66	FAM90A20P	0.024	-0.68
RAB6C	0.040	0.65	SH2D5	0.026	-0.68
IGBP1	0.034	0.65	MROH6	0.017	-0.68
MIR384	0.028	0.65	WDFY4	0.029	-0.68
IGHD	0.029	0.65	CSAG2	0.016	-0.68
RAB1B	0.031	0.65	FCGR2A	0.017	-0.68
PYGL	0.036	0.65	FAM90A1	0.008	-0.67
SMIM18	0.036	0.65	ZFP69	0.017	-0.67
ZNF292	0.008	0.65	SAMHD1	0.029	-0.67
TCEA3	0.039	0.65	CXorf21	0.017	-0.67
JMY	0.041	0.65	VRK1	0.021	-0.67
CNOT10	0.013	0.65	GPR183	0.010	-0.67
IPO11	0.026	0.65	RNU7-6P	0.023	-0.67
MON1A	0.022	0.65	FLJ42102	0.023	-0.67
SOS1-IT1	0.029	0.65	APOC1	0.019	-0.67
GTF2IRD2	0.031	0.65	C1QTNF9B-AS1	0.024	-0.67
FAM19A5	0.034	0.65	RNA5SP188	0.019	-0.67
STXBP5L	0.027	0.65	TAF7L	0.017	-0.67
CLDN20	0.042	0.65	SEPT14	0.033	-0.67
MARK4	0.024	0.65	CD180	0.022	-0.67
MIR1185-2	0.032	0.65	MAPKAPK3	0.018	-0.67
PLEKHM1	0.025	0.65	MIR591	0.026	-0.67
GNL1	0.032	0.65	TUBB4B	0.017	-0.67
TMEM255B	0.028	0.65	LINC00700	0.020	-0.66
PPT2-EGFL8	0.029	0.65	TRIM71	0.030	-0.66
GGCT	0.029	0.65	RPL36P20	0.017	-0.66
ATG10	0.035	0.65	CECR1	0.026	-0.66

<i>FBXW5</i>	0.028	0.65	<i>SYK</i>	0.030	-0.66
<i>RPS29</i>	0.043	0.64	<i>SNORA79</i>	0.018	-0.66
<i>ANK3</i>	0.031	0.64	<i>TRDJ4</i>	0.026	-0.66
<i>FAM211A</i>	0.041	0.64	<i>FAM83G</i>	0.029	-0.66
<i>FGFRL1</i>	0.040	0.64	<i>AIF1</i>	0.019	-0.66
<i>SLC25A2</i>	0.030	0.64	<i>LINC00548</i>	0.019	-0.66
<i>OIP5</i>	0.033	0.64	<i>CXCL16</i>	0.027	-0.66
<i>HSFY2</i>	0.027	0.64	<i>PLEK</i>	0.031	-0.66
<i>CCNB1IP1</i>	0.041	0.64	<i>SERTAD1</i>	0.039	-0.66
<i>TRAJ21</i>	0.026	0.64	<i>SECTM1</i>	0.020	-0.66
<i>TTC25</i>	0.033	0.64	<i>NPAP1</i>	0.021	-0.66
<i>XRCC2</i>	0.008	0.64	<i>SCGB3A2</i>	0.034	-0.65
<i>C19orf67</i>	0.041	0.64	<i>HCLS1</i>	0.037	-0.65
<i>AKT3</i>	0.036	0.64	<i>FCAR</i>	0.030	-0.65
<i>PROP1</i>	0.024	0.64	<i>LPAR5</i>	0.039	-0.65
<i>PLEKHG2</i>	0.038	0.64	<i>TMEM86B</i>	0.039	-0.65
<i>OR7E24</i>	0.038	0.64	<i>MIR3973</i>	0.039	-0.65
<i>ADAMTS14</i>	0.042	0.64	<i>AMY1A</i>	0.039	-0.65
<i>CCDC57</i>	0.048	0.64	<i>NAP1L2</i>	0.035	-0.65
<i>CLK2P</i>	0.021	0.64	<i>APOBEC1</i>	0.038	-0.65
<i>FLJ35934</i>	0.015	0.64	<i>GAGE12C</i>	0.027	-0.65
<i>RUSC2</i>	0.016	0.64	<i>THSD4</i>	0.041	-0.65
<i>GARNL3</i>	0.041	0.64	<i>MIR3922</i>	0.035	-0.65
<i>KIAA1147</i>	0.041	0.63	<i>VAMP8</i>	0.027	-0.65
<i>ZNF8</i>	0.047	0.63	<i>ARSE</i>	0.038	-0.65
<i>MIR451A</i>	0.049	0.63	<i>HLA-DQB1</i>	0.039	-0.65
<i>CAMTA2</i>	0.044	0.63	<i>SCUBE1</i>	0.033	-0.65
<i>MIRLET7A3</i>	0.026	0.63	<i>NEUROD4</i>	0.025	-0.65
<i>FAM160B2</i>	0.044	0.63	<i>SSX2</i>	0.025	-0.65
<i>SCARNA17</i>	0.047	0.63	<i>AGRP</i>	0.041	-0.65
<i>OR8B8</i>	0.011	0.63	<i>PRM3</i>	0.042	-0.64
<i>LNX1-AS2</i>	0.047	0.63	<i>PPP1R3F</i>	0.044	-0.64
<i>BOLA1</i>	0.049	0.63	<i>HCST</i>	0.021	-0.64
<i>ZNF891</i>	0.038	0.63	<i>RALGDS</i>	0.027	-0.64
<i>FEZF1-AS1</i>	0.048	0.63	<i>ZNF555</i>	0.023	-0.64
<i>B3GALT4</i>	0.043	0.62	<i>OR1L4</i>	0.032	-0.64
<i>MIR1297</i>	0.040	0.62	<i>KRT23</i>	0.038	-0.64
<i>BRWD1-IT2</i>	0.038	0.62	<i>OR111</i>	0.028	-0.64
<i>KLHL4</i>	0.048	0.62	<i>MSMP</i>	0.040	-0.64
<i>TMEM91</i>	0.044	0.62	<i>SNORD116-11</i>	0.045	-0.64
<i>C1RL-AS1</i>	0.044	0.62	<i>SIGLEC16</i>	0.019	-0.64
<i>AK9</i>	0.049	0.62	<i>AOX2P</i>	0.039	-0.64
<i>GRIK1-AS2</i>	0.037	0.62	<i>SIGLEC1</i>	0.033	-0.64
<i>DENND3</i>	0.035	0.62	<i>ERAS</i>	0.041	-0.64
<i>LINC00484</i>	0.043	0.62	<i>PAQR8</i>	0.045	-0.64
<i>OR8J3</i>	0.045	0.62	<i>HLA-DRA</i>	0.028	-0.64
<i>RNF167</i>	0.031	0.62	<i>LINC00284</i>	0.044	-0.64

PURA	0.042	0.62	NKX3-1	0.046	-0.64
GPER	0.045	0.62	RNA5SP64	0.046	-0.64
BRE	0.030	0.62	SIGLEC9	0.046	-0.64
ADIRF	0.049	0.62	BTK	0.030	-0.64
RNA5SP271	0.034	0.62	POP1	0.029	-0.64
NUMB	0.044	0.62	KLRC4-KLRK1	0.033	-0.64
KCNK18	0.020	0.62	HVCN1	0.045	-0.64
FNDC1-IT1	0.047	0.61	TMCO4	0.033	-0.63
TMEM104	0.033	0.61	FAM78B	0.048	-0.63
RPL37	0.038	0.61	PARK2	0.033	-0.63
ZNF296	0.029	0.61	CABP7	0.022	-0.63
INPP5B	0.030	0.61	FAM71A	0.034	-0.63
PHLDA3	0.032	0.61	ANKRD20A3	0.017	-0.63
AKAP8L	0.043	0.61	RGS8	0.032	-0.63
STK25	0.040	0.61	NKAPP1	0.048	-0.63
ADRA1B	0.046	0.61	MTPAP	0.030	-0.63
MUC1	0.037	0.61	RNF113B	0.041	-0.63
C1S	0.046	0.61	ASAH1	0.031	-0.63
RAB24	0.033	0.61	THAP2	0.035	-0.63
IL21	0.049	0.61	C16orf89	0.015	-0.63
NEBL-AS1	0.036	0.61	CSF2RA	0.028	-0.63
SMAD3	0.047	0.61	THOC3	0.046	-0.63
TXNRD2	0.035	0.61	SPRR2B	0.045	-0.63
GOLGA8A	0.016	0.61	GAPT	0.043	-0.63
MCTP2	0.021	0.61	LIPT2	0.045	-0.63
INSIG1	0.030	0.60	ADAM23	0.047	-0.63
HDAC5	0.049	0.60	ITGAX	0.046	-0.63
NNMT	0.028	0.60	KLRC2	0.050	-0.63
EGFL8	0.045	0.60	ECHDC3	0.030	-0.63
WDR70	0.036	0.60	SNORD88B	0.042	-0.63
WASF3	0.039	0.60	BLNK	0.035	-0.63
MAN1B1	0.037	0.60	TEX13A	0.012	-0.63
ISG20L2	0.042	0.60	COBL	0.036	-0.63
EGFL6	0.037	0.60	APOM	0.043	-0.63
PAN3-AS1	0.027	0.60	HLA-DMB	0.034	-0.62
SPDYA	0.049	0.60	ANKRD54	0.028	-0.62
USP27X-AS1	0.044	0.59	MAST1	0.033	-0.62
DCUN1D2-AS1	0.048	0.59	PRSS55	0.032	-0.62
MPDZ	0.049	0.59	LPA	0.034	-0.62
HSFY1P1	0.042	0.59	LINC00964	0.050	-0.62
MYO1D	0.041	0.59	DYRK1B	0.032	-0.62
AUTS2	0.014	0.59	USP26	0.033	-0.62
CUBN	0.036	0.59	GAGE12J	0.043	-0.62
SSR4	0.039	0.59	C9orf135-AS1	0.037	-0.62
KIAA1549L	0.049	0.59	PRR22	0.031	-0.62
GPR124	0.041	0.59	LIPN	0.046	-0.62
CCDC54	0.040	0.59	CYSLTR2	0.035	-0.62

GOLGA8B	0.024	0.59	FAM90A10P	0.043	-0.62
MIR3146	0.033	0.59	CSH1	0.027	-0.62
YPEL1	0.040	0.59	OR9A4	0.034	-0.62
DOCK9	0.037	0.59	LINC00365	0.031	-0.62
MIR2116	0.025	0.59	NOXA1	0.030	-0.62
DLEU2L	0.036	0.58	INPP5J	0.015	-0.62
ZIC1	0.046	0.58	RNASE1	0.032	-0.62
SNORD116-20	0.042	0.58	SCARA5	0.047	-0.62
TXLNB	0.047	0.58	SLC9A4	0.042	-0.62
C2orf15	0.046	0.58	SNAR-F	0.045	-0.62
SPRY4	0.044	0.58	MAGEA3	0.045	-0.62
SNX19	0.049	0.58	WAS	0.032	-0.62
C1orf101	0.025	0.58	C10orf85	0.038	-0.62
PFKFB4	0.034	0.58	LINC00578	0.042	-0.61
STYXL1	0.049	0.58	GCHFR	0.034	-0.61
OLFM1	0.043	0.57	DBIL5P2	0.041	-0.61
SARDH	0.048	0.57	PCSK2	0.023	-0.61
RIPK3	0.043	0.57	CXCR4	0.030	-0.61
YBX3	0.045	0.57	MIR338	0.048	-0.61
OR2B6	0.042	0.57	KIR3DL2	0.043	-0.61
SNORD123	0.047	0.57	GRM7-AS2	0.028	-0.61
RPS2	0.048	0.57	LANCL2	0.040	-0.61
TGM3	0.046	0.57	TLR1	0.038	-0.61
KRTAP4-12	0.032	0.57	IGHV3-33	0.049	-0.61
PRDX2	0.040	0.57	IRF8	0.049	-0.61
NRN1	0.032	0.55	LINC00901	0.035	-0.61
BSN	0.036	0.55	PILRA	0.030	-0.61
RNF214	0.037	0.54	FOXG1	0.034	-0.61
AFF1	0.047	0.54	IGBP1-AS1	0.010	-0.61
PEBP1	0.048	0.54	HFE2	0.044	-0.60
TMEM209	0.049	0.53	CTSL1P2	0.049	-0.60
MIR770	0.047	0.52	WDR38	0.043	-0.60
TRADD	0.032	0.52	IQCF3	0.046	-0.60
PPFIA3	0.042	0.51	MIR517B	0.045	-0.60
ZNF616	0.037	0.49	SNORA5A	0.028	-0.60
INPP5K	0.045	0.46	IL10RA	0.046	-0.60
			SCARNA27	0.043	-0.60
			IFI30	0.033	-0.60
			ENDOU	0.049	-0.60
			PTPRJ	0.043	-0.60
			GREM2	0.011	-0.59
			ADAMTS16	0.036	-0.59
			TYROBP	0.046	-0.59
			ZNF90	0.039	-0.59
			UBQLNL	0.045	-0.59
			TLR2	0.043	-0.59
			RBP2	0.050	-0.59

			<i>PI15</i>	0.034	-0.58
			<i>SSX4</i>	0.045	-0.58
			<i>OR1L6</i>	0.037	-0.58
			<i>PPAN-P2RY11</i>	0.028	-0.58
			<i>KRTAP13-1</i>	0.034	-0.58
			<i>PLEKHB2</i>	0.045	-0.58
			<i>SLC36A2</i>	0.041	-0.58
			<i>ARMCX4</i>	0.045	-0.58
			<i>LACTBL1</i>	0.010	-0.58
			<i>GS52</i>	0.026	-0.57
			<i>FLJ25917</i>	0.016	-0.57
			<i>BMP10</i>	0.041	-0.57
			<i>CYBB</i>	0.046	-0.57
			<i>MC3R</i>	0.040	-0.57
			<i>C8A</i>	0.021	-0.57
			<i>SLC10A4</i>	0.047	-0.57
			<i>HMGA1P7</i>	0.050	-0.57
			<i>OVOL1</i>	0.035	-0.57
			<i>FSCN3</i>	0.048	-0.57
			<i>TARM1</i>	0.046	-0.56
			<i>TCAP</i>	0.046	-0.56
			<i>LINC00388</i>	0.039	-0.56
			<i>CCDC19</i>	0.020	-0.56
			<i>MIR3157</i>	0.029	-0.56
			<i>GOLGA6L6</i>	0.048	-0.56
			<i>PPT1</i>	0.023	-0.56
			<i>FAM107B</i>	0.050	-0.56
			<i>IGHD2-21</i>	0.029	-0.56
			<i>CT64</i>	0.047	-0.55
			<i>SMTNL2</i>	0.025	-0.55
			<i>MIR3666</i>	0.015	-0.55
			<i>CCDC142</i>	0.024	-0.54
			<i>LINC00698</i>	0.034	-0.54
			<i>OR52K2</i>	0.020	-0.54
			<i>ACR</i>	0.027	-0.54
			<i>TDO2</i>	0.042	-0.54
			<i>MIR3937</i>	0.042	-0.54
			<i>PANX3</i>	0.045	-0.54
			<i>PEG3-AS1</i>	0.039	-0.53
			<i>RAD54L</i>	0.035	-0.53
			<i>SLC26A7</i>	0.033	-0.53
			<i>THEG5</i>	0.045	-0.53
			<i>SLC24A2</i>	0.029	-0.52
			<i>LINC00239</i>	0.041	-0.51
			<i>GH1</i>	0.045	-0.51
			<i>WDR87</i>	0.031	-0.49

			<i>SYCE1</i>	0.044	-0.48
--	--	--	--------------	-------	-------

**Duplicate, uncharacterized and non-annotated gene transcripts were removed*