

Supplemental Online Content

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eReferences.

This supplemental material has been provided by the authors to give readers additional information about their work.

eMethods

Participants. Participants were without known dementia at enrollment, agreed to brain donation, signed a repository consent allowing their data to be repurposed, and were longitudinally followed until death. Individuals were mostly of a non-Hispanic White background (311 of 315 women with 2 Hispanic White and 2 non-Hispanic Black backgrounds; 188 of 193 men with 2 Hispanic White and 3 non-Hispanic Black backgrounds).

RNA Sequencing. RNA-seq was carried out with the Illumina HiSeq2000 with 101 bp paired end reads for a targeted coverage of 50M paired reads. RNA-seq data quantification, quality control, data normalization, and association analyses have been described in detail¹ and include batch correction and removal of the effects of major biological (including age at death and sex) and technical (RIN, number of ribosomal bases, number of aligned reads, study index, and postmortem interval) confounding factors. Genes with at least 4 reads detected in at least 100 individuals were analyzed. The current analysis of coding genes yielded 13,822 genes including 488 X chromosome genes. In association analyses reported, significance was established genome-wide at a false discovery rate (FDR) adjusted p-value of <0.05. We performed linear regressions of data derived from RNA-seq of DLPFC with longitudinal change in global cognition and with NFT burden in individuals from the ROS/MAP joint cohorts (Table 1; eTable 1) using R (version 3.5, lm function).

Cognitive testing. The ROS and MAP methods of assessing cognition have been summarized in previous publications¹⁻⁴. Briefly, uniform and comprehensive cognitive assessments were administered annually to the ROS and MAP participants; annual follow-up was similar between women and men (cohort-at-large, sampled 2012-2016, $p=0.22$ by chi-square). Scores from 17 cognitive performance tests common to both studies were used to obtain a summary measure for global cognition. Each test was converted to a z-score based on the mean and standard deviation of the scores from all participants at baseline. The z-scores were averaged. The mean global cognition is the mean of both cohorts together at baseline and each unit is roughly one standard deviation. To obtain a measurement of cognitive change, the annual global cognitive scores were modeled longitudinally with a mixed effects model, adjusting for age, sex and education, providing the rate of cognitive change for each person.

Tau Burden. Tau burden, via measurement of neurofibrillary tangle (NFT), for each individual was assessed across eight regions of the brain to create a single summary measure as previously described¹. Using global tau burden is relevant to the DLPFC because global tau deposition causes dysfunction across multiple connected regions and networks. Since the DLPFC is a cognitive hub with inputs from multiple regions and networks, correlating global tau burden with RNA seq of this area facilitates an approach that assess both direct and indirect, proximal and distal, influences of tau pathology. Briefly, to quantify an estimate of the burden of abnormally phosphorylated tau-positive NFT (PHFtau) levels present in the cortex at death, tissue was dissected from eight regions of the brain: the hippocampus, entorhinal cortex, anterior cingulate cortex, midfrontal cortex, superior frontal cortex, inferior temporal cortex, angular gyrus and calcarine cortex. Sections 20 μm thick from each region were stained with antibodies to the tau protein and quantified with image analysis and stereology as previously described^{5,6}. Briefly, PHFtau was labeled with the AT8 antibody. Using stereological mapping, the average density (per mm^2) of PHFtau tangles was determined and scores across the eight regions were averaged to create a single summary measure.

Clinical Diagnosis of AD at the time of death. The clinical diagnosis of AD dementia follows the recommendation of the joint working group of the National Institute of Neurological and Communicative Disorders and Stroke and the AD and Related Disorders Association⁷ and was previously described¹. Briefly, the diagnosis required a history of cognitive decline along with impairment in memory and at least one other cognitive domain. After a participant died, a neurologist specializing in dementia reviewed clinical information and provided a summary

opinion of the most likely clinical diagnosis at the time of death. This summary diagnosis was blinded to all neuropathologic data; case conferences were held for consensus as necessary. AD dementia includes persons with probable or possible AD dementia.

Sex differences in global cognitive change and NFT burden. Sex differences in each of these measures was measured by linear regression, adjusted by age at death and education.

eReferences

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eTable 1. Clinical Diagnoses of Patients in ROSMAP cohort separated by sex			
	Women (n=315)†	Men (n=193)†	Total (n=508)
NCI	98 (31.1%)	68 (35.2%)	166 (32.7%)
MCI no other cause	79 (25.1%)	45 (23.3%)	124 (24.4%)
MCI plus other cause	3 (1.0%)	6 (3.1%)	9 (1.8%)
AD and no other cause	118 (37.5%)	55 (28.5%)	173 (34.1%)
AD plus other cause	11 (3.5%)	13 (6.7%)	24 (4.7%)
Other dementia	6 (1.9%)	6 (3.1%)	12 (2.4%)

Data shown as count (percent of column total).

NCI=no cognitive impairment; MCI=mild cognitive impairment; AD=Alzheimer's disease

† women and men diagnostic distributions do not differ significantly (chi-square test p-value=0.24)

eTable 2. Association of X chromosome gene expression with cognition, adjusted for age, education, and AD pathology, in women. FDR-adjusted p-values for genome-wide correction shown.

Gene	Beta	Pvalue	Pvalue Adjusted
<i>APLN</i>	-0.0257	0.0000	0.0006
<i>FOXO4</i>	-0.0253	0.0000	0.0020
<i>WWC3</i>	-0.0259	0.0000	0.0022
<i>MID1IP1</i>	-0.0247	0.0000	0.0022
<i>MED12</i>	-0.0242	0.0000	0.0032
<i>PPEF1</i>	0.0230	0.0000	0.0041
<i>EIF1AX</i>	0.0221	0.0000	0.0060
<i>GPRASP1</i>	0.0214	0.0000	0.0082
<i>GPRASP2</i>	0.0221	0.0000	0.0084
<i>NGFRAP1</i>	0.0203	0.0001	0.0121
<i>ZCCHC12</i>	0.0205	0.0001	0.0127
<i>FAM156B</i>	0.0191	0.0002	0.0191
<i>XK</i>	0.0194	0.0002	0.0204
<i>ACSL4</i>	0.0194	0.0002	0.0224
<i>VMA21</i>	0.0187	0.0002	0.0228
<i>RLIM</i>	0.0190	0.0003	0.0235
<i>PHF16</i>	-0.0187	0.0003	0.0250
<i>IRAK1</i>	-0.0181	0.0004	0.0274
<i>GRIPAP1</i>	0.0189	0.0005	0.0285
<i>BEX2</i>	0.0180	0.0005	0.0290
<i>IL2RG</i>	-0.0168	0.0005	0.0301
<i>ASMTL</i>	0.0177	0.0005	0.0303
<i>NAP1L2</i>	0.0175	0.0006	0.0312
<i>OTUD5</i>	0.0181	0.0006	0.0326
<i>RAB9A</i>	-0.0175	0.0006	0.0333
<i>DYNLT3</i>	0.0174	0.0007	0.0347
<i>PNCK</i>	0.0166	0.0011	0.0453
<i>GRIA3</i>	0.0173	0.0012	0.0468
<i>POLA1</i>	-0.0157	0.0013	0.0487
<i>PRKX</i>	-0.0170	0.0015	0.0518
<i>BRCC3</i>	0.0166	0.0015	0.0522
<i>HMGN5</i>	-0.0161	0.0016	0.0524
<i>ENOX2</i>	-0.0164	0.0016	0.0535
<i>HS6ST2</i>	0.0169	0.0017	0.0537
<i>KCND1</i>	0.0167	0.0017	0.0543
<i>STS</i>	0.0166	0.0019	0.0572
<i>DLG3</i>	0.0160	0.0020	0.0596
<i>ATP2B3</i>	0.0161	0.0022	0.0621
<i>CCDC160</i>	-0.0153	0.0022	0.0624
<i>FAM127A</i>	0.0161	0.0023	0.0629
<i>FRMPD4</i>	0.0160	0.0025	0.0654
<i>PIM2</i>	0.0156	0.0027	0.0685
<i>RRAGB</i>	0.0155	0.0027	0.0686
<i>CXorf40A</i>	0.0158	0.0029	0.0717
<i>ARHGEF9</i>	0.0157	0.0030	0.0720
<i>PRPS2</i>	0.0153	0.0030	0.0724

<i>SLC25A14</i>	0.0152	0.0031	0.0734
<i>SYP</i>	0.0150	0.0033	0.0752
<i>ABCD1</i>	-0.0157	0.0035	0.0759
<i>ARHGEF6</i>	-0.0143	0.0035	0.0764
<i>PJA1</i>	0.0147	0.0036	0.0770
<i>HPRT1</i>	0.0148	0.0037	0.0785
<i>NKRF</i>	0.0149	0.0038	0.0795
<i>UTP14A</i>	0.0153	0.0039	0.0804
<i>REPS2</i>	0.0150	0.0043	0.0845
<i>ZFX</i>	-0.0147	0.0043	0.0853
<i>RNF128</i>	0.0145	0.0045	0.0872
<i>RENBP</i>	-0.0148	0.0045	0.0875
<i>PRICKLE3</i>	-0.0142	0.0047	0.0892
<i>TCEAL6</i>	0.0144	0.0048	0.0903
<i>DACH2</i>	0.0140	0.0057	0.0980
<i>ATP6AP2</i>	0.0142	0.0061	0.1020
<i>ATP6AP1</i>	0.0145	0.0063	0.1034
<i>CETN2</i>	0.0139	0.0071	0.1084
<i>SMC1A</i>	-0.0129	0.0075	0.1117
<i>CXorf40B</i>	0.0139	0.0076	0.1123
<i>MCTS1</i>	0.0135	0.0078	0.1133
<i>MAGED1</i>	0.0135	0.0079	0.1138
<i>ARMCX3</i>	0.0139	0.0080	0.1145
<i>TIMM8A</i>	0.0147	0.0082	0.1165
<i>SLITRK4</i>	0.0139	0.0086	0.1186
<i>TAF9B</i>	0.0133	0.0086	0.1188
<i>GDI1</i>	0.0130	0.0087	0.1196
<i>CD99L2</i>	0.0139	0.0088	0.1203
<i>DDX26B</i>	0.0133	0.0094	0.1247
<i>MAGEH1</i>	0.0136	0.0096	0.1255
<i>TSPAN6</i>	-0.0135	0.0096	0.1256
<i>ZRSR2</i>	-0.0134	0.0100	0.1288
<i>MED14</i>	0.0134	0.0105	0.1313
<i>TXLNG</i>	0.0138	0.0108	0.1324
<i>ELK1</i>	-0.0132	0.0111	0.1344
<i>NXT2</i>	-0.0131	0.0113	0.1354
<i>STAG2</i>	-0.0135	0.0116	0.1368
<i>GPM6B</i>	-0.0129	0.0116	0.1372
<i>PABPC1L2A</i>	0.0130	0.0120	0.1388
<i>UBA1</i>	-0.0127	0.0121	0.1393
<i>ARMCX5</i>	0.0131	0.0127	0.1424
<i>PHF8</i>	-0.0127	0.0130	0.1441
<i>UXT</i>	-0.0131	0.0133	0.1458
<i>PSMD10</i>	0.0121	0.0141	0.1505
<i>ARMCX2</i>	0.0126	0.0141	0.1505
<i>PNMA5</i>	0.0125	0.0142	0.1507
<i>PQBPI</i>	-0.0131	0.0147	0.1526
<i>UPRT</i>	0.0126	0.0147	0.1527
<i>PNMA3</i>	0.0125	0.0148	0.1531

<i>MBTPS2</i>	0.0130	0.0156	0.1559
<i>RAB9B</i>	0.0128	0.0156	0.1560
<i>CDKL5</i>	0.0127	0.0161	0.1581
<i>ZBED1</i>	-0.0122	0.0164	0.1596
<i>ATP11C</i>	-0.0119	0.0165	0.1601
<i>PRRG3</i>	0.0128	0.0170	0.1616
<i>HCFC1</i>	-0.0120	0.0177	0.1651
<i>PGRMC1</i>	0.0126	0.0185	0.1678
<i>LAMP2</i>	-0.0120	0.0186	0.1680
<i>TCEAL7</i>	0.0125	0.0189	0.1693
<i>TMEM35</i>	0.0119	0.0190	0.1700
<i>RBM10</i>	0.0122	0.0195	0.1724
<i>DRP2</i>	0.0122	0.0197	0.1734
<i>MUM1L1</i>	0.0121	0.0199	0.1740
<i>ERAS</i>	0.0118	0.0203	0.1753
<i>TMSB4X</i>	0.0115	0.0204	0.1759
<i>ZC4H2</i>	0.0126	0.0209	0.1781
<i>SLC25A53</i>	-0.0119	0.0214	0.1801
<i>BEX5</i>	0.0115	0.0217	0.1813
<i>BCAP31</i>	0.0118	0.0220	0.1827
<i>AMOT</i>	-0.0116	0.0224	0.1847
<i>SYTL4</i>	-0.0115	0.0238	0.1902
<i>EIF2S3</i>	0.0119	0.0240	0.1911
<i>GABRA3</i>	0.0116	0.0243	0.1924
<i>EMD</i>	0.0114	0.0247	0.1934
<i>PRRG1</i>	-0.0116	0.0262	0.1996
<i>NLGN3</i>	-0.0111	0.0263	0.2000
<i>USP11</i>	0.0114	0.0264	0.2002
<i>XIAP</i>	0.0113	0.0267	0.2016
<i>AP1S2</i>	0.0113	0.0270	0.2024
<i>SMS</i>	0.0115	0.0275	0.2042
<i>MECP2</i>	-0.0115	0.0278	0.2047
<i>PORCN</i>	0.0115	0.0287	0.2078
<i>MPP1</i>	0.0114	0.0290	0.2093
<i>TCEAL5</i>	0.0109	0.0295	0.2109
<i>MAGEE1</i>	0.0111	0.0300	0.2131
<i>THOC2</i>	-0.0109	0.0307	0.2156
<i>PABPC1L2B</i>	0.0112	0.0317	0.2178
<i>ZNF275</i>	-0.0109	0.0323	0.2199
<i>NUDT11</i>	0.0108	0.0331	0.2229
<i>MORF4L2</i>	0.0109	0.0340	0.2258
<i>MTM1</i>	-0.0103	0.0342	0.2264
<i>FGF13</i>	0.0109	0.0354	0.2300
<i>LONRF3</i>	-0.0110	0.0356	0.2306
<i>BEX1</i>	0.0108	0.0358	0.2311
<i>PDK3</i>	0.0109	0.0377	0.2367
<i>TBLIX</i>	-0.0104	0.0378	0.2372
<i>BEX4</i>	0.0107	0.0382	0.2388
<i>PRPS1</i>	0.0107	0.0396	0.2437

<i>HNRNPH2</i>	0.0107	0.0398	0.2441
<i>AKAP17A</i>	-0.0108	0.0399	0.2444
<i>WBP5</i>	-0.0107	0.0401	0.2453
<i>MCF2</i>	0.0105	0.0410	0.2480
<i>CXorf24</i>	-0.0111	0.0411	0.2483
<i>F8</i>	0.0106	0.0427	0.2535
<i>TAB3</i>	0.0109	0.0430	0.2543
<i>GPR34</i>	-0.0100	0.0466	0.2642
<i>FAAH2</i>	0.0100	0.0473	0.2663
<i>KLF8</i>	0.0098	0.0485	0.2696
<i>SHROOM2</i>	0.0105	0.0487	0.2701
<i>NAPIL3</i>	0.0100	0.0523	0.2798
<i>RAB39B</i>	0.0101	0.0526	0.2805
<i>STARD8</i>	-0.0099	0.0526	0.2806
<i>GPC4</i>	-0.0095	0.0546	0.2862
<i>ZNF75D</i>	0.0101	0.0552	0.2884
<i>PPP1R3F</i>	0.0096	0.0553	0.2885
<i>HSD17B10</i>	-0.0098	0.0557	0.2886
<i>GLA</i>	0.0098	0.0559	0.2891
<i>ZMAT1</i>	0.0098	0.0561	0.2896
<i>HMGB3</i>	0.0100	0.0564	0.2905
<i>TSR2</i>	0.0098	0.0580	0.2949
<i>WDR13</i>	-0.0093	0.0597	0.2992
<i>IDS</i>	0.0099	0.0598	0.2994
<i>SLC9A6</i>	0.0100	0.0599	0.2997
<i>SPIN2B</i>	0.0096	0.0605	0.3013
<i>PTCHD1</i>	-0.0097	0.0635	0.3077
<i>ARAF</i>	-0.0093	0.0678	0.3169
<i>MAGED4B</i>	-0.0096	0.0679	0.3171
<i>PLP1</i>	-0.0095	0.0682	0.3178
<i>BHLHB9</i>	0.0094	0.0696	0.3210
<i>CXorf36</i>	-0.0093	0.0711	0.3243
<i>PIGA</i>	-0.0093	0.0719	0.3263
<i>AMMECR1</i>	0.0092	0.0732	0.3293
<i>UBQLN2</i>	0.0095	0.0748	0.3321
<i>OCRL</i>	0.0093	0.0768	0.3361
<i>KIAA2022</i>	0.0091	0.0784	0.3406
<i>PLXNB3</i>	-0.0091	0.0794	0.3422
<i>IL3RA</i>	-0.0090	0.0802	0.3440
<i>TSPAN7</i>	0.0093	0.0804	0.3444
<i>TMEM47</i>	-0.0089	0.0828	0.3482
<i>DCX</i>	0.0086	0.0873	0.3589
<i>NLGN4X</i>	0.0091	0.0875	0.3593
<i>NUDT10</i>	0.0088	0.0876	0.3595
<i>SASH3</i>	-0.0084	0.0881	0.3604
<i>PPP2R3B</i>	-0.0087	0.0884	0.3610
<i>GSPT2</i>	0.0090	0.0929	0.3700
<i>PGK1</i>	0.0085	0.0936	0.3712
<i>FAM199X</i>	0.0088	0.0947	0.3728

<i>DHRX</i>	-0.0085	0.0949	0.3729
<i>SHROOM4</i>	-0.0087	0.0970	0.3767
<i>ZXDB</i>	0.0086	0.0972	0.3771
<i>TBC1D8B</i>	-0.0088	0.0974	0.3776
<i>ALG13</i>	0.0085	0.0989	0.3798
<i>FAM123B</i>	0.0082	0.1058	0.3932
<i>SLC9A7</i>	0.0087	0.1080	0.3972
<i>APOO</i>	-0.0080	0.1098	0.4007
<i>TIMM17B</i>	0.0079	0.1119	0.4042
<i>HUWE1</i>	-0.0080	0.1121	0.4047
<i>SLC35A2</i>	0.0082	0.1141	0.4078
<i>MAP7D2</i>	0.0081	0.1142	0.4080
<i>HEPH</i>	-0.0080	0.1152	0.4099
<i>DMRTC1B</i>	0.0080	0.1156	0.4107
<i>TCEAL2</i>	0.0080	0.1171	0.4122
<i>WAS</i>	-0.0082	0.1168	0.4122
<i>F8A2</i>	-0.0084	0.1175	0.4128
<i>RP11-274K13.2</i>	-0.0082	0.1189	0.4159
<i>CCDC120</i>	-0.0079	0.1193	0.4163
<i>F8A3</i>	-0.0083	0.1200	0.4173
<i>FAM70A</i>	-0.0080	0.1226	0.4214
<i>TRO</i>	0.0079	0.1231	0.4224
<i>CITED1</i>	0.0077	0.1236	0.4230
<i>RNF113A</i>	-0.0082	0.1247	0.4250
<i>ZNF711</i>	0.0081	0.1253	0.4256
<i>CUL4B</i>	0.0078	0.1258	0.4262
<i>SEPT</i>	0.0080	0.1269	0.4278
<i>GJB1</i>	-0.0081	0.1275	0.4288
<i>USP51</i>	0.0075	0.1275	0.4288
<i>GTPBP6</i>	-0.0078	0.1279	0.4294
<i>EBP</i>	0.0077	0.1286	0.4304
<i>FMR1</i>	0.0078	0.1289	0.4310
<i>TAZ</i>	-0.0079	0.1312	0.4343
<i>PIR</i>	0.0082	0.1321	0.4358
<i>SLITRK2</i>	-0.0076	0.1332	0.4370
<i>RGAG4</i>	0.0077	0.1348	0.4399
<i>MTCP1NB</i>	-0.0075	0.1417	0.4514
<i>RAB33A</i>	-0.0078	0.1437	0.4539
<i>RPL36A</i>	-0.0076	0.1461	0.4573
<i>ZNF673</i>	0.0077	0.1477	0.4593
<i>CNKSR2</i>	0.0076	0.1483	0.4599
<i>FAM120C</i>	-0.0071	0.1521	0.4646
<i>FAM127C</i>	-0.0077	0.1524	0.4649
<i>HAUS7</i>	0.0072	0.1535	0.4661
<i>YIPF6</i>	-0.0072	0.1544	0.4677
<i>RP1-177G6.2</i>	-0.0073	0.1552	0.4686
<i>EFHC2</i>	-0.0071	0.1600	0.4753
<i>SLC25A43</i>	-0.0075	0.1623	0.4780
<i>CXorf38</i>	-0.0069	0.1637	0.4799

<i>ZC3H12B</i>	0.0072	0.1639	0.4803
<i>KDM6A</i>	-0.0068	0.1653	0.4821
<i>WASH6P</i>	-0.0073	0.1659	0.4826
<i>KLHL15</i>	0.0071	0.1708	0.4896
<i>RBM41</i>	-0.0070	0.1712	0.4904
<i>RBM3</i>	0.0070	0.1729	0.4930
<i>TCEAL1</i>	-0.0072	0.1729	0.4930
<i>CXorf26</i>	0.0070	0.1808	0.5034
<i>BRWD3</i>	-0.0069	0.1842	0.5082
<i>AL158821.1</i>	-0.0070	0.1846	0.5087
<i>PLS3</i>	0.0068	0.1855	0.5099
<i>SSR4</i>	0.0072	0.1893	0.5144
<i>RGN</i>	-0.0068	0.1893	0.5145
<i>DMD</i>	-0.0068	0.1916	0.5166
<i>DDX3X</i>	-0.0064	0.1917	0.5168
<i>NHS</i>	-0.0067	0.1925	0.5179
<i>RIBC1</i>	0.0067	0.1944	0.5199
<i>CSAG1</i>	-0.0068	0.1966	0.5228
<i>IGBP1</i>	0.0068	0.1966	0.5228
<i>TMSB15B</i>	0.0066	0.2060	0.5343
<i>SPIN3</i>	0.0067	0.2067	0.5352
<i>MSN</i>	-0.0062	0.2083	0.5367
<i>PNMA6C</i>	0.0072	0.2103	0.5395
<i>FAM50A</i>	-0.0065	0.2109	0.5403
<i>IL1RAPL1</i>	0.0061	0.2139	0.5441
<i>PNPLA4</i>	0.0063	0.2146	0.5452
<i>VBPI</i>	0.0067	0.2159	0.5467
<i>TCEAL8</i>	0.0064	0.2175	0.5487
<i>DIAPH2</i>	0.0066	0.2206	0.5525
<i>PRAF2</i>	0.0063	0.2208	0.5528
<i>LICAM</i>	0.0062	0.2216	0.5536
<i>TMEM164</i>	-0.0062	0.2276	0.5606
<i>CLIC2</i>	-0.0060	0.2370	0.5702
<i>ARMCX1</i>	0.0060	0.2372	0.5704
<i>VSIG4</i>	-0.0059	0.2381	0.5713
<i>ZNF185</i>	0.0063	0.2390	0.5724
<i>MORC4</i>	-0.0059	0.2469	0.5808
<i>PHKA1</i>	-0.0060	0.2485	0.5825
<i>ARMCX6</i>	-0.0058	0.2538	0.5877
<i>NAA10</i>	0.0059	0.2569	0.5909
<i>FATE1</i>	-0.0062	0.2572	0.5909
<i>LDOC1</i>	0.0060	0.2572	0.5909
<i>SAT1</i>	-0.0059	0.2571	0.5909
<i>MAGIX</i>	0.0057	0.2581	0.5918
<i>WDR45</i>	-0.0057	0.2614	0.5951
<i>BTK</i>	0.0056	0.2622	0.5960
<i>CCDC22</i>	0.0059	0.2646	0.5982
<i>FTSJI</i>	0.0055	0.2659	0.5995
<i>CHM</i>	0.0058	0.2668	0.6003

<i>CTPS2</i>	0.0054	0.2822	0.6154
<i>GK</i>	0.0055	0.2846	0.6176
<i>UBL4A</i>	-0.0053	0.2859	0.6189
<i>CHIC1</i>	0.0055	0.2865	0.6196
<i>KDM5C</i>	-0.0052	0.2880	0.6212
<i>CD99</i>	-0.0055	0.2886	0.6217
<i>PDZD11</i>	0.0056	0.2888	0.6220
<i>MMGT1</i>	0.0055	0.2894	0.6227
<i>CXorf69</i>	-0.0053	0.2904	0.6237
<i>MID1</i>	-0.0052	0.2918	0.6245
<i>PAK3</i>	0.0052	0.2943	0.6263
<i>ZMYM3</i>	-0.0053	0.2968	0.6284
<i>COX7B</i>	0.0056	0.3037	0.6335
<i>BGN</i>	-0.0054	0.3043	0.6342
<i>NONO</i>	-0.0050	0.3103	0.6399
<i>TSC22D3</i>	-0.0052	0.3150	0.6444
<i>PDZD4</i>	0.0052	0.3182	0.6475
<i>LAGE3</i>	0.0051	0.3193	0.6485
<i>KCNE1L</i>	-0.0057	0.3209	0.6500
<i>CDK16</i>	-0.0050	0.3217	0.6505
<i>GPR143</i>	0.0051	0.3227	0.6516
<i>IQSEC2</i>	0.0050	0.3240	0.6527
<i>PLP2</i>	-0.0051	0.3242	0.6529
<i>BCOR</i>	0.0050	0.3253	0.6537
<i>RAI2</i>	-0.0050	0.3263	0.6541
<i>COL4A5</i>	-0.0050	0.3267	0.6543
<i>PHF6</i>	-0.0049	0.3292	0.6568
<i>IL13RA1</i>	-0.0050	0.3307	0.6580
<i>TMEM185A</i>	0.0050	0.3328	0.6599
<i>F8A1</i>	0.0053	0.3415	0.6668
<i>BCORL1</i>	-0.0047	0.3478	0.6713
<i>EFNB1</i>	-0.0050	0.3484	0.6714
<i>SH3BGRL</i>	-0.0046	0.3499	0.6728
<i>ODZ1</i>	0.0048	0.3509	0.6738
<i>SPIN2A</i>	0.0048	0.3554	0.6773
<i>NDP</i>	-0.0046	0.3594	0.6803
<i>SLC6A8</i>	-0.0047	0.3595	0.6803
<i>IDH3G</i>	-0.0046	0.3678	0.6870
<i>FAM122C</i>	0.0044	0.3691	0.6882
<i>PDHA1</i>	0.0049	0.3751	0.6927
<i>ZNF630</i>	0.0046	0.3766	0.6940
<i>HCCS</i>	0.0045	0.3835	0.6995
<i>ARSE</i>	-0.0045	0.3847	0.7007
<i>TRMT2B</i>	-0.0047	0.3867	0.7017
<i>GNL3L</i>	-0.0045	0.3909	0.7054
<i>PIN4</i>	-0.0045	0.3931	0.7069
<i>SMPX</i>	0.0044	0.3998	0.7120
<i>CSF2RA</i>	-0.0045	0.4003	0.7123
<i>PLXNA3</i>	0.0046	0.4005	0.7123

<i>UPF3B</i>	-0.0041	0.4091	0.7191
<i>MSL3</i>	0.0042	0.4154	0.7243
<i>GDPD2</i>	0.0041	0.4179	0.7256
<i>MAMLD1</i>	-0.0041	0.4194	0.7267
<i>ACRC</i>	-0.0040	0.4212	0.7277
<i>MAOA</i>	-0.0040	0.4316	0.7352
<i>SCML1</i>	-0.0041	0.4339	0.7369
<i>MTCP1</i>	0.0039	0.4346	0.7372
<i>KLHL4</i>	-0.0041	0.4369	0.7386
<i>TRAPPC2</i>	0.0040	0.4375	0.7389
<i>FGD1</i>	-0.0040	0.4410	0.7413
<i>SRPK3</i>	-0.0040	0.4452	0.7447
<i>TBC1D25</i>	0.0040	0.4465	0.7458
<i>DUSP9</i>	-0.0038	0.4472	0.7460
<i>SYAP1</i>	0.0039	0.4489	0.7471
<i>ZNF41</i>	-0.0040	0.4490	0.7472
<i>TFE3</i>	-0.0038	0.4495	0.7476
<i>FAM122B</i>	0.0041	0.4533	0.7505
<i>PCDH11X</i>	0.0040	0.4536	0.7505
<i>CXorf1</i>	0.0039	0.4549	0.7516
<i>HDAC6</i>	-0.0038	0.4585	0.7544
<i>G6PD</i>	-0.0039	0.4593	0.7546
<i>GEMIN8</i>	0.0037	0.4631	0.7567
<i>CXorf56</i>	0.0038	0.4646	0.7578
<i>SYN1</i>	0.0038	0.4692	0.7605
<i>ZNF449</i>	0.0039	0.4712	0.7623
<i>PRDX4</i>	0.0036	0.4716	0.7627
<i>ZBTB33</i>	-0.0037	0.4781	0.7669
<i>IKBKG</i>	0.0037	0.4795	0.7676
<i>LASIL</i>	0.0035	0.4902	0.7727
<i>FUNDC1</i>	0.0035	0.4916	0.7732
<i>MAP7D3</i>	-0.0036	0.4950	0.7758
<i>FAM156A</i>	0.0036	0.4951	0.7759
<i>RPL10</i>	0.0034	0.5032	0.7804
<i>HSFX1</i>	-0.0033	0.5117	0.7860
<i>TIMP1</i>	0.0033	0.5149	0.7879
<i>GPKOW</i>	0.0031	0.5215	0.7916
<i>DKC1</i>	-0.0033	0.5225	0.7925
<i>CHST7</i>	-0.0033	0.5306	0.7968
<i>FRMPD3</i>	0.0033	0.5304	0.7968
<i>WDR44</i>	0.0032	0.5325	0.7978
<i>OPHN1</i>	-0.0032	0.5331	0.7984
<i>CFP</i>	0.0032	0.5374	0.8012
<i>SMARCA1</i>	-0.0031	0.5400	0.8027
<i>SH3KBP1</i>	0.0034	0.5422	0.8043
<i>TSPYL2</i>	0.0032	0.5456	0.8064
<i>INE1</i>	-0.0030	0.5481	0.8081
<i>SLC38A5</i>	-0.0029	0.5624	0.8154
<i>GPR173</i>	-0.0029	0.5626	0.8155

<i>SNX12</i>	0.0030	0.5677	0.8186
<i>CASK</i>	0.0029	0.5796	0.8249
<i>FAM127B</i>	-0.0028	0.5934	0.8342
<i>PCDH19</i>	0.0026	0.5935	0.8342
<i>CA5B</i>	-0.0028	0.5938	0.8343
<i>MAGEE2</i>	0.0028	0.5954	0.8348
<i>ZNF674</i>	-0.0027	0.5999	0.8368
<i>PLCXD1</i>	-0.0026	0.6059	0.8401
<i>FAM155B</i>	-0.0027	0.6080	0.8401
<i>IGSF1</i>	0.0027	0.6085	0.8401
<i>UBE2A</i>	0.0026	0.6097	0.8401
<i>RPL39</i>	0.0026	0.6135	0.8406
<i>RPGR</i>	-0.0026	0.6193	0.8428
<i>CYSLTR1</i>	-0.0025	0.6244	0.8456
<i>FAM133A</i>	0.0023	0.6335	0.8501
<i>ATRX</i>	0.0024	0.6391	0.8526
<i>CSTF2</i>	0.0025	0.6393	0.8527
<i>FAM58A</i>	-0.0023	0.6458	0.8559
<i>CHRDL1</i>	-0.0023	0.6510	0.8583
<i>RP11-706O15.1</i>	0.0022	0.6510	0.8583
<i>ABCB7</i>	-0.0022	0.6556	0.8605
<i>RBBP7</i>	-0.0023	0.6631	0.8647
<i>CLCN4</i>	0.0023	0.6644	0.8658
<i>HTATSF1</i>	-0.0022	0.6751	0.8707
<i>RHOXF1</i>	0.0024	0.6795	0.8724
<i>ACOT9</i>	-0.0021	0.6821	0.8739
<i>RBMX</i>	0.0022	0.6831	0.8744
<i>CYBB</i>	-0.0019	0.6937	0.8807
<i>TCEAL3</i>	-0.0020	0.6943	0.8810
<i>MAOB</i>	0.0019	0.6953	0.8816
<i>ZNF182</i>	0.0020	0.7026	0.8847
<i>MID2</i>	-0.0019	0.7033	0.8849
<i>FAM3A</i>	0.0019	0.7101	0.8884
<i>MAGT1</i>	0.0019	0.7130	0.8895
<i>MOSPD1</i>	-0.0019	0.7146	0.8900
<i>FHL1</i>	0.0017	0.7241	0.8946
<i>PCSK1N</i>	0.0017	0.7310	0.8981
<i>ITM2A</i>	0.0017	0.7349	0.9003
<i>MAGED2</i>	-0.0017	0.7384	0.9016
<i>ARX</i>	-0.0017	0.7439	0.9041
<i>ARSD</i>	0.0017	0.7447	0.9047
<i>ZDHHC15</i>	0.0017	0.7467	0.9056
<i>VAMP7</i>	0.0016	0.7518	0.9078
<i>HDAC8</i>	0.0016	0.7541	0.9089
<i>KLHL13</i>	-0.0016	0.7543	0.9090
<i>FIGF</i>	0.0016	0.7553	0.9094
<i>CXorf57</i>	0.0015	0.7734	0.9171
<i>MTMR1</i>	0.0014	0.7782	0.9192
<i>LRCH2</i>	0.0015	0.7834	0.9215

<i>AFF2</i>	0.0014	0.7900	0.9242
<i>OGT</i>	0.0013	0.7981	0.9279
<i>SLC25A5</i>	-0.0013	0.7999	0.9292
<i>DNASE1L1</i>	-0.0014	0.8006	0.9295
<i>TMLHE</i>	0.0012	0.8192	0.9364
<i>NDUFB11</i>	0.0011	0.8270	0.9399
<i>TCEANC</i>	-0.0012	0.8296	0.9407
<i>TMEM187</i>	-0.0011	0.8314	0.9414
<i>TCEAL4</i>	0.0011	0.8352	0.9426
<i>ARSF</i>	0.0010	0.8389	0.9439
<i>ATG4A</i>	-0.0010	0.8431	0.9449
<i>ARHGAP4</i>	-0.0010	0.8446	0.9453
<i>PNMA6A</i>	0.0010	0.8465	0.9460
<i>FLNA</i>	-0.0010	0.8539	0.9492
<i>SRPX</i>	-0.0010	0.8540	0.9492
<i>FAM104B</i>	0.0009	0.8552	0.9498
<i>MAGEC3</i>	0.0009	0.8664	0.9540
<i>OFD1</i>	-0.0009	0.8665	0.9540
<i>NSDHL</i>	0.0008	0.8751	0.9569
<i>CXorf23</i>	-0.0008	0.8766	0.9574
<i>APOOL</i>	-0.0008	0.8781	0.9581
<i>SLC16A2</i>	-0.0007	0.8849	0.9604
<i>APEX2</i>	-0.0007	0.8952	0.9640
<i>RBMX2</i>	0.0006	0.9062	0.9670
<i>SLC25A6</i>	0.0006	0.9073	0.9672
<i>ZDHHC9</i>	-0.0006	0.9078	0.9675
<i>NDUFA1</i>	-0.0006	0.9081	0.9676
<i>ARMCX4</i>	-0.0006	0.9102	0.9684
<i>HDHD1</i>	-0.0006	0.9120	0.9695
<i>RPS6KA3</i>	-0.0005	0.9192	0.9724
<i>ZNF81</i>	-0.0005	0.9232	0.9741
<i>NKAP</i>	0.0004	0.9395	0.9793
<i>USP9X</i>	0.0004	0.9425	0.9804
<i>GYG2</i>	0.0003	0.9451	0.9815
<i>TAF1</i>	-0.0003	0.9494	0.9829
<i>MOSPD2</i>	-0.0003	0.9531	0.9841
<i>SLC10A3</i>	-0.0003	0.9553	0.9848
<i>RPS4X</i>	0.0003	0.9601	0.9861
<i>CIGALT1C1</i>	0.0002	0.9607	0.9864
<i>FUNDC2</i>	0.0002	0.9632	0.9870
<i>SCML2</i>	0.0002	0.9657	0.9879
<i>KAL1</i>	-0.0002	0.9681	0.9888
<i>RAP2C</i>	-0.0001	0.9798	0.9935
<i>AIFM1</i>	0.0001	0.9808	0.9936
<i>SUV39H1</i>	0.0001	0.9837	0.9949
<i>PCYT1B</i>	0.0001	0.9850	0.9952
<i>DMRTC1</i>	0.0001	0.9912	0.9974
<i>PHKA2</i>	0.0001	0.9923	0.9979
<i>MAGED4</i>	0.0000	0.9933	0.9981

<i>GABRE</i>	0.0000	0.9939	0.9983
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eTable 3. Association of X chromosome gene expression with cognition, adjusted for age, education, and AD pathology, in men. FDR-adjusted p-values for genome-wide correction shown.

Gene	Beta	Pvalue	Pvalue Adjusted
<i>TAF9B</i>	0.0232	0.0013	0.1768
<i>PTCHD1</i>	-0.0218	0.0014	0.1805
<i>FRMPD3</i>	-0.0203	0.0027	0.2053
<i>VMA21</i>	0.0206	0.0035	0.2085
<i>CLIC2</i>	-0.0206	0.0036	0.2085
<i>DNASE1L1</i>	0.0182	0.0040	0.2150
<i>WBP5</i>	-0.0193	0.0047	0.2289
<i>WASH6P</i>	-0.0188	0.0072	0.2565
<i>PRKX</i>	-0.0174	0.0072	0.2565
<i>TAZ</i>	-0.0172	0.0105	0.2788
<i>MECP2</i>	-0.0167	0.0126	0.2922
<i>ELK1</i>	-0.0173	0.0129	0.2951
<i>MAGED4B</i>	-0.0171	0.0139	0.2998
<i>BRCC3</i>	0.0163	0.0142	0.3029
<i>FTSJ1</i>	-0.0176	0.0148	0.3066
<i>TSC22D3</i>	-0.0172	0.0152	0.3095
<i>PDZD11</i>	0.0165	0.0157	0.3121
<i>FOXO4</i>	-0.0166	0.0162	0.3160
<i>HCFC1</i>	-0.0170	0.0170	0.3205
<i>TSR2</i>	0.0161	0.0188	0.3282
<i>FAM127A</i>	0.0155	0.0196	0.3316
<i>DMD</i>	0.0153	0.0217	0.3401
<i>MORC4</i>	-0.0155	0.0229	0.3456
<i>CSTF2</i>	0.0153	0.0240	0.3499
<i>PPEF1</i>	0.0157	0.0242	0.3513
<i>PRICKLE3</i>	-0.0156	0.0249	0.3543
<i>ASMTL</i>	0.0157	0.0260	0.3589
<i>RP11-706O15.1</i>	0.0161	0.0265	0.3599
<i>CXorf56</i>	0.0147	0.0272	0.3627
<i>HMGB3</i>	0.0151	0.0284	0.3678
<i>MID1IP1</i>	-0.0144	0.0286	0.3688
<i>MED12</i>	-0.0143	0.0293	0.3714
<i>PLS3</i>	0.0152	0.0294	0.3715
<i>PNMA5</i>	0.0157	0.0308	0.3768
<i>ITM2A</i>	0.0149	0.0352	0.3903
<i>GYG2</i>	-0.0159	0.0360	0.3920
<i>MED14</i>	0.0137	0.0387	0.4019
<i>ARMCX5</i>	0.0137	0.0397	0.4054
<i>HSFX1</i>	-0.0144	0.0400	0.4063
<i>RBM3</i>	0.0139	0.0422	0.4132

<i>GPRASP2</i>	0.0131	0.0423	0.4132
<i>RAB9A</i>	-0.0141	0.0425	0.4141
<i>HPRT1</i>	0.0144	0.0430	0.4157
<i>SYAP1</i>	0.0134	0.0451	0.4197
<i>SLC9A7</i>	0.0128	0.0462	0.4233
<i>DDX26B</i>	0.0135	0.0466	0.4247
<i>PHF8</i>	-0.0136	0.0466	0.4247
<i>PORCN</i>	0.0136	0.0473	0.4257
<i>PDHA1</i>	0.0123	0.0478	0.4275
<i>ARSD</i>	0.0138	0.0510	0.4359
<i>TCEAL5</i>	0.0143	0.0512	0.4360
<i>TAB3</i>	0.0127	0.0546	0.4423
<i>RBMX</i>	0.0127	0.0555	0.4449
<i>APLN</i>	-0.0141	0.0575	0.4498
<i>RPL10</i>	0.0133	0.0583	0.4520
<i>TIMM8A</i>	0.0121	0.0594	0.4545
<i>ZMYM3</i>	-0.0136	0.0611	0.4579
<i>TMEM187</i>	-0.0132	0.0626	0.4612
<i>PGRMC1</i>	0.0125	0.0635	0.4639
<i>NDUFA1</i>	0.0128	0.0644	0.4646
<i>COX7B</i>	0.0122	0.0660	0.4684
<i>IL3RA</i>	-0.0125	0.0662	0.4684
<i>GPC4</i>	-0.0136	0.0664	0.4687
<i>POLA1</i>	-0.0137	0.0668	0.4703
<i>CDKL5</i>	0.0121	0.0673	0.4708
<i>USP11</i>	0.0125	0.0696	0.4761
<i>GPRASP1</i>	0.0124	0.0711	0.4795
<i>RPI-177G6.2</i>	-0.0131	0.0723	0.4824
<i>TMLHE</i>	0.0121	0.0738	0.4855
<i>DYNLT3</i>	0.0126	0.0740	0.4855
<i>PHKA2</i>	-0.0117	0.0742	0.4858
<i>BCOR</i>	-0.0127	0.0746	0.4865
<i>BEX1</i>	0.0125	0.0746	0.4865
<i>MAP7D2</i>	0.0124	0.0766	0.4904
<i>TMSB4X</i>	0.0131	0.0778	0.4922
<i>STAG2</i>	-0.0113	0.0795	0.4957
<i>SPIN2B</i>	0.0128	0.0800	0.4963
<i>BEX5</i>	0.0128	0.0809	0.4982
<i>EMD</i>	0.0124	0.0828	0.5018
<i>SMC1A</i>	-0.0141	0.0827	0.5018
<i>RNF128</i>	0.0122	0.0835	0.5030
<i>BEX2</i>	0.0119	0.0839	0.5046

<i>ACRC</i>	-0.0126	0.0848	0.5057
<i>RAP2C</i>	0.0111	0.0871	0.5099
<i>SLC10A3</i>	0.0117	0.0911	0.5181
<i>CXorf26</i>	0.0112	0.0914	0.5193
<i>ABCB7</i>	-0.0122	0.0926	0.5207
<i>RRAGB</i>	0.0118	0.0948	0.5242
<i>ZNF81</i>	-0.0111	0.0966	0.5285
<i>UPRT</i>	0.0111	0.0977	0.5306
<i>ZNF711</i>	0.0113	0.0975	0.5306
<i>SPIN2A</i>	-0.0112	0.1002	0.5335
<i>EIF1AX</i>	0.0112	0.1051	0.5406
<i>KLF8</i>	0.0118	0.1055	0.5411
<i>FAM199X</i>	0.0115	0.1095	0.5459
<i>SLC38A5</i>	0.0119	0.1120	0.5495
<i>CXorf24</i>	-0.0099	0.1170	0.5582
<i>RENBP</i>	-0.0106	0.1190	0.5618
<i>ZBTB33</i>	-0.0108	0.1215	0.5663
<i>MBTPS2</i>	0.0103	0.1230	0.5683
<i>TCEANC</i>	-0.0101	0.1237	0.5684
<i>CIGALT1C1</i>	-0.0114	0.1235	0.5684
<i>ZNF41</i>	0.0098	0.1294	0.5789
<i>TFE3</i>	-0.0110	0.1338	0.5850
<i>CSAG1</i>	-0.0100	0.1429	0.5955
<i>GRIA3</i>	0.0098	0.1459	0.5985
<i>F8</i>	0.0095	0.1475	0.6002
<i>IRAK1</i>	-0.0100	0.1477	0.6007
<i>L1CAM</i>	-0.0103	0.1480	0.6012
<i>SCML2</i>	-0.0106	0.1486	0.6018
<i>PNMA3</i>	0.0100	0.1508	0.6047
<i>UBE2A</i>	0.0099	0.1513	0.6051
<i>USP9X</i>	0.0106	0.1534	0.6071
<i>XK</i>	0.0096	0.1537	0.6073
<i>PLXNB3</i>	-0.0097	0.1541	0.6073
<i>CD99L2</i>	0.0092	0.1544	0.6073
<i>FAM156A</i>	0.0097	0.1557	0.6093
<i>PNPLA4</i>	0.0103	0.1560	0.6099
<i>TSPAN7</i>	0.0097	0.1575	0.6118
<i>CXorf23</i>	0.0097	0.1579	0.6118
<i>BEX4</i>	0.0099	0.1597	0.6141
<i>RAB33A</i>	-0.0091	0.1619	0.6155
<i>GDI1</i>	0.0102	0.1648	0.6193
<i>IL2RG</i>	-0.0105	0.1657	0.6199

<i>ZBED1</i>	-0.0098	0.1696	0.6228
<i>VBPI</i>	0.0091	0.1702	0.6241
<i>SYTL4</i>	-0.0096	0.1719	0.6264
<i>PHF16</i>	-0.0096	0.1728	0.6273
<i>FAM50A</i>	-0.0096	0.1745	0.6296
<i>SLC35A2</i>	0.0090	0.1764	0.6308
<i>MAGED1</i>	0.0092	0.1813	0.6360
<i>TRAPPC2</i>	-0.0096	0.1817	0.6361
<i>TCEAL6</i>	0.0091	0.1834	0.6380
<i>TMEM185A</i>	-0.0090	0.1842	0.6382
<i>CUL4B</i>	0.0095	0.1852	0.6389
<i>STS</i>	0.0087	0.1892	0.6422
<i>GNL3L</i>	0.0087	0.1921	0.6451
<i>FAM155B</i>	-0.0088	0.1934	0.6461
<i>FUNDC1</i>	0.0093	0.1935	0.6463
<i>FGF13</i>	0.0093	0.1970	0.6496
<i>PLXNA3</i>	-0.0084	0.1976	0.6503
<i>VAMP7</i>	0.0095	0.1991	0.6519
<i>OTUD5</i>	0.0083	0.1995	0.6520
<i>TSPAN6</i>	-0.0088	0.2024	0.6525
<i>CCDC120</i>	-0.0093	0.2037	0.6537
<i>NAP1L2</i>	0.0088	0.2098	0.6604
<i>TBLIX</i>	-0.0090	0.2110	0.6618
<i>ARMCX1</i>	0.0088	0.2110	0.6619
<i>GSPT2</i>	0.0080	0.2119	0.6625
<i>RGAG4</i>	0.0083	0.2129	0.6636
<i>GPKOW</i>	0.0100	0.2134	0.6639
<i>GDPD2</i>	-0.0090	0.2135	0.6639
<i>EFNB1</i>	-0.0081	0.2150	0.6649
<i>ARSE</i>	-0.0085	0.2159	0.6661
<i>SH3KBP1</i>	0.0076	0.2297	0.6782
<i>GABRE</i>	-0.0084	0.2301	0.6783
<i>MID1</i>	-0.0087	0.2326	0.6802
<i>DLG3</i>	0.0079	0.2344	0.6815
<i>SAT1</i>	-0.0081	0.2352	0.6821
<i>PCDH19</i>	0.0089	0.2367	0.6841
<i>DUSP9</i>	-0.0086	0.2398	0.6872
<i>GK</i>	0.0086	0.2413	0.6890
<i>VSIG4</i>	-0.0087	0.2447	0.6919
<i>NDP</i>	-0.0082	0.2459	0.6928
<i>G6PD</i>	0.0080	0.2483	0.6947
<i>CHRDLI</i>	0.0082	0.2505	0.6960

<i>MAGIX</i>	0.0080	0.2518	0.6978
<i>KDM6A</i>	-0.0086	0.2559	0.7011
<i>CCDC160</i>	-0.0083	0.2573	0.7025
<i>HEPH</i>	-0.0079	0.2578	0.7029
<i>AL158821.1</i>	-0.0075	0.2593	0.7037
<i>LONRF3</i>	-0.0076	0.2600	0.7043
<i>SMS</i>	0.0080	0.2660	0.7108
<i>ATRX</i>	-0.0082	0.2709	0.7143
<i>HNRNPH2</i>	0.0077	0.2709	0.7143
<i>TCEAL7</i>	0.0074	0.2720	0.7155
<i>PDZD4</i>	-0.0076	0.2727	0.7163
<i>EFHC2</i>	-0.0078	0.2734	0.7164
<i>TCEAL1</i>	-0.0074	0.2740	0.7164
<i>FAM127B</i>	0.0072	0.2748	0.7168
<i>SH3BGRL</i>	0.0081	0.2748	0.7168
<i>KDM5C</i>	-0.0080	0.2775	0.7179
<i>FIGF</i>	-0.0072	0.2838	0.7231
<i>SUV39H1</i>	0.0072	0.2857	0.7250
<i>ARMCX3</i>	0.0073	0.2883	0.7268
<i>CXorf38</i>	0.0077	0.2918	0.7285
<i>PNMA6C</i>	0.0063	0.2961	0.7313
<i>KCNE1L</i>	-0.0064	0.2970	0.7319
<i>HMG5</i>	-0.0073	0.2978	0.7328
<i>IDS</i>	0.0070	0.3001	0.7344
<i>ZRSR2</i>	-0.0071	0.3025	0.7364
<i>AIFM1</i>	0.0071	0.3086	0.7386
<i>GPR34</i>	0.0073	0.3078	0.7386
<i>CHM</i>	-0.0066	0.3091	0.7387
<i>CETN2</i>	0.0073	0.3105	0.7399
<i>PRAF2</i>	0.0072	0.3122	0.7414
<i>ZCCHC12</i>	0.0070	0.3130	0.7422
<i>ARHGEF6</i>	-0.0074	0.3145	0.7427
<i>BGN</i>	-0.0068	0.3192	0.7465
<i>SLC25A5</i>	0.0070	0.3204	0.7474
<i>PHKA1</i>	-0.0068	0.3223	0.7487
<i>ZDHHC15</i>	0.0062	0.3232	0.7494
<i>ARMCX2</i>	0.0067	0.3239	0.7498
<i>WDR44</i>	0.0070	0.3243	0.7499
<i>PABPC1L2A</i>	-0.0066	0.3274	0.7522
<i>SSR4</i>	0.0069	0.3284	0.7527
<i>NGFRAP1</i>	0.0067	0.3299	0.7534
<i>PRPS2</i>	0.0065	0.3305	0.7537

<i>PPP2R3B</i>	-0.0068	0.3320	0.7552
<i>IGSF1</i>	-0.0065	0.3345	0.7569
<i>UPF3B</i>	-0.0072	0.3407	0.7604
<i>TBC1D8B</i>	-0.0063	0.3412	0.7608
<i>DRP2</i>	0.0066	0.3433	0.7614
<i>ARMCX4</i>	0.0064	0.3562	0.7693
<i>UXT</i>	-0.0062	0.3646	0.7751
<i>ATP6AP2</i>	0.0063	0.3669	0.7761
<i>CXorf40B</i>	0.0062	0.3721	0.7780
<i>SRPX</i>	0.0062	0.3699	0.7780
<i>NONO</i>	-0.0066	0.3746	0.7780
<i>UTP14A</i>	0.0057	0.3727	0.7780
<i>NAPIL3</i>	0.0061	0.3768	0.7789
<i>DMRTC1B</i>	-0.0061	0.3766	0.7789
<i>RAI2</i>	-0.0060	0.3789	0.7805
<i>NUDT11</i>	0.0061	0.3843	0.7835
<i>ARX</i>	-0.0060	0.3849	0.7835
<i>ZFX</i>	-0.0061	0.3852	0.7838
<i>MCTS1</i>	0.0061	0.3858	0.7844
<i>ALG13</i>	0.0059	0.3892	0.7867
<i>SMPX</i>	0.0060	0.3903	0.7871
<i>HDHD1</i>	0.0055	0.3947	0.7892
<i>ARHGEF9</i>	0.0057	0.3979	0.7909
<i>TCEAL8</i>	-0.0058	0.3993	0.7915
<i>EBP</i>	0.0060	0.4001	0.7921
<i>ZNF449</i>	0.0057	0.4007	0.7923
<i>CCDC22</i>	0.0054	0.4009	0.7924
<i>RBM10</i>	-0.0054	0.4033	0.7939
<i>ARHGAP4</i>	0.0057	0.4050	0.7946
<i>PNCK</i>	0.0058	0.4086	0.7971
<i>FHL1</i>	0.0061	0.4105	0.7983
<i>LRCH2</i>	-0.0055	0.4135	0.7995
<i>MAP7D3</i>	-0.0055	0.4140	0.7996
<i>AFF2</i>	-0.0053	0.4163	0.8008
<i>OPHN1</i>	-0.0059	0.4162	0.8008
<i>SLC6A8</i>	-0.0055	0.4177	0.8015
<i>CXorf40A</i>	0.0052	0.4190	0.8018
<i>SNX12</i>	0.0055	0.4190	0.8018
<i>MAGEH1</i>	0.0056	0.4195	0.8018
<i>FMR1</i>	0.0057	0.4197	0.8018
<i>FAM122B</i>	0.0054	0.4219	0.8032
<i>HUWE1</i>	-0.0056	0.4227	0.8038

<i>NHS</i>	-0.0057	0.4229	0.8039
<i>PCSK1N</i>	0.0061	0.4250	0.8051
<i>ZNF275</i>	0.0056	0.4259	0.8056
<i>MAGED2</i>	0.0056	0.4265	0.8058
<i>FAM70A</i>	-0.0054	0.4285	0.8064
<i>SHROOM2</i>	0.0050	0.4377	0.8121
<i>TAF1</i>	0.0059	0.4410	0.8133
<i>TMEM47</i>	-0.0052	0.4416	0.8133
<i>SPIN3</i>	0.0053	0.4422	0.8138
<i>FAM3A</i>	0.0054	0.4426	0.8138
<i>IL13RA1</i>	0.0052	0.4526	0.8198
<i>MAOA</i>	0.0053	0.4585	0.8224
<i>APOO</i>	0.0053	0.4588	0.8226
<i>TCEAL2</i>	0.0051	0.4599	0.8230
<i>RBMX2</i>	-0.0051	0.4615	0.8234
<i>GPR143</i>	0.0052	0.4631	0.8240
<i>MUMILI1</i>	-0.0050	0.4629	0.8240
<i>RPL39</i>	-0.0051	0.4664	0.8258
<i>IKBKG</i>	0.0050	0.4712	0.8278
<i>FAM120C</i>	-0.0053	0.4720	0.8282
<i>LASIL</i>	0.0050	0.4745	0.8289
<i>CITED1</i>	0.0052	0.4745	0.8290
<i>SMARCA1</i>	-0.0051	0.4760	0.8297
<i>IDH3G</i>	0.0050	0.4790	0.8307
<i>USP51</i>	0.0050	0.4852	0.8332
<i>NLGN3</i>	0.0050	0.4873	0.8345
<i>PRPS1</i>	0.0048	0.4911	0.8363
<i>HDAC6</i>	-0.0050	0.4927	0.8370
<i>ATP2B3</i>	0.0045	0.5058	0.8443
<i>APEX2</i>	0.0045	0.5068	0.8446
<i>RIBC1</i>	-0.0047	0.5072	0.8449
<i>PJA1</i>	0.0046	0.5080	0.8453
<i>PRRG1</i>	-0.0045	0.5126	0.8474
<i>TXLNG</i>	0.0042	0.5126	0.8474
<i>MAGED4</i>	-0.0043	0.5159	0.8494
<i>SLC25A6</i>	0.0043	0.5221	0.8524
<i>CXorf57</i>	-0.0044	0.5271	0.8549
<i>PIM2</i>	0.0043	0.5274	0.8551
<i>PQBP1</i>	0.0042	0.5277	0.8552
<i>PSMD10</i>	0.0048	0.5290	0.8560
<i>ZNF185</i>	0.0043	0.5325	0.8579
<i>WWC3</i>	-0.0039	0.5346	0.8584

<i>CXorf36</i>	-0.0043	0.5348	0.8585
<i>RPS6KA3</i>	-0.0041	0.5445	0.8641
<i>TMEM164</i>	-0.0042	0.5449	0.8644
<i>RP11-274K13.2</i>	0.0040	0.5499	0.8672
<i>CA5B</i>	0.0041	0.5519	0.8684
<i>GPM6B</i>	-0.0041	0.5521	0.8685
<i>HS6ST2</i>	0.0040	0.5542	0.8692
<i>ZNF674</i>	0.0040	0.5560	0.8702
<i>SLC25A53</i>	0.0040	0.5584	0.8713
<i>PRDX4</i>	-0.0044	0.5587	0.8714
<i>GTPBP6</i>	-0.0041	0.5593	0.8719
<i>GJB1</i>	0.0038	0.5623	0.8733
<i>LAMP2</i>	-0.0039	0.5683	0.8760
<i>CSF2RA</i>	0.0037	0.5698	0.8767
<i>GRIPAP1</i>	0.0038	0.5718	0.8777
<i>HSD17B10</i>	0.0040	0.5733	0.8784
<i>PHF6</i>	-0.0040	0.5741	0.8785
<i>PNMA6A</i>	-0.0039	0.5741	0.8785
<i>ACOT9</i>	0.0039	0.5745	0.8785
<i>WDR45</i>	-0.0040	0.5750	0.8786
<i>MMGT1</i>	0.0039	0.5810	0.8809
<i>CXorf69</i>	-0.0040	0.5831	0.8819
<i>FAM123B</i>	-0.0040	0.5835	0.8821
<i>CTPS2</i>	-0.0040	0.5853	0.8827
<i>SCML1</i>	0.0036	0.5895	0.8844
<i>DHRX</i>	0.0038	0.5931	0.8856
<i>SYP</i>	0.0037	0.5951	0.8862
<i>MCF2</i>	-0.0037	0.5951	0.8862
<i>TCEAL4</i>	0.0036	0.5954	0.8863
<i>CFP</i>	0.0035	0.5966	0.8865
<i>PRRG3</i>	0.0035	0.6019	0.8884
<i>ODZ1</i>	0.0038	0.6031	0.8891
<i>PIGA</i>	-0.0036	0.6054	0.8896
<i>AMMECR1</i>	-0.0035	0.6063	0.8896
<i>RAB39B</i>	0.0035	0.6064	0.8897
<i>MAGEE1</i>	0.0036	0.6065	0.8897
<i>EIF2S3</i>	-0.0034	0.6073	0.8900
<i>SASH3</i>	-0.0038	0.6113	0.8919
<i>KLHL4</i>	0.0035	0.6115	0.8919
<i>APIS2</i>	0.0036	0.6119	0.8921
<i>CD99</i>	-0.0035	0.6121	0.8922
<i>BRWD3</i>	-0.0035	0.6148	0.8936

<i>XIAP</i>	-0.0034	0.6166	0.8941
<i>ACSL4</i>	0.0033	0.6206	0.8955
<i>ZDHHC9</i>	0.0036	0.6206	0.8955
<i>LDOC1</i>	0.0033	0.6223	0.8962
<i>ZXDB</i>	0.0034	0.6228	0.8964
<i>SLC25A14</i>	0.0034	0.6261	0.8974
<i>RAB9B</i>	0.0032	0.6271	0.8975
<i>GABRA3</i>	-0.0033	0.6278	0.8979
<i>FAM156B</i>	0.0034	0.6315	0.8999
<i>WAS</i>	0.0033	0.6360	0.9014
<i>BCORL1</i>	-0.0035	0.6363	0.9015
<i>FAM122C</i>	0.0034	0.6383	0.9024
<i>ATG4A</i>	-0.0032	0.6406	0.9031
<i>TIMM17B</i>	0.0035	0.6419	0.9035
<i>RPL36A</i>	-0.0031	0.6444	0.9050
<i>KLHL15</i>	-0.0031	0.6462	0.9054
<i>MTM1</i>	-0.0033	0.6512	0.9071
<i>GPR173</i>	0.0032	0.6548	0.9082
<i>MORF4L2</i>	0.0031	0.6589	0.9092
<i>FRMPD4</i>	0.0030	0.6602	0.9097
<i>MAGEE2</i>	-0.0029	0.6624	0.9107
<i>ZNF75D</i>	0.0029	0.6637	0.9112
<i>MAGT1</i>	0.0029	0.6640	0.9112
<i>ABCD1</i>	-0.0027	0.6851	0.9193
<i>FATE1</i>	-0.0026	0.6887	0.9205
<i>MOSPD1</i>	-0.0028	0.6904	0.9210
<i>IL1RAPL1</i>	-0.0029	0.6993	0.9245
<i>LAGE3</i>	0.0026	0.7021	0.9255
<i>SLC9A6</i>	-0.0025	0.7044	0.9266
<i>CHIC1</i>	-0.0026	0.7053	0.9269
<i>MTCP1</i>	0.0026	0.7072	0.9277
<i>RPS4X</i>	0.0026	0.7109	0.9289
<i>OFD1</i>	-0.0025	0.7123	0.9294
<i>SLITRK4</i>	-0.0025	0.7134	0.9297
<i>TIMP1</i>	-0.0025	0.7152	0.9299
<i>MAMLD1</i>	0.0025	0.7216	0.9320
<i>FLNA</i>	0.0023	0.7240	0.9330
<i>FAAH2</i>	-0.0025	0.7271	0.9341
<i>RPGR</i>	-0.0025	0.7281	0.9344
<i>COL4A5</i>	0.0024	0.7285	0.9344
<i>ARMCX6</i>	0.0024	0.7300	0.9346
<i>F8A1</i>	-0.0021	0.7352	0.9362

<i>TCEAL3</i>	-0.0023	0.7356	0.9363
<i>SEPT</i>	-0.0023	0.7418	0.9385
<i>MTCP1NB</i>	-0.0024	0.7435	0.9390
<i>GEMIN8</i>	-0.0023	0.7466	0.9393
<i>ENOX2</i>	0.0022	0.7513	0.9409
<i>BTK</i>	0.0023	0.7514	0.9410
<i>FUNDC2</i>	-0.0022	0.7569	0.9422
<i>RGN</i>	-0.0021	0.7575	0.9425
<i>DIAPH2</i>	0.0020	0.7586	0.9427
<i>FGD1</i>	-0.0021	0.7611	0.9434
<i>SLC16A2</i>	0.0022	0.7622	0.9436
<i>PIR</i>	0.0020	0.7626	0.9437
<i>ZNF182</i>	-0.0020	0.7632	0.9439
<i>GLA</i>	-0.0020	0.7660	0.9451
<i>UBL4A</i>	0.0022	0.7667	0.9452
<i>CNKSR2</i>	-0.0020	0.7686	0.9454
<i>PDK3</i>	-0.0019	0.7769	0.9479
<i>ZMAT1</i>	0.0019	0.7782	0.9480
<i>MTMR1</i>	-0.0021	0.7790	0.9482
<i>OCRL</i>	0.0018	0.7826	0.9488
<i>SLITRK2</i>	-0.0020	0.7833	0.9488
<i>KCND1</i>	-0.0017	0.7867	0.9494
<i>ATP6AP1</i>	0.0018	0.7883	0.9499
<i>PLP2</i>	-0.0018	0.7908	0.9505
<i>APOOL</i>	-0.0018	0.7935	0.9518
<i>CHST7</i>	0.0017	0.7992	0.9537
<i>SLC25A43</i>	0.0016	0.7992	0.9537
<i>DDX3X</i>	-0.0019	0.8023	0.9544
<i>ARSF</i>	-0.0017	0.8058	0.9555
<i>KAL1</i>	0.0017	0.8131	0.9577
<i>BCAP31</i>	-0.0016	0.8146	0.9578
<i>HTATSF1</i>	-0.0016	0.8194	0.9585
<i>NKAP</i>	-0.0017	0.8226	0.9592
<i>PLCXD1</i>	-0.0016	0.8269	0.9603
<i>NLGN4X</i>	0.0014	0.8342	0.9624
<i>RBM41</i>	0.0014	0.8415	0.9642
<i>MSL3</i>	-0.0014	0.8423	0.9645
<i>NUDT10</i>	0.0014	0.8464	0.9657
<i>IGBP1</i>	0.0013	0.8467	0.9659
<i>RHOXF1</i>	-0.0012	0.8479	0.9663
<i>FAM127C</i>	-0.0012	0.8504	0.9667
<i>DACH2</i>	0.0014	0.8505	0.9667

<i>DMRTC1</i>	0.0012	0.8579	0.9687
<i>SHROOM4</i>	0.0011	0.8616	0.9702
<i>FAM133A</i>	0.0013	0.8619	0.9702
<i>AMOT</i>	-0.0012	0.8674	0.9717
<i>BHLHB9</i>	0.0011	0.8677	0.9717
<i>PCDH11X</i>	0.0010	0.8761	0.9740
<i>UBA1</i>	-0.0011	0.8778	0.9745
<i>RBBP7</i>	-0.0010	0.8790	0.9748
<i>PPP1R3F</i>	-0.0011	0.8826	0.9754
<i>AKAP17A</i>	-0.0010	0.8826	0.9754
<i>MPP1</i>	-0.0010	0.8824	0.9754
<i>HAUS7</i>	0.0010	0.8876	0.9765
<i>RLIM</i>	-0.0009	0.8900	0.9768
<i>MID2</i>	0.0010	0.8926	0.9777
<i>TMSB15B</i>	-0.0009	0.8952	0.9783
<i>WDR13</i>	-0.0010	0.8970	0.9791
<i>NXT2</i>	-0.0008	0.9033	0.9804
<i>MOSPD2</i>	0.0008	0.9066	0.9816
<i>CASK</i>	-0.0008	0.9089	0.9817
<i>REPS2</i>	0.0008	0.9100	0.9819
<i>STARD8</i>	-0.0007	0.9148	0.9831
<i>KIAA2022</i>	0.0007	0.9148	0.9831
<i>YIPF6</i>	0.0007	0.9182	0.9840
<i>PAK3</i>	-0.0008	0.9185	0.9842
<i>ERAS</i>	-0.0007	0.9207	0.9847
<i>PLP1</i>	0.0007	0.9218	0.9850
<i>PGK1</i>	0.0007	0.9230	0.9850
<i>MAOB</i>	-0.0007	0.9237	0.9851
<i>ZC3H12B</i>	-0.0006	0.9276	0.9863
<i>INE1</i>	-0.0006	0.9284	0.9865
<i>UBQLN2</i>	0.0006	0.9291	0.9868
<i>FAM58A</i>	0.0006	0.9311	0.9872
<i>ZNF673</i>	-0.0006	0.9312	0.9873
<i>PABPC1L2B</i>	0.0006	0.9317	0.9874
<i>TRMT2B</i>	0.0005	0.9319	0.9875
<i>TMEM35</i>	-0.0006	0.9320	0.9875
<i>F8A2</i>	-0.0005	0.9378	0.9883
<i>CYBB</i>	0.0006	0.9389	0.9886
<i>CLCN4</i>	0.0005	0.9412	0.9891
<i>RNF113A</i>	0.0005	0.9426	0.9892
<i>TSPYL2</i>	-0.0005	0.9454	0.9895
<i>TBC1D25</i>	0.0004	0.9474	0.9901

<i>HDAC8</i>	-0.0004	0.9543	0.9920
<i>CXorf1</i>	0.0003	0.9572	0.9923
<i>ZC4H2</i>	-0.0003	0.9580	0.9926
<i>TRO</i>	-0.0004	0.9586	0.9926
<i>KLHL13</i>	-0.0004	0.9601	0.9927
<i>MSN</i>	0.0003	0.9624	0.9930
<i>ZNF630</i>	-0.0003	0.9632	0.9932
<i>NSDHL</i>	0.0003	0.9644	0.9935
<i>SYN1</i>	-0.0003	0.9642	0.9935
<i>NDUFB11</i>	0.0003	0.9647	0.9935
<i>MAGEC3</i>	-0.0003	0.9665	0.9938
<i>SRPK3</i>	0.0003	0.9678	0.9943
<i>CYSLTR1</i>	-0.0002	0.9749	0.9954
<i>DCX</i>	-0.0002	0.9730	0.9954
<i>IQSEC2</i>	-0.0002	0.9733	0.9954
<i>OGT</i>	0.0002	0.9732	0.9954
<i>CDK16</i>	0.0002	0.9768	0.9959
<i>NAA10</i>	-0.0002	0.9813	0.9974
<i>FAM104B</i>	-0.0001	0.9838	0.9975
<i>THOC2</i>	0.0002	0.9834	0.9975
<i>NKRF</i>	0.0001	0.9878	0.9984
<i>DKC1</i>	0.0001	0.9886	0.9986
<i>PCYT1B</i>	-0.0001	0.9920	0.9992
<i>ARAF</i>	-0.0001	0.9937	0.9993
<i>HCCS</i>	0.0000	0.9944	0.9995
<i>F8A3</i>	0.0000	0.9970	0.9998
<i>PIN4</i>	0.0000	0.9976	0.9998
<i>ATP11C</i>	0.0000	0.9994	0.9999

eTable 4. Global cognitive decline and NFT in men compared to women, adjusted by age and education

Measure	Beta	Pvalue
Global cognitive decline (women)	-0.180	0.86
NFT (women)	-0.056	0.07

eTable 5. Association of X chromosome gene expression with neurofibrillary tangles in women, adjusted by age and education. FDR-adjusted p-values for genome-wide correction shown.

Gene	Beta	Pvalue	Pvalue Adjusted
<i>ELK1</i>	0.0748	0.0001	0.1176
<i>PDZD11</i>	-0.0675	0.0004	0.2450
<i>SMS</i>	-0.0654	0.0005	0.2555
<i>PPEF1</i>	-0.0610	0.0010	0.2753
<i>LONRF3</i>	0.0596	0.0015	0.3155
<i>FOXO4</i>	0.0591	0.0019	0.3199
<i>MCTS1</i>	-0.0557	0.0026	0.3364
<i>GPRASP1</i>	-0.0555	0.0029	0.3430
<i>MAGED4B</i>	0.0561	0.0028	0.3430
<i>MAGEH1</i>	-0.0541	0.0042	0.3665
<i>FGF13</i>	-0.0535	0.0042	0.3665
<i>RRAGB</i>	-0.0530	0.0046	0.3723
<i>CSTF2</i>	-0.0536	0.0049	0.3730
<i>ATRX</i>	0.0505	0.0054	0.3766
<i>TMLHE</i>	-0.0522	0.0056	0.3787
<i>ZBED1</i>	0.0514	0.0058	0.3806
<i>DYNLT3</i>	-0.0499	0.0067	0.3965
<i>COX7B</i>	-0.0515	0.0080	0.4038
<i>OTUD5</i>	-0.0497	0.0111	0.4108
<i>G6PD</i>	-0.0487	0.0102	0.4108
<i>PDHA1</i>	-0.0502	0.0117	0.4144
<i>PRPS1</i>	-0.0472	0.0123	0.4190
<i>NAA10</i>	-0.0478	0.0123	0.4190
<i>ARSE</i>	0.0462	0.0134	0.4228
<i>HPRT1</i>	-0.0457	0.0139	0.4262
<i>MBTPS2</i>	-0.0470	0.0147	0.4287
<i>PIM2</i>	-0.0467	0.0146	0.4287
<i>TSPAN7</i>	-0.0466	0.0169	0.4371
<i>NHS</i>	-0.0447	0.0184	0.4411
<i>MOSPD1</i>	0.0442	0.0185	0.4416
<i>TXLNG</i>	-0.0461	0.0195	0.4485
<i>FAM127A</i>	-0.0454	0.0204	0.4528
<i>THOC2</i>	0.0426	0.0212	0.4558
<i>GRIPAP1</i>	-0.0441	0.0213	0.4558
<i>PLXNB3</i>	0.0434	0.0217	0.4580
<i>EIF2S3</i>	-0.0438	0.0218	0.4580
<i>VBPI</i>	-0.0445	0.0231	0.4619
<i>KCNE1L</i>	0.0469	0.0238	0.4646
<i>MED12</i>	0.0436	0.0239	0.4652
<i>TSC22D3</i>	0.0423	0.0246	0.4663

<i>PCYT1B</i>	0.0422	0.0250	0.4677
<i>ZNF673</i>	0.0433	0.0263	0.4737
<i>SRPK3</i>	0.0411	0.0282	0.4802
<i>CSF2RA</i>	0.0427	0.0306	0.4806
<i>SPIN2B</i>	-0.0401	0.0291	0.4806
<i>HSFX1</i>	0.0400	0.0310	0.4806
<i>CXorf1</i>	0.0419	0.0299	0.4806
<i>KAL1</i>	-0.0402	0.0336	0.4806
<i>ATP6AP2</i>	-0.0403	0.0307	0.4806
<i>TMSB4X</i>	-0.0392	0.0301	0.4806
<i>PQBP1</i>	0.0417	0.0342	0.4822
<i>CCDC120</i>	0.0389	0.0343	0.4825
<i>SCML2</i>	0.0382	0.0356	0.4851
<i>PRAF2</i>	-0.0394	0.0358	0.4855
<i>NGFRAP1</i>	-0.0389	0.0373	0.4885
<i>UXT</i>	0.0401	0.0381	0.4885
<i>GPRASP2</i>	-0.0406	0.0376	0.4885
<i>HCFC1</i>	0.0383	0.0384	0.4885
<i>TSPAN6</i>	0.0395	0.0383	0.4885
<i>ABCD1</i>	0.0402	0.0402	0.4934
<i>BEX4</i>	-0.0387	0.0406	0.4938
<i>TAZ</i>	0.0393	0.0412	0.4950
<i>ZCCHC12</i>	-0.0377	0.0472	0.5114
<i>BEX2</i>	-0.0374	0.0473	0.5116
<i>GABRE</i>	-0.0365	0.0511	0.5207
<i>PDK3</i>	-0.0370	0.0553	0.5318
<i>PGK1</i>	-0.0348	0.0577	0.5349
<i>TSR2</i>	-0.0355	0.0598	0.5407
<i>ZDHHC9</i>	0.0348	0.0600	0.5408
<i>HDHD1</i>	0.0369	0.0606	0.5420
<i>VMA21</i>	-0.0349	0.0619	0.5431
<i>SYTL4</i>	0.0341	0.0652	0.5491
<i>AKAP17A</i>	0.0352	0.0656	0.5501
<i>TIMM8A</i>	-0.0367	0.0675	0.5530
<i>RAB9A</i>	0.0344	0.0687	0.5552
<i>CCDC160</i>	0.0335	0.0693	0.5564
<i>TRAPPC2</i>	0.0341	0.0700	0.5574
<i>TBC1D8B</i>	0.0351	0.0709	0.5587
<i>RPI-177G6.2</i>	0.0335	0.0727	0.5602
<i>CXorf38</i>	-0.0324	0.0739	0.5627
<i>ACSL4</i>	-0.0343	0.0766	0.5696
<i>PHF16</i>	0.0343	0.0766	0.5696

<i>MID2</i>	-0.0326	0.0775	0.5705
<i>GK</i>	-0.0324	0.0771	0.5705
<i>TAF9B</i>	-0.0328	0.0781	0.5718
<i>RLIM</i>	-0.0335	0.0783	0.5726
<i>IL1RAPL1</i>	0.0318	0.0791	0.5736
<i>SRPX</i>	0.0334	0.0808	0.5739
<i>EMD</i>	-0.0325	0.0822	0.5748
<i>SHROOM2</i>	-0.0342	0.0830	0.5757
<i>GNL3L</i>	-0.0328	0.0857	0.5796
<i>FAM156B</i>	-0.0322	0.0865	0.5801
<i>HS6ST2</i>	-0.0332	0.0872	0.5811
<i>SLC9A7</i>	-0.0343	0.0878	0.5824
<i>HMG5</i>	0.0322	0.0884	0.5844
<i>RNF128</i>	-0.0316	0.0894	0.5868
<i>AL158821.1</i>	0.0328	0.0913	0.5891
<i>ASMTL</i>	-0.0314	0.0954	0.5947
<i>PLP1</i>	0.0314	0.0978	0.5991
<i>LAGE3</i>	-0.0309	0.0985	0.6005
<i>GPR173</i>	0.0305	0.1021	0.6019
<i>CXorf24</i>	0.0323	0.1025	0.6029
<i>F8</i>	-0.0316	0.1031	0.6044
<i>RP11-274K13.2</i>	-0.0315	0.1035	0.6046
<i>NDUFB11</i>	-0.0309	0.1035	0.6046
<i>CITED1</i>	-0.0295	0.1055	0.6080
<i>RBMX</i>	-0.0313	0.1057	0.6081
<i>ZNF674</i>	-0.0306	0.1059	0.6086
<i>SSR4</i>	-0.0317	0.1122	0.6166
<i>RPL10</i>	-0.0301	0.1140	0.6196
<i>PRKX</i>	0.0310	0.1150	0.6208
<i>ATP6AP1</i>	-0.0306	0.1152	0.6208
<i>MTCP1NB</i>	0.0294	0.1156	0.6213
<i>KDM6A</i>	0.0279	0.1180	0.6245
<i>SPIN3</i>	-0.0299	0.1217	0.6278
<i>MSL3</i>	0.0294	0.1226	0.6286
<i>CLIC2</i>	-0.0287	0.1231	0.6292
<i>SLC6A8</i>	0.0292	0.1230	0.6292
<i>SMCIA</i>	0.0275	0.1230	0.6292
<i>PSMD10</i>	-0.0281	0.1229	0.6292
<i>CXorf69</i>	0.0283	0.1245	0.6309
<i>RAP2C</i>	-0.0300	0.1248	0.6316
<i>ARSF</i>	0.0283	0.1257	0.6327
<i>ZFX</i>	0.0293	0.1260	0.6328

<i>ZXDB</i>	-0.0290	0.1271	0.6346
<i>F8A2</i>	0.0297	0.1304	0.6368
<i>NAP1L2</i>	-0.0283	0.1304	0.6368
<i>CXorf56</i>	-0.0290	0.1318	0.6377
<i>F8A3</i>	0.0296	0.1333	0.6401
<i>DNASE1L1</i>	-0.0296	0.1359	0.6425
<i>SYP</i>	-0.0281	0.1362	0.6425
<i>ZMYM3</i>	0.0279	0.1365	0.6430
<i>CXorf36</i>	0.0280	0.1365	0.6430
<i>PORCN</i>	-0.0282	0.1435	0.6530
<i>NAP1L3</i>	-0.0275	0.1475	0.6552
<i>CNKSR2</i>	0.0281	0.1470	0.6552
<i>GPC4</i>	0.0262	0.1484	0.6571
<i>MED14</i>	-0.0271	0.1557	0.6664
<i>GJB1</i>	0.0276	0.1613	0.6710
<i>ARMCX2</i>	-0.0267	0.1619	0.6714
<i>CXorf23</i>	0.0263	0.1632	0.6723
<i>GLA</i>	0.0263	0.1653	0.6741
<i>RENBP</i>	0.0264	0.1659	0.6741
<i>RBM3</i>	-0.0261	0.1673	0.6755
<i>POLA1</i>	0.0251	0.1692	0.6776
<i>RBBP7</i>	0.0273	0.1693	0.6776
<i>WWC3</i>	0.0273	0.1716	0.6797
<i>SCML1</i>	-0.0258	0.1730	0.6813
<i>YIPF6</i>	0.0253	0.1750	0.6835
<i>TCEAL5</i>	-0.0249	0.1757	0.6846
<i>RPGR</i>	0.0258	0.1770	0.6859
<i>ENOX2</i>	0.0260	0.1802	0.6895
<i>BRWD3</i>	0.0257	0.1815	0.6909
<i>CASK</i>	-0.0253	0.1855	0.6946
<i>MMGT1</i>	-0.0252	0.1888	0.6962
<i>PHF8</i>	0.0247	0.1912	0.6975
<i>CXorf26</i>	0.0252	0.1927	0.6985
<i>UPF3B</i>	0.0236	0.1935	0.6995
<i>USP9X</i>	-0.0238	0.1956	0.7020
<i>APOOL</i>	-0.0247	0.1985	0.7043
<i>ABCB7</i>	-0.0233	0.2015	0.7063
<i>FAM155B</i>	0.0248	0.2027	0.7072
<i>AP1S2</i>	-0.0237	0.2029	0.7073
<i>GEMIN8</i>	-0.0238	0.2054	0.7094
<i>KLF8</i>	-0.0233	0.2059	0.7099
<i>VAMP7</i>	-0.0232	0.2092	0.7128

<i>SLC25A5</i>	-0.0235	0.2123	0.7152
<i>XIAP</i>	-0.0232	0.2181	0.7201
<i>GDII</i>	-0.0225	0.2188	0.7205
<i>PLS3</i>	-0.0232	0.2187	0.7205
<i>SLC25A14</i>	-0.0231	0.2205	0.7222
<i>HNRNPH2</i>	-0.0229	0.2233	0.7241
<i>CHRDL1</i>	-0.0228	0.2230	0.7241
<i>ZC3H12B</i>	0.0232	0.2232	0.7241
<i>FAM127C</i>	0.0241	0.2258	0.7260
<i>FUNDC2</i>	0.0228	0.2260	0.7261
<i>PLCXD1</i>	0.0218	0.2299	0.7293
<i>FATE1</i>	0.0241	0.2301	0.7296
<i>PLP2</i>	0.0224	0.2358	0.7336
<i>ZBTB33</i>	-0.0222	0.2369	0.7336
<i>DLG3</i>	-0.0225	0.2365	0.7336
<i>NKRF</i>	-0.0224	0.2379	0.7336
<i>APOO</i>	-0.0217	0.2411	0.7353
<i>FRMPD3</i>	-0.0225	0.2411	0.7353
<i>PCDH11X</i>	-0.0227	0.2414	0.7354
<i>NXT2</i>	0.0221	0.2426	0.7363
<i>APLN</i>	0.0211	0.2465	0.7373
<i>IRAK1</i>	0.0221	0.2457	0.7373
<i>FGD1</i>	0.0222	0.2475	0.7378
<i>PNPLA4</i>	-0.0215	0.2482	0.7383
<i>USP11</i>	-0.0216	0.2528	0.7414
<i>MAGEE1</i>	-0.0214	0.2549	0.7427
<i>PPP2R3B</i>	0.0212	0.2558	0.7437
<i>MORF4L2</i>	-0.0215	0.2559	0.7438
<i>SLC25A43</i>	-0.0227	0.2568	0.7440
<i>SH3KBP1</i>	-0.0228	0.2571	0.7440
<i>MAGED2</i>	-0.0213	0.2579	0.7440
<i>MORC4</i>	0.0215	0.2590	0.7447
<i>ARMCX6</i>	0.0213	0.2620	0.7467
<i>PRRG1</i>	0.0215	0.2624	0.7471
<i>FAM3A</i>	-0.0208	0.2648	0.7492
<i>ALG13</i>	-0.0212	0.2654	0.7498
<i>UBL4A</i>	0.0206	0.2659	0.7499
<i>ATP2B3</i>	-0.0215	0.2668	0.7504
<i>UBE2A</i>	-0.0211	0.2693	0.7518
<i>FAM156A</i>	-0.0212	0.2692	0.7518
<i>MID1IP1</i>	0.0215	0.2698	0.7522
<i>SLC25A6</i>	-0.0213	0.2737	0.7552

<i>WDR45</i>	0.0204	0.2739	0.7554
<i>RPS6KA3</i>	-0.0212	0.2755	0.7555
<i>OPHN1</i>	-0.0199	0.2779	0.7563
<i>UTP14A</i>	0.0214	0.2787	0.7568
<i>IDS</i>	-0.0208	0.2795	0.7570
<i>BEX1</i>	-0.0205	0.2795	0.7570
<i>ARMCX4</i>	-0.0207	0.2804	0.7574
<i>DMRTC1B</i>	0.0202	0.2822	0.7599
<i>STARD8</i>	0.0201	0.2864	0.7621
<i>GPKOW</i>	-0.0191	0.2865	0.7621
<i>SLC16A2</i>	-0.0199	0.2869	0.7625
<i>ARHGEF9</i>	-0.0205	0.2880	0.7631
<i>COL4A5</i>	0.0200	0.2884	0.7635
<i>MECP2</i>	0.0206	0.2888	0.7637
<i>PCDH19</i>	0.0193	0.2909	0.7651
<i>TCEAL7</i>	-0.0203	0.2925	0.7666
<i>SEPT</i>	-0.0200	0.2979	0.7689
<i>MAGT1</i>	-0.0200	0.2991	0.7697
<i>TIMM17B</i>	-0.0190	0.2992	0.7697
<i>PNMA3</i>	-0.0193	0.3037	0.7711
<i>ARX</i>	-0.0200	0.3036	0.7711
<i>ARMCX5</i>	-0.0196	0.3042	0.7714
<i>FIGF</i>	0.0198	0.3051	0.7714
<i>EIF1AX</i>	-0.0194	0.3077	0.7723
<i>RGN</i>	-0.0194	0.3088	0.7731
<i>KLHL13</i>	0.0191	0.3111	0.7752
<i>INE1</i>	-0.0188	0.3135	0.7767
<i>IKBKG</i>	-0.0191	0.3146	0.7777
<i>PNMA6C</i>	0.0211	0.3161	0.7784
<i>PRRG3</i>	-0.0200	0.3173	0.7791
<i>MAP7D2</i>	-0.0188	0.3187	0.7807
<i>SLC35A2</i>	-0.0191	0.3202	0.7814
<i>LAMP2</i>	0.0188	0.3220	0.7823
<i>AMMECR1</i>	0.0186	0.3252	0.7840
<i>NONO</i>	0.0175	0.3318	0.7878
<i>FAM50A</i>	0.0183	0.3374	0.7913
<i>RBM41</i>	0.0179	0.3427	0.7945
<i>SLC38A5</i>	0.0174	0.3439	0.7951
<i>WDR13</i>	-0.0172	0.3464	0.7955
<i>GPM6B</i>	0.0177	0.3470	0.7960
<i>GDPD2</i>	0.0174	0.3480	0.7964
<i>ZNF81</i>	-0.0178	0.3506	0.7982

<i>CIGALTIC1</i>	0.0171	0.3510	0.7984
<i>DRP2</i>	-0.0174	0.3640	0.8039
<i>KLHL15</i>	-0.0173	0.3662	0.8048
<i>FAM127B</i>	0.0176	0.3687	0.8058
<i>FAM199X</i>	-0.0172	0.3697	0.8062
<i>NSDHL</i>	-0.0170	0.3712	0.8068
<i>PIR</i>	-0.0180	0.3736	0.8083
<i>ZNF75D</i>	-0.0174	0.3739	0.8083
<i>BCORL1</i>	0.0162	0.3775	0.8106
<i>NKAP</i>	0.0160	0.3777	0.8108
<i>DIAPH2</i>	-0.0175	0.3779	0.8109
<i>HDAC8</i>	0.0171	0.3790	0.8115
<i>CXorf40B</i>	-0.0168	0.3810	0.8120
<i>RAB33A</i>	0.0171	0.3806	0.8120
<i>ARAF</i>	0.0163	0.3855	0.8144
<i>GRIA3</i>	-0.0170	0.3869	0.8152
<i>CYSLTR1</i>	0.0162	0.3901	0.8174
<i>TAF1</i>	-0.0158	0.3903	0.8177
<i>FAM122B</i>	-0.0165	0.3908	0.8178
<i>STAG2</i>	0.0166	0.3979	0.8200
<i>MAOA</i>	-0.0159	0.3986	0.8205
<i>ZNF182</i>	0.0164	0.4001	0.8209
<i>BTK</i>	-0.0157	0.4004	0.8210
<i>KLHL4</i>	0.0160	0.4060	0.8242
<i>ZNF630</i>	-0.0160	0.4072	0.8246
<i>TSPYL2</i>	-0.0158	0.4147	0.8293
<i>CHM</i>	0.0156	0.4216	0.8323
<i>AFF2</i>	-0.0157	0.4290	0.8356
<i>SLC25A53</i>	-0.0151	0.4303	0.8363
<i>MAOB</i>	-0.0140	0.4352	0.8382
<i>SH3BGRL</i>	-0.0140	0.4391	0.8399
<i>GPR143</i>	-0.0147	0.4395	0.8400
<i>AMOT</i>	0.0144	0.4410	0.8403
<i>NLGN3</i>	0.0142	0.4445	0.8421
<i>PGRMC1</i>	-0.0150	0.4450	0.8421
<i>CYBB</i>	-0.0138	0.4466	0.8424
<i>PNMA5</i>	-0.0142	0.4533	0.8459
<i>RPL36A</i>	0.0145	0.4542	0.8468
<i>PRPS2</i>	-0.0143	0.4547	0.8474
<i>IQSEC2</i>	0.0140	0.4560	0.8480
<i>KCND1</i>	-0.0148	0.4593	0.8487
<i>ATG4A</i>	-0.0140	0.4637	0.8510

<i>PDZD4</i>	-0.0140	0.4642	0.8512
<i>FAM104B</i>	0.0137	0.4665	0.8525
<i>OCRL</i>	0.0141	0.4694	0.8534
<i>ARSD</i>	0.0136	0.4695	0.8534
<i>MSN</i>	-0.0131	0.4703	0.8538
<i>FHL1</i>	-0.0131	0.4714	0.8543
<i>SLC10A3</i>	0.0137	0.4731	0.8548
<i>HDAC6</i>	0.0132	0.4766	0.8559
<i>GYG2</i>	0.0128	0.4828	0.8586
<i>MAGED1</i>	-0.0133	0.4827	0.8586
<i>BHLHB9</i>	-0.0134	0.4844	0.8598
<i>BEX5</i>	-0.0127	0.4894	0.8621
<i>SUV39H1</i>	0.0130	0.4954	0.8643
<i>PABPC1L2A</i>	-0.0131	0.4971	0.8652
<i>MPP1</i>	-0.0130	0.4982	0.8659
<i>SLITRK4</i>	0.0132	0.4983	0.8660
<i>FAM133A</i>	0.0121	0.5012	0.8672
<i>EBP</i>	-0.0125	0.5015	0.8673
<i>PIGA</i>	-0.0123	0.5077	0.8698
<i>PCSKIN</i>	-0.0121	0.5110	0.8716
<i>LRCH2</i>	-0.0127	0.5132	0.8724
<i>DDX3X</i>	0.0119	0.5127	0.8724
<i>CSAG1</i>	0.0127	0.5141	0.8728
<i>CD99</i>	0.0121	0.5203	0.8752
<i>ZNF449</i>	-0.0123	0.5241	0.8768
<i>HMGB3</i>	-0.0121	0.5256	0.8768
<i>FAM58A</i>	0.0117	0.5271	0.8772
<i>MAP7D3</i>	0.0119	0.5299	0.8777
<i>PTCHD1</i>	0.0119	0.5343	0.8791
<i>ERAS</i>	-0.0117	0.5360	0.8797
<i>MAGIX</i>	-0.0114	0.5402	0.8815
<i>FUNDC1</i>	-0.0113	0.5440	0.8828
<i>VSIG4</i>	-0.0110	0.5449	0.8834
<i>MID1</i>	-0.0112	0.5450	0.8835
<i>TCEAL6</i>	-0.0111	0.5607	0.8880
<i>SMPX</i>	0.0109	0.5660	0.8895
<i>DHR SX</i>	0.0109	0.5652	0.8895
<i>NDP</i>	-0.0107	0.5677	0.8903
<i>MAGEE2</i>	-0.0109	0.5748	0.8920
<i>SYN1</i>	0.0108	0.5783	0.8932
<i>PABPC1L2B</i>	-0.0105	0.5858	0.8959
<i>FAM70A</i>	-0.0104	0.5864	0.8962

<i>RBMX2</i>	-0.0102	0.5877	0.8965
<i>PHKA1</i>	-0.0103	0.5906	0.8981
<i>WBP5</i>	0.0103	0.5911	0.8982
<i>IL13RA1</i>	0.0101	0.5921	0.8984
<i>RAB9B</i>	-0.0105	0.5925	0.8985
<i>CUL4B</i>	0.0100	0.5932	0.8987
<i>TBLIX</i>	0.0097	0.5965	0.8998
<i>UBA1</i>	0.0099	0.5990	0.9010
<i>FAM120C</i>	0.0096	0.5991	0.9010
<i>TFE3</i>	-0.0096	0.6031	0.9017
<i>BRCC3</i>	-0.0100	0.6039	0.9017
<i>RHOXF1</i>	-0.0109	0.6086	0.9035
<i>PLXNA3</i>	-0.0099	0.6108	0.9047
<i>ARHGEF6</i>	0.0092	0.6121	0.9051
<i>PNCK</i>	-0.0095	0.6171	0.9075
<i>ATP11C</i>	0.0092	0.6194	0.9083
<i>TMSB15B</i>	0.0093	0.6281	0.9110
<i>OGT</i>	-0.0088	0.6378	0.9134
<i>RBM10</i>	-0.0091	0.6388	0.9136
<i>FAM122C</i>	-0.0085	0.6399	0.9141
<i>CXorf40A</i>	-0.0091	0.6440	0.9150
<i>RP11-706O15.1</i>	-0.0085	0.6443	0.9152
<i>IGSF1</i>	0.0089	0.6444	0.9153
<i>DUSP9</i>	0.0085	0.6475	0.9158
<i>ITM2A</i>	0.0085	0.6510	0.9165
<i>MOSPD2</i>	0.0086	0.6584	0.9194
<i>IL2RG</i>	-0.0079	0.6600	0.9195
<i>MTCP1</i>	0.0081	0.6609	0.9199
<i>PPP1R3F</i>	-0.0081	0.6620	0.9203
<i>MCF2</i>	-0.0081	0.6657	0.9217
<i>USP51</i>	0.0079	0.6661	0.9217
<i>BCOR</i>	0.0079	0.6695	0.9236
<i>ZMAT1</i>	-0.0081	0.6717	0.9241
<i>ZDHHC15</i>	-0.0084	0.6719	0.9241
<i>SLC9A6</i>	0.0082	0.6760	0.9257
<i>DACH2</i>	-0.0077	0.6806	0.9266
<i>PHF6</i>	0.0077	0.6792	0.9266
<i>CDKL5</i>	-0.0079	0.6878	0.9285
<i>ACRC</i>	-0.0074	0.6890	0.9289
<i>UPRT</i>	-0.0075	0.6921	0.9299
<i>TRO</i>	-0.0072	0.6961	0.9313
<i>TAB3</i>	-0.0076	0.6959	0.9313

<i>EFHC2</i>	0.0073	0.6972	0.9313
<i>XK</i>	-0.0073	0.7017	0.9325
<i>ACOT9</i>	0.0074	0.7023	0.9325
<i>AIFM1</i>	0.0073	0.7015	0.9325
<i>PHKA2</i>	0.0074	0.7062	0.9335
<i>MUMIL1</i>	-0.0073	0.7052	0.9335
<i>TCEANC</i>	-0.0074	0.7074	0.9337
<i>RAI2</i>	0.0071	0.7098	0.9345
<i>DDX26B</i>	-0.0070	0.7128	0.9352
<i>PRICKLE3</i>	-0.0068	0.7174	0.9367
<i>NLGN4X</i>	-0.0070	0.7184	0.9369
<i>FLNA</i>	-0.0070	0.7233	0.9390
<i>MAMLD1</i>	-0.0067	0.7260	0.9395
<i>TRMT2B</i>	0.0070	0.7297	0.9408
<i>ARMCX1</i>	-0.0065	0.7303	0.9410
<i>ZRSR2</i>	0.0066	0.7321	0.9415
<i>EFNB1</i>	0.0067	0.7339	0.9419
<i>SAT1</i>	-0.0065	0.7348	0.9424
<i>CFP</i>	0.0065	0.7385	0.9434
<i>UBQLN2</i>	-0.0064	0.7465	0.9458
<i>TBC1D25</i>	-0.0063	0.7487	0.9469
<i>RPS4X</i>	0.0059	0.7560	0.9482
<i>HAUS7</i>	-0.0056	0.7632	0.9497
<i>WAS</i>	-0.0056	0.7716	0.9530
<i>MTM1</i>	-0.0052	0.7730	0.9534
<i>LDOC1</i>	0.0054	0.7830	0.9564
<i>SPIN2A</i>	-0.0054	0.7822	0.9564
<i>DMD</i>	-0.0051	0.7895	0.9584
<i>SLITRK2</i>	-0.0050	0.7889	0.9584
<i>HTATSF1</i>	0.0049	0.7960	0.9592
<i>CTPS2</i>	-0.0048	0.7953	0.9592
<i>TCEAL1</i>	0.0048	0.8024	0.9600
<i>REPS2</i>	-0.0048	0.8052	0.9605
<i>TCEAL8</i>	0.0047	0.8052	0.9605
<i>GPR34</i>	-0.0045	0.8080	0.9613
<i>RAB39B</i>	0.0046	0.8090	0.9618
<i>HEPH</i>	0.0045	0.8122	0.9624
<i>FRMPD4</i>	-0.0044	0.8236	0.9652
<i>STS</i>	-0.0044	0.8240	0.9652
<i>DMRTC1</i>	0.0044	0.8250	0.9653
<i>IL3RA</i>	0.0042	0.8258	0.9653
<i>ZC4H2</i>	0.0044	0.8252	0.9653

<i>SYAP1</i>	-0.0042	0.8269	0.9655
<i>BCAP31</i>	-0.0042	0.8274	0.9657
<i>WDR44</i>	-0.0040	0.8319	0.9664
<i>TMEM35</i>	0.0039	0.8348	0.9672
<i>DCX</i>	-0.0039	0.8356	0.9672
<i>NUDT11</i>	0.0039	0.8370	0.9675
<i>RIBC1</i>	0.0038	0.8394	0.9683
<i>SHROOM4</i>	0.0039	0.8401	0.9684
<i>TMEM164</i>	-0.0038	0.8404	0.9685
<i>CLCN4</i>	-0.0037	0.8477	0.9696
<i>LAS1L</i>	-0.0036	0.8489	0.9698
<i>RGAG4</i>	-0.0037	0.8486	0.9698
<i>TMEM185A</i>	-0.0036	0.8520	0.9705
<i>TMEM187</i>	0.0033	0.8592	0.9721
<i>PRDX4</i>	0.0033	0.8589	0.9721
<i>TCEAL4</i>	-0.0033	0.8614	0.9726
<i>ARHGAP4</i>	0.0033	0.8625	0.9728
<i>CXorf57</i>	-0.0032	0.8677	0.9740
<i>GTPBP6</i>	-0.0031	0.8673	0.9740
<i>CETN2</i>	-0.0032	0.8681	0.9740
<i>GABRA3</i>	0.0032	0.8680	0.9740
<i>DKC1</i>	0.0031	0.8722	0.9750
<i>FAAH2</i>	-0.0030	0.8729	0.9750
<i>APEX2</i>	-0.0030	0.8752	0.9756
<i>ZNF185</i>	-0.0031	0.8771	0.9759
<i>MAGED4</i>	-0.0030	0.8804	0.9767
<i>TCEAL3</i>	-0.0028	0.8816	0.9771
<i>FAM123B</i>	0.0026	0.8883	0.9786
<i>SASH3</i>	0.0026	0.8889	0.9786
<i>CCDC22</i>	0.0026	0.8937	0.9796
<i>RPL39</i>	0.0025	0.8964	0.9800
<i>NDUFA1</i>	-0.0024	0.9008	0.9810
<i>PAK3</i>	0.0023	0.9015	0.9812
<i>KDM5C</i>	-0.0023	0.9023	0.9813
<i>ZNF41</i>	0.0023	0.9052	0.9816
<i>KIAA2022</i>	-0.0022	0.9091	0.9820
<i>PIN4</i>	0.0020	0.9158	0.9832
<i>CDK16</i>	-0.0020	0.9170	0.9834
<i>IDH3G</i>	-0.0019	0.9178	0.9838
<i>HCCS</i>	0.0019	0.9196	0.9845
<i>LICAM</i>	-0.0019	0.9196	0.9845
<i>TCEAL2</i>	0.0019	0.9201	0.9846

<i>MTMRI</i>	-0.0017	0.9278	0.9859
<i>CD99L2</i>	0.0017	0.9318	0.9861
<i>OFD1</i>	-0.0016	0.9327	0.9861
<i>PNMA6A</i>	0.0017	0.9301	0.9861
<i>ZNF711</i>	0.0016	0.9341	0.9864
<i>ARMCX3</i>	-0.0015	0.9372	0.9872
<i>F8A1</i>	-0.0014	0.9452	0.9892
<i>SNX12</i>	0.0013	0.9456	0.9892
<i>CA5B</i>	0.0013	0.9456	0.9892
<i>HSD17B10</i>	-0.0013	0.9463	0.9892
<i>PJA1</i>	-0.0013	0.9467	0.9892
<i>BGN</i>	-0.0012	0.9483	0.9894
<i>WASH6P</i>	-0.0012	0.9492	0.9894
<i>CHIC1</i>	0.0012	0.9519	0.9899
<i>ZNF275</i>	-0.0011	0.9521	0.9899
<i>TMEM47</i>	0.0011	0.9536	0.9905
<i>IGBP1</i>	0.0010	0.9595	0.9923
<i>SMARCA1</i>	0.0008	0.9657	0.9930
<i>TIMP1</i>	-0.0008	0.9660	0.9931
<i>RNF113A</i>	0.0008	0.9670	0.9932
<i>MAGEC3</i>	0.0008	0.9686	0.9936
<i>CHST7</i>	0.0005	0.9780	0.9956
<i>NUDT10</i>	0.0005	0.9797	0.9960
<i>GSPT2</i>	0.0005	0.9805	0.9960
<i>FMRI</i>	0.0004	0.9834	0.9963
<i>ODZ1</i>	-0.0002	0.9908	0.9977
<i>FTSJ1</i>	-0.0001	0.9972	0.9995
<i>HUWE1</i>	-0.0001	0.9976	0.9995

eTable 6. Association of X chromosome gene expression with neurofibrillary tangles in men, adjusted by age and education. FDR-adjusted p-values for genome-wide correction shown.

Gene	Beta	Pvalue unadjusted	Pvalue adjusted
<i>EMD</i>	-0.0982	0.0000	0.0266
<i>UBL4A</i>	0.0975	0.0000	0.0317
<i>PHF16</i>	0.0901	0.0000	0.0320
<i>PNMA5</i>	-0.0841	0.0003	0.0636
<i>SSR4</i>	-0.0732	0.0006	0.0821
<i>SMC1A</i>	0.0879	0.0006	0.0857
<i>PRAF2</i>	-0.0772	0.0008	0.0949
<i>LASIL</i>	-0.0761	0.0008	0.0975
<i>TCEAL5</i>	-0.0803	0.0008	0.0981
<i>ZBED1</i>	0.0772	0.0009	0.1022
<i>FOXO4</i>	0.0730	0.0012	0.1119
<i>RPL10</i>	-0.0749	0.0013	0.1156
<i>FAM156B</i>	-0.0736	0.0015	0.1247
<i>ARMCX4</i>	-0.0709	0.0016	0.1283
<i>ZMAT1</i>	-0.0698	0.0020	0.1410
<i>FAM127A</i>	-0.0673	0.0021	0.1419
<i>GYG2</i>	0.0732	0.0028	0.1603
<i>POLA1</i>	0.0728	0.0031	0.1671
<i>HCFC1</i>	0.0698	0.0034	0.1735
<i>FAM123B</i>	0.0670	0.0039	0.1793
<i>GEMIN8</i>	-0.0643	0.0060	0.2095
<i>HUWE1</i>	0.0649	0.0060	0.2099
<i>PHF6</i>	0.0637	0.0069	0.2175
<i>GK</i>	-0.0658	0.0071	0.2206
<i>IRAK1</i>	0.0616	0.0071	0.2206
<i>PDZD11</i>	-0.0607	0.0072	0.2215
<i>BEX4</i>	-0.0602	0.0083	0.2334
<i>SLC35A2</i>	-0.0590	0.0085	0.2341
<i>HAUS7</i>	-0.0613	0.0093	0.2383
<i>F8A3</i>	0.0563	0.0102	0.2476
<i>TSPAN7</i>	-0.0555	0.0112	0.2561
<i>NAA10</i>	-0.0576	0.0114	0.2567
<i>ARHGAP4</i>	-0.0576	0.0119	0.2608
<i>EBP</i>	-0.0591	0.0124	0.2623
<i>RBMX2</i>	-0.0581	0.0127	0.2645
<i>MTCP1NB</i>	-0.0585	0.0135	0.2681
<i>OFD1</i>	-0.0554	0.0137	0.2703
<i>CLCN4</i>	0.0556	0.0138	0.2709
<i>RAB9A</i>	0.0563	0.0140	0.2722

<i>F8A2</i>	0.0539	0.0144	0.2743
<i>SMARCA1</i>	0.0588	0.0145	0.2746
<i>TRMT2B</i>	0.0522	0.0148	0.2776
<i>RIBC1</i>	-0.0568	0.0154	0.2798
<i>RAI2</i>	0.0549	0.0157	0.2818
<i>BCORL1</i>	0.0583	0.0158	0.2821
<i>FAM155B</i>	0.0532	0.0164	0.2841
<i>ZNF185</i>	-0.0514	0.0169	0.2876
<i>GPR143</i>	-0.0547	0.0169	0.2876
<i>CCDC160</i>	0.0572	0.0174	0.2897
<i>BEX2</i>	-0.0542	0.0183	0.2915
<i>APLN</i>	0.0580	0.0186	0.2915
<i>FUNDC1</i>	-0.0552	0.0188	0.2924
<i>FAM127B</i>	-0.0513	0.0190	0.2940
<i>MID1IP1</i>	0.0519	0.0192	0.2957
<i>MED14</i>	-0.0522	0.0209	0.3055
<i>GLA</i>	-0.0524	0.0225	0.3144
<i>CHIC1</i>	0.0510	0.0245	0.3253
<i>TAF9B</i>	-0.0525	0.0267	0.3335
<i>DDX26B</i>	-0.0508	0.0277	0.3384
<i>TCEAL2</i>	-0.0501	0.0292	0.3445
<i>FRMPD3</i>	0.0485	0.0308	0.3505
<i>STAG2</i>	0.0471	0.0309	0.3511
<i>CFP</i>	-0.0477	0.0320	0.3542
<i>NKAP</i>	-0.0534	0.0348	0.3636
<i>KLHL13</i>	0.0492	0.0363	0.3693
<i>PGRMC1</i>	-0.0453	0.0391	0.3762
<i>MSL3</i>	0.0470	0.0392	0.3765
<i>F8A1</i>	-0.0427	0.0402	0.3785
<i>CSTF2</i>	-0.0461	0.0418	0.3827
<i>TIMM17B</i>	-0.0511	0.0417	0.3827
<i>PDZD4</i>	0.0458	0.0423	0.3844
<i>TCEAL4</i>	-0.0453	0.0444	0.3915
<i>YIPF6</i>	0.0471	0.0450	0.3928
<i>BHLHB9</i>	0.0457	0.0451	0.3930
<i>ARSD</i>	-0.0461	0.0453	0.3939
<i>WAS</i>	-0.0457	0.0458	0.3950
<i>PNMA3</i>	-0.0460	0.0487	0.4023
<i>MECP2</i>	0.0436	0.0501	0.4066
<i>CCDC120</i>	0.0472	0.0508	0.4088
<i>G6PD</i>	-0.0439	0.0549	0.4205
<i>ASMTL</i>	-0.0439	0.0572	0.4210

<i>FAM120C</i>	0.0473	0.0587	0.4238
<i>TSC22D3</i>	0.0437	0.0598	0.4276
<i>ZBTB33</i>	0.0439	0.0598	0.4278
<i>NDUFA1</i>	-0.0427	0.0600	0.4281
<i>RPL36A</i>	-0.0423	0.0641	0.4390
<i>RRAGB</i>	-0.0428	0.0646	0.4402
<i>CETN2</i>	-0.0425	0.0651	0.4413
<i>KLHL4</i>	0.0418	0.0657	0.4422
<i>TFE3</i>	0.0448	0.0658	0.4426
<i>PTCHD1</i>	0.0417	0.0660	0.4432
<i>WWC3</i>	0.0391	0.0664	0.4437
<i>PHKA2</i>	-0.0405	0.0666	0.4440
<i>MCF2</i>	0.0416	0.0727	0.4551
<i>ZNF673</i>	-0.0398	0.0734	0.4568
<i>USP11</i>	-0.0414	0.0752	0.4605
<i>RPS6KA3</i>	0.0400	0.0753	0.4608
<i>DMRTC1</i>	-0.0383	0.0762	0.4625
<i>TMEM185A</i>	0.0394	0.0762	0.4625
<i>ELK1</i>	0.0411	0.0774	0.4644
<i>RHOXF1</i>	-0.0356	0.0775	0.4644
<i>PIN4</i>	-0.0394	0.0775	0.4644
<i>IKBKG</i>	-0.0402	0.0804	0.4713
<i>BCOR</i>	0.0412	0.0835	0.4782
<i>RPGR</i>	-0.0396	0.0847	0.4799
<i>ZCCHC12</i>	-0.0392	0.0868	0.4848
<i>HPRT1</i>	-0.0402	0.0892	0.4902
<i>TXLNG</i>	-0.0367	0.0888	0.4902
<i>SLC25A53</i>	0.0382	0.0897	0.4910
<i>PIR</i>	-0.0359	0.0897	0.4910
<i>TCEAL7</i>	-0.0379	0.0902	0.4924
<i>NHS</i>	0.0392	0.0915	0.4950
<i>MOSPD1</i>	0.0403	0.0921	0.4952
<i>ZNF674</i>	0.0388	0.0952	0.5017
<i>HMGB3</i>	-0.0381	0.0956	0.5028
<i>SPIN2B</i>	-0.0402	0.0960	0.5036
<i>LDOC1</i>	-0.0361	0.0960	0.5036
<i>PPP1R3F</i>	0.0398	0.0961	0.5037
<i>BEX1</i>	-0.0385	0.0985	0.5074
<i>CA5B</i>	-0.0367	0.1005	0.5101
<i>ACSL4</i>	-0.0365	0.1050	0.5179
<i>LONRF3</i>	0.0371	0.1059	0.5185
<i>DDX3X</i>	0.0418	0.1064	0.5189

<i>TCEANC</i>	0.0348	0.1074	0.5191
<i>TMLHE</i>	-0.0379	0.1075	0.5192
<i>CIGALTIC1</i>	0.0386	0.1169	0.5335
<i>AIFM1</i>	-0.0358	0.1178	0.5353
<i>PNCK</i>	-0.0358	0.1219	0.5404
<i>FLNA</i>	-0.0340	0.1239	0.5428
<i>ZNF630</i>	0.0346	0.1265	0.5476
<i>ARMCX5</i>	-0.0347	0.1276	0.5495
<i>ARAF</i>	-0.0356	0.1288	0.5512
<i>CXorf23</i>	-0.0356	0.1299	0.5536
<i>IDH3G</i>	-0.0351	0.1328	0.5582
<i>NLGN4X</i>	0.0341	0.1347	0.5605
<i>CXorf56</i>	-0.0336	0.1393	0.5656
<i>HTATSF1</i>	0.0339	0.1404	0.5665
<i>PHF8</i>	0.0343	0.1428	0.5696
<i>TBC1D25</i>	0.0323	0.1437	0.5712
<i>APOO</i>	-0.0352	0.1442	0.5720
<i>ZFX</i>	0.0340	0.1443	0.5721
<i>HDHD1</i>	0.0313	0.1498	0.5781
<i>UXT</i>	0.0323	0.1531	0.5822
<i>TAF1</i>	-0.0356	0.1543	0.5824
<i>TSPYL2</i>	-0.0314	0.1616	0.5911
<i>BEX5</i>	-0.0340	0.1621	0.5918
<i>RBM10</i>	-0.0311	0.1624	0.5923
<i>ATRX</i>	0.0342	0.1672	0.5980
<i>DNASE1L1</i>	-0.0291	0.1731	0.6037
<i>GPKOW</i>	-0.0349	0.1732	0.6037
<i>TCEAL6</i>	-0.0311	0.1736	0.6045
<i>ARMCX6</i>	-0.0317	0.1745	0.6060
<i>REPS2</i>	0.0311	0.1746	0.6061
<i>KDM5C</i>	0.0328	0.1780	0.6105
<i>PDHA1</i>	-0.0289	0.1801	0.6132
<i>HCCS</i>	0.0309	0.1810	0.6136
<i>NDUFB11</i>	0.0307	0.1820	0.6144
<i>PORCN</i>	-0.0297	0.1886	0.6194
<i>RBMX</i>	-0.0298	0.1889	0.6196
<i>MAOA</i>	-0.0303	0.1945	0.6257
<i>ENOX2</i>	0.0291	0.1945	0.6257
<i>ZNF275</i>	0.0301	0.1949	0.6258
<i>FAM70A</i>	0.0294	0.1973	0.6282
<i>COL4A5</i>	-0.0295	0.2072	0.6376
<i>ARMCX3</i>	0.0291	0.2098	0.6403

<i>FRMPD4</i>	0.0283	0.2101	0.6406
<i>SCML1</i>	-0.0288	0.2121	0.6433
<i>APEX2</i>	0.0290	0.2171	0.6483
<i>GPRASP1</i>	-0.0291	0.2178	0.6487
<i>CASK</i>	0.0282	0.2211	0.6510
<i>ARHGEF6</i>	0.0305	0.2255	0.6552
<i>NAP1L3</i>	-0.0278	0.2274	0.6562
<i>SMS</i>	-0.0278	0.2293	0.6580
<i>APOOL</i>	0.0281	0.2315	0.6601
<i>WBP5</i>	0.0273	0.2340	0.6628
<i>GRIA3</i>	-0.0261	0.2365	0.6652
<i>HDAC6</i>	-0.0281	0.2402	0.6681
<i>IL3RA</i>	0.0265	0.2417	0.6693
<i>ZNF41</i>	0.0261	0.2433	0.6708
<i>CHRDLI</i>	-0.0277	0.2443	0.6718
<i>SPIN2A</i>	0.0262	0.2463	0.6740
<i>MAOB</i>	-0.0296	0.2470	0.6749
<i>HNRNPH2</i>	-0.0269	0.2497	0.6776
<i>GABRA3</i>	0.0258	0.2590	0.6849
<i>WDR44</i>	0.0265	0.2597	0.6854
<i>ARSE</i>	0.0265	0.2625	0.6876
<i>PIM2</i>	-0.0252	0.2625	0.6876
<i>ZC4H2</i>	-0.0247	0.2640	0.6882
<i>ALG13</i>	-0.0255	0.2681	0.6916
<i>TBC1D8B</i>	-0.0246	0.2685	0.6918
<i>ATP6AP2</i>	-0.0259	0.2707	0.6936
<i>FMR1</i>	0.0263	0.2710	0.6938
<i>GABRE</i>	-0.0257	0.2723	0.6954
<i>TMSB15B</i>	-0.0248	0.2723	0.6954
<i>CITED1</i>	-0.0271	0.2742	0.6970
<i>CD99L2</i>	0.0237	0.2812	0.7028
<i>RBM3</i>	-0.0250	0.2811	0.7028
<i>VMA21</i>	-0.0256	0.2828	0.7041
<i>IL13RA1</i>	-0.0253	0.2834	0.7046
<i>DMD</i>	-0.0242	0.2836	0.7046
<i>TSR2</i>	-0.0249	0.2841	0.7050
<i>THOC2</i>	-0.0258	0.2860	0.7060
<i>RP1-177G6.2</i>	-0.0256	0.2868	0.7066
<i>NGFRAP1</i>	-0.0248	0.2905	0.7094
<i>ZNF711</i>	0.0242	0.2922	0.7108
<i>DHR SX</i>	-0.0247	0.2921	0.7108
<i>BTK</i>	-0.0252	0.2920	0.7108

<i>SCML2</i>	0.0264	0.2937	0.7116
<i>MID2</i>	0.0261	0.2937	0.7116
<i>ZMYM3</i>	0.0252	0.2952	0.7129
<i>COX7B</i>	-0.0229	0.2986	0.7164
<i>SHROOM2</i>	0.0228	0.2989	0.7167
<i>RNF128</i>	-0.0246	0.3001	0.7172
<i>FAM58A</i>	0.0250	0.3007	0.7172
<i>ACRC</i>	0.0251	0.3059	0.7211
<i>MORF4L2</i>	-0.0235	0.3065	0.7214
<i>MBTPS2</i>	-0.0234	0.3073	0.7220
<i>FAM104B</i>	-0.0238	0.3078	0.7221
<i>TIMP1</i>	-0.0242	0.3083	0.7224
<i>FUNDC2</i>	0.0238	0.3090	0.7227
<i>KIAA2022</i>	0.0235	0.3098	0.7231
<i>ERAS</i>	0.0235	0.3097	0.7231
<i>FAM122B</i>	0.0230	0.3171	0.7291
<i>MAGT1</i>	-0.0225	0.3195	0.7313
<i>F8</i>	-0.0219	0.3206	0.7313
<i>CXorf1</i>	0.0223	0.3224	0.7328
<i>PLCXD1</i>	0.0246	0.3256	0.7348
<i>TMEM187</i>	0.0230	0.3284	0.7359
<i>AP1S2</i>	0.0230	0.3294	0.7366
<i>PSMD10</i>	-0.0238	0.3345	0.7401
<i>PRRG3</i>	-0.0207	0.3397	0.7435
<i>KCND1</i>	0.0205	0.3407	0.7445
<i>IQSEC2</i>	0.0222	0.3412	0.7449
<i>LAMP2</i>	0.0219	0.3454	0.7477
<i>LRCH2</i>	0.0208	0.3467	0.7486
<i>SNX12</i>	0.0209	0.3557	0.7548
<i>MSN</i>	-0.0231	0.3573	0.7555
<i>CSAG1</i>	0.0204	0.3599	0.7576
<i>BCAP31</i>	0.0210	0.3606	0.7577
<i>VAMP7</i>	0.0221	0.3627	0.7593
<i>WASH6P</i>	0.0210	0.3640	0.7602
<i>RNF113A</i>	0.0198	0.3651	0.7608
<i>PDK3</i>	-0.0206	0.3668	0.7610
<i>CXorf57</i>	-0.0211	0.3720	0.7641
<i>MAGED4B</i>	0.0212	0.3730	0.7647
<i>TMSB4X</i>	-0.0223	0.3743	0.7650
<i>DACH2</i>	-0.0209	0.3782	0.7680
<i>KAL1</i>	-0.0205	0.3821	0.7703
<i>RPL39</i>	-0.0207	0.3822	0.7704

<i>HMG5</i>	0.0205	0.3839	0.7717
<i>UPRT</i>	0.0197	0.3896	0.7757
<i>HSFX1</i>	-0.0205	0.3912	0.7769
<i>ATP11C</i>	0.0208	0.3966	0.7805
<i>RGN</i>	-0.0192	0.4008	0.7825
<i>DKC1</i>	0.0189	0.4018	0.7832
<i>DMRTC1B</i>	-0.0197	0.4026	0.7836
<i>UTP14A</i>	-0.0181	0.4031	0.7838
<i>FAM127C</i>	-0.0174	0.4181	0.7927
<i>SYN1</i>	-0.0179	0.4200	0.7932
<i>PNPLA4</i>	-0.0192	0.4214	0.7940
<i>SLC25A14</i>	-0.0185	0.4254	0.7959
<i>MORC4</i>	0.0183	0.4266	0.7970
<i>TAB3</i>	0.0176	0.4320	0.8000
<i>TRAPPC2</i>	0.0184	0.4340	0.8011
<i>ZDHHC9</i>	-0.0189	0.4383	0.8038
<i>GDI1</i>	-0.0189	0.4425	0.8069
<i>PIGA</i>	-0.0184	0.4426	0.8070
<i>WDR45</i>	0.0182	0.4499	0.8111
<i>DLG3</i>	0.0171	0.4551	0.8130
<i>RBM41</i>	0.0171	0.4573	0.8138
<i>OCRL</i>	0.0164	0.4599	0.8147
<i>RAB33A</i>	0.0162	0.4605	0.8150
<i>DIAPH2</i>	-0.0159	0.4620	0.8165
<i>GPR173</i>	0.0174	0.4634	0.8174
<i>TSPAN6</i>	-0.0167	0.4639	0.8176
<i>PLS3</i>	-0.0173	0.4646	0.8179
<i>CHM</i>	0.0163	0.4680	0.8200
<i>FAM133A</i>	-0.0183	0.4722	0.8225
<i>DYNLT3</i>	-0.0173	0.4728	0.8227
<i>PRRG1</i>	0.0161	0.4826	0.8291
<i>HDAC8</i>	-0.0156	0.4844	0.8304
<i>SLITRK4</i>	0.0155	0.4857	0.8314
<i>IL1RAPL1</i>	-0.0175	0.4875	0.8323
<i>ZNF75D</i>	-0.0155	0.4870	0.8323
<i>AL158821.1</i>	-0.0155	0.4901	0.8326
<i>CUL4B</i>	0.0165	0.4911	0.8330
<i>DRP2</i>	-0.0158	0.4944	0.8343
<i>GNL3L</i>	0.0157	0.4950	0.8344
<i>MAGEH1</i>	-0.0155	0.4969	0.8357
<i>SASH3</i>	-0.0169	0.5000	0.8380
<i>INE1</i>	-0.0160	0.5069	0.8405

<i>CYBB</i>	-0.0167	0.5080	0.8413
<i>PPEF1</i>	-0.0158	0.5092	0.8415
<i>MCTS1</i>	-0.0157	0.5110	0.8428
<i>RPS4X</i>	-0.0154	0.5137	0.8438
<i>SUV39H1</i>	0.0149	0.5151	0.8440
<i>NUDT10</i>	0.0150	0.5163	0.8446
<i>AFF2</i>	0.0142	0.5177	0.8446
<i>VBPI</i>	-0.0141	0.5181	0.8447
<i>ARX</i>	0.0146	0.5183	0.8447
<i>SLC25A43</i>	-0.0139	0.5205	0.8453
<i>SLC38A5</i>	-0.0157	0.5202	0.8453
<i>RGAG4</i>	0.0146	0.5219	0.8462
<i>PABPC1L2A</i>	0.0142	0.5269	0.8486
<i>PLP2</i>	-0.0146	0.5296	0.8501
<i>MAP7D3</i>	0.0145	0.5318	0.8510
<i>MUM1L1</i>	0.0140	0.5336	0.8514
<i>IGSF1</i>	-0.0140	0.5345	0.8518
<i>CLIC2</i>	0.0144	0.5447	0.8578
<i>NDP</i>	0.0144	0.5462	0.8585
<i>ABCD1</i>	0.0131	0.5493	0.8604
<i>NSDHL</i>	-0.0137	0.5515	0.8611
<i>MAGEC3</i>	-0.0122	0.5548	0.8619
<i>CXorf38</i>	-0.0149	0.5559	0.8624
<i>FAM122C</i>	-0.0147	0.5583	0.8639
<i>PRPS2</i>	-0.0132	0.5597	0.8645
<i>FGD1</i>	0.0132	0.5619	0.8654
<i>SLC9A7</i>	0.0127	0.5622	0.8656
<i>MAGIX</i>	-0.0137	0.5676	0.8678
<i>STARD8</i>	0.0135	0.5700	0.8689
<i>USP9X</i>	0.0144	0.5729	0.8701
<i>TCEAL3</i>	-0.0128	0.5763	0.8715
<i>IDS</i>	0.0128	0.5763	0.8715
<i>ZC3H12B</i>	0.0127	0.5842	0.8756
<i>NONO</i>	0.0138	0.5868	0.8768
<i>CSF2RA</i>	-0.0119	0.5880	0.8774
<i>LICAM</i>	0.0127	0.5899	0.8782
<i>ATG4A</i>	0.0123	0.5936	0.8795
<i>ZNF449</i>	-0.0123	0.5955	0.8803
<i>NXT2</i>	0.0122	0.5975	0.8812
<i>UPF3B</i>	-0.0134	0.5975	0.8812
<i>SRPX</i>	-0.0119	0.5990	0.8812
<i>CNKSR2</i>	0.0119	0.5996	0.8815

<i>MIDI</i>	-0.0126	0.6044	0.8829
<i>PLXNA3</i>	-0.0113	0.6094	0.8857
<i>SH3KBP1</i>	0.0108	0.6111	0.8866
<i>PCSKIN</i>	-0.0124	0.6126	0.8873
<i>CDK16</i>	0.0118	0.6125	0.8873
<i>ITM2A</i>	-0.0118	0.6126	0.8873
<i>PNMA6C</i>	0.0103	0.6150	0.8882
<i>KCNE1L</i>	0.0103	0.6164	0.8890
<i>SAT1</i>	-0.0114	0.6197	0.8898
<i>RP11-706O15.1</i>	0.0125	0.6227	0.8906
<i>TBLIX</i>	0.0119	0.6230	0.8908
<i>XIAP</i>	0.0113	0.6340	0.8952
<i>AKAP17A</i>	-0.0107	0.6355	0.8962
<i>XK</i>	-0.0108	0.6361	0.8964
<i>PLXNB3</i>	-0.0107	0.6435	0.8995
<i>HS6ST2</i>	0.0104	0.6439	0.8998
<i>GPC4</i>	0.0116	0.6456	0.9002
<i>EIF2S3</i>	-0.0104	0.6468	0.9006
<i>SH3BGRL</i>	0.0115	0.6480	0.9009
<i>MAMLD1</i>	-0.0105	0.6493	0.9016
<i>ARMCX1</i>	-0.0107	0.6499	0.9019
<i>AMOT</i>	0.0106	0.6547	0.9038
<i>GPRASP2</i>	-0.0100	0.6549	0.9039
<i>CD99</i>	-0.0105	0.6550	0.9040
<i>RAB39B</i>	0.0102	0.6559	0.9044
<i>SYTL4</i>	0.0106	0.6582	0.9050
<i>GDPD2</i>	-0.0105	0.6613	0.9066
<i>MOSPD2</i>	0.0098	0.6625	0.9073
<i>SMPX</i>	-0.0101	0.6640	0.9077
<i>SRPK3</i>	0.0100	0.6664	0.9085
<i>BRWD3</i>	0.0099	0.6666	0.9086
<i>IL2RG</i>	0.0111	0.6687	0.9094
<i>DCX</i>	0.0103	0.6727	0.9111
<i>IGBP1</i>	0.0092	0.6763	0.9127
<i>PLP1</i>	-0.0098	0.6761	0.9127
<i>EIF1AX</i>	0.0098	0.6760	0.9127
<i>SLC25A6</i>	0.0094	0.6767	0.9129
<i>EFNB1</i>	0.0090	0.6819	0.9147
<i>UBQLN2</i>	-0.0085	0.6945	0.9191
<i>PCYT1B</i>	0.0093	0.6948	0.9191
<i>OPHN1</i>	-0.0096	0.6939	0.9191
<i>PJA1</i>	-0.0092	0.6946	0.9191

<i>MPP1</i>	0.0088	0.6984	0.9198
<i>CXorf40B</i>	-0.0085	0.7054	0.9217
<i>SPIN3</i>	-0.0084	0.7188	0.9264
<i>TMEM35</i>	0.0085	0.7192	0.9265
<i>PCDH11X</i>	0.0080	0.7207	0.9271
<i>RLIM</i>	0.0083	0.7222	0.9278
<i>ZDHHC15</i>	0.0077	0.7252	0.9285
<i>ARHGEF9</i>	-0.0079	0.7269	0.9292
<i>CXorf69</i>	-0.0084	0.7303	0.9299
<i>ARSF</i>	0.0083	0.7313	0.9299
<i>PGK1</i>	0.0084	0.7331	0.9304
<i>ACOT9</i>	-0.0074	0.7449	0.9348
<i>GPR34</i>	-0.0077	0.7460	0.9351
<i>PRKX</i>	0.0070	0.7470	0.9353
<i>OTUD5</i>	-0.0069	0.7503	0.9353
<i>TAZ</i>	0.0073	0.7487	0.9353
<i>MAGEE1</i>	-0.0073	0.7544	0.9354
<i>ATP6AP1</i>	-0.0068	0.7606	0.9365
<i>CYSLTR1</i>	-0.0071	0.7610	0.9365
<i>FAM156A</i>	-0.0069	0.7619	0.9369
<i>BRCC3</i>	-0.0068	0.7649	0.9383
<i>KDM6A</i>	0.0076	0.7701	0.9390
<i>ZNF182</i>	-0.0064	0.7722	0.9390
<i>NAP1L2</i>	-0.0067	0.7761	0.9394
<i>FHL1</i>	-0.0070	0.7765	0.9394
<i>CDKL5</i>	-0.0065	0.7773	0.9398
<i>SYP</i>	-0.0066	0.7805	0.9409
<i>UBA1</i>	-0.0064	0.7892	0.9440
<i>UBE2A</i>	-0.0061	0.7900	0.9443
<i>DUSP9</i>	-0.0064	0.7907	0.9446
<i>MTCP1</i>	-0.0064	0.7916	0.9448
<i>FTSJ1</i>	-0.0062	0.7984	0.9477
<i>HEPH</i>	-0.0058	0.8057	0.9498
<i>MTM1</i>	-0.0061	0.8087	0.9509
<i>ZXDB</i>	-0.0055	0.8099	0.9510
<i>PCDH19</i>	-0.0060	0.8099	0.9510
<i>PHKA1</i>	0.0055	0.8106	0.9510
<i>MAGED4</i>	0.0052	0.8132	0.9515
<i>MAGED2</i>	0.0055	0.8143	0.9520
<i>SLITRK2</i>	-0.0055	0.8144	0.9520
<i>VSIG4</i>	-0.0058	0.8165	0.9525
<i>CCDC22</i>	0.0050	0.8211	0.9538

<i>CHST7</i>	0.0049	0.8229	0.9543
<i>NLGN3</i>	0.0054	0.8229	0.9543
<i>OGT</i>	0.0051	0.8324	0.9573
<i>RENBP</i>	0.0049	0.8322	0.9573
<i>SLC9A6</i>	-0.0046	0.8370	0.9589
<i>FAM199X</i>	0.0048	0.8386	0.9593
<i>MAGEE2</i>	-0.0045	0.8401	0.9596
<i>CXorf26</i>	-0.0045	0.8419	0.9601
<i>GSPT2</i>	0.0043	0.8423	0.9603
<i>MAP7D2</i>	0.0047	0.8444	0.9608
<i>ARMCX2</i>	-0.0044	0.8479	0.9618
<i>KLF8</i>	-0.0047	0.8482	0.9618
<i>CXorf40A</i>	0.0041	0.8505	0.9618
<i>PQBP1</i>	0.0042	0.8507	0.9619
<i>ZNF81</i>	0.0042	0.8535	0.9626
<i>SLC6A8</i>	0.0043	0.8544	0.9627
<i>RP11-274K13.2</i>	-0.0040	0.8580	0.9641
<i>NKRF</i>	0.0041	0.8592	0.9644
<i>CXorf36</i>	0.0041	0.8608	0.9650
<i>AMMECR1</i>	0.0041	0.8611	0.9651
<i>FIGF</i>	-0.0039	0.8627	0.9656
<i>FAM3A</i>	-0.0040	0.8664	0.9666
<i>SYAP1</i>	0.0038	0.8670	0.9667
<i>ODZ1</i>	-0.0040	0.8698	0.9673
<i>FGF13</i>	-0.0037	0.8724	0.9679
<i>HSD17B10</i>	0.0038	0.8734	0.9682
<i>KLHL15</i>	0.0034	0.8822	0.9710
<i>BGN</i>	0.0033	0.8869	0.9721
<i>SLC16A2</i>	0.0034	0.8887	0.9723
<i>LAGE3</i>	-0.0032	0.8935	0.9733
<i>TCEAL8</i>	0.0031	0.8943	0.9734
<i>EFHC2</i>	0.0031	0.8951	0.9739
<i>FATE1</i>	-0.0028	0.8961	0.9744
<i>RAB9B</i>	-0.0028	0.8997	0.9757
<i>TCEAL1</i>	0.0028	0.8993	0.9757
<i>SEPT</i>	-0.0028	0.9018	0.9761
<i>MAGED1</i>	-0.0029	0.9016	0.9761
<i>USP51</i>	-0.0028	0.9093	0.9782
<i>GTPBP6</i>	-0.0028	0.9097	0.9783
<i>CXorf24</i>	-0.0023	0.9136	0.9796
<i>TMEM47</i>	-0.0024	0.9150	0.9802
<i>TRO</i>	0.0025	0.9182	0.9812

<i>RBBP7</i>	0.0020	0.9256	0.9835
<i>PPP2R3B</i>	-0.0022	0.9258	0.9836
<i>STS</i>	0.0020	0.9281	0.9839
<i>MTMR1</i>	-0.0022	0.9281	0.9839
<i>PABPC1L2B</i>	0.0019	0.9344	0.9850
<i>TMEM164</i>	0.0017	0.9413	0.9870
<i>TIMM8A</i>	-0.0015	0.9445	0.9881
<i>GPM6B</i>	-0.0016	0.9442	0.9881
<i>GRIPAP1</i>	0.0015	0.9469	0.9882
<i>MMGT1</i>	0.0015	0.9491	0.9885
<i>CTPS2</i>	-0.0015	0.9504	0.9888
<i>NUDT11</i>	-0.0015	0.9509	0.9888
<i>ZRSR2</i>	-0.0013	0.9539	0.9895
<i>GJB1</i>	0.0013	0.9542	0.9896
<i>FAAH2</i>	-0.0012	0.9588	0.9908
<i>PNMA6A</i>	0.0009	0.9681	0.9928
<i>PRDX4</i>	0.0010	0.9688	0.9929
<i>MED12</i>	-0.0008	0.9701	0.9930
<i>ABCB7</i>	0.0010	0.9699	0.9930
<i>ATP2B3</i>	-0.0008	0.9726	0.9936
<i>SHROOM4</i>	0.0008	0.9721	0.9936
<i>PAK3</i>	0.0008	0.9734	0.9937
<i>PRICKLE3</i>	-0.0008	0.9738	0.9938
<i>FAM50A</i>	-0.0007	0.9765	0.9947
<i>RAP2C</i>	-0.0006	0.9776	0.9949
<i>WDR13</i>	-0.0005	0.9823	0.9962
<i>PRPS1</i>	-0.0004	0.9877	0.9974
<i>SLC10A3</i>	-0.0003	0.9893	0.9982
<i>SLC25A5</i>	-0.0002	0.9945	0.9990