

**Supplementary material S1.** Virtual panel of 185 genes associated with neurodegeneration.

*ABCA7, ABCD1, ACE, ACOX1, ACMSD, ADAM10, APOC1, APOE, APOOP2, APP, ARSA, ARID5B, ASPA, ATP13A2, AUH, ATXN2, BCKDK, BIN1, BST1, C11orf30, CALHM1, CASS4, CCDC62, CD2AP, CD33, CELF1, CHCHD2, CHCHD10, CHMP2B, CHRNA9, CLU, CNTNAP2, COL4A2, COL4A1, COQ2, CR1, CRAT, CTC1, CSF1R, DARS2, DDRGK1, DGKQ, DLG2, DNAJC13, DNAJC5, DNAJC6, DNMT1, DSG2, DYRK1A, DYSF, ECHDC3, EIF2B, EIF4G1, EPHA1, ERCC6, ERCC8, EPHA4, FAM186A, FAM47E, FBF1, FBXO7, FGB, FGF20, FERMT2, FUS, GAB2, GAK, GALC, GBA, GBE1, GCDH, GCH1, GFAP, GLA, GPNMB, GRN, GSK3B, GUCY1A3, HEXA, HIP1R, HS3ST1, HTRA1, IL23R, INPP5D, INPP5F, ITGA8, ITPKB, KANSL1, KRT8P25, L2HGDH, LAMC2, LAMP3, LMNB1, LRRK2, LRRTM3, MADD, MAN2B1, MAPT, MC1R, MCCC1, MEF2C, MIR4697, MLC1, MMP16, MRPL38, MS4A4A, MTHFR, NCAM2, NEDD9, NLRP3, NME8, NMD3, NOTCH3, NSF, NUCKS1, NXPH1, NYAP1, OPTN, SERPINE1, PARK2, PARK7, PAXIP1, PICALM, PINK1, PLEKHM1, PLP1, PM20D1, PLD3, PRNP, PSAP, PSEN1, PSEN2, PTK2B, RAB7A, RAB7B, RAB25, RAB29, RAB38, RAI1, REST, RIN3, RIT2, RUNX1, SCARB2, SIPA1L2, SIRT2, SLC17A5, SLC2A13, SLC2A14, SLC41A1, SLC45A3, SLC7A4, SMPD1, SNCA, SORL1, SPPL2B, SQSTM1, SREBF1, STBD1, STK39, STX1B, SYT11, TARDBP, TBK1, TMEM106B, TMEM163, TMEM175, TMEM229B, TOMM40, TP63, TRIM47, TRIM65, TREM2, TREX1, TRIP4, TYMP, TYROBP, UNC5C, UPP2, USP25, VCP, VPS13C, VPS35, WBP2, ZCWPW1*