

Table S5. Diseases and functions of the DEGs correlated with DETEs and DE-Alu in the prefrontal cortex of ASD predicted by IPA.

Diseases or Functions Annotation	DETEs	DE-Alu	
	<i>p</i> value (#genes)	<i>p</i> value (#genes)	DEGs lists
Pervasive developmental disorder	1.04×10^{-7} (21)	6.97×10^{-5} (9)	<i>CNTNAP2, GNG5, GRIN2A, GRIN2B, IL18, RNF135, TSPO, USP3, VAMP2</i>
Autism spectrum disorder or intellectual disability	4.33×10^{-5} (37)	1.19×10^{-3} (16)	<i>ATP8A2, CNTNAP2, GNG5, GRIN2A, GRIN2B, IL18, KCNB1, KCNQ5, NBEA, RNF135, SCN3B, STXBP1, TRPC5, TSPO, USP3, VAMP2</i>
Nonspecific mental retardation	8.84×10^{-5} (19)	3.81×10^{-3} (8)	<i>CNTNAP2, GRIN2A, GRIN2B, KCNB1, KCNQ5, NBEA, STXBP1, TRPC5</i>
Seizures	5.29×10^{-8} (25)	1.80×10^{-3} (9)	<i>CNTNAP2, GRIN2A, GRIN2B, HMOX1, KCNB1, NBEA, SCN3B, STXBP1, TSPO</i>
Movement Disorders	4.94×10^{-7} (45)	1.52×10^{-3} (17)	<i>ATP8A2, CDH18, CFLAR, GRIN2A, GRIN2B, HMOX1, ID3, KCNB1, NBEA, NDRG3, NEDD4, RPH3A, SCN3B, SLIT2, SPP1, TSPO, VAMP2</i>
Epilepsy	6.94×10^{-6} (22)	8.46×10^{-3} (8)	<i>CNTNAP2, GRIN2A, GRIN2B, HMOX1, KCNB1, SCN3B, STXBP1, TSPO</i>
Disorder of basal ganglia	9.62×10^{-6} (35)	2.12×10^{-3} (14)	<i>CFLAR, GRIN2A, GRIN2B, HMOX1, ID3, NBEA, NDRG3, NEDD4, RPH3A, SCN3B, SLIT2, SPP1, TSPO, VAMP2</i>
Multiple Sclerosis	1.00×10^{-5} (17)	6.05×10^{-4} (8)	<i>CFLAR, GRIN2A, GRIN2B, HAVCR2, KCNB1, MERTK, SPP1, TSPO</i>
Progressive neurological disorder	1.70×10^{-5} (49)	6.02×10^{-3} (19)	<i>APOC1, BRCA1, CFLAR, GRIN2A, GRIN2B, HAVCR2, HMOX1, KCNB1, MERTK, mir-612, MTHFD2, NEDD4, SCN3B, SLIT2, SPP1, STXBP1, TSPO, TYROBP, VAMP2</i>
Huntington Disease	3.29×10^{-5} (26)	4.75×10^{-4} (12)	<i>CFLAR, GRIN2A, GRIN2B, HMOX1, ID3, NBEA, NDRG3, RPH3A, SCN3B, SLIT2, TSPO, VAMP2</i>
Apoptosis	7.86×10^{-6} (70)	5.75×10^{-4} (30)	<i>APOC1, BAZ1A, BNIP2, BRCA1, CARD8, CFLAR, CHEK2, GPLD1, GRIN2B, HMOX1, ID3, IFIT3, IKZF1, IL18, MDM4, MERTK, MOAP1, NEDD4, PARP14, PLIN2, PTK6, S100A11, SCN3B, SLIT2, SPAG5, SPP1, TCF12, TGFB3, XAF1, XPO1</i>