

Supplementary File 1. Database sources for autism-associated genes

Gene name	Developmental Brain Disorder gene database (Tier 1)	denovo-db database (>5 non-SSC mutations)	SFARI Gene database (Tiers 1 and 2)
<i>ADNP</i>	X	X	X
<i>AHDC1</i>	X		
<i>ANK2</i>	X	X	X
<i>ANKRD11</i>	X	X	X
<i>ARID1B</i>	X	X	X
<i>ARL6IP4</i>		X	
<i>ASH1L</i>	X	X	X
<i>ASXL3</i>	X	X	X
<i>AUTS2</i>	X		
<i>BAZ2B</i>			X
<i>BCKDK</i>			X
<i>BCL11A</i>	X	X	X
<i>BCLAF1</i>	X		
<i>BRF1</i>		X	
<i>BRSK2</i>		X	
<i>CACNA1D</i>			X
<i>CACNA1H</i>			X
<i>CACNA2D3</i>			X
<i>CALU</i>		X	
<i>CASZ1</i>		X	
<i>CD101</i>		X	
<i>CDKL5</i>	X		
<i>CELF2</i>		X	
<i>CEP41</i>			X
<i>CHAMP1</i>	X		
<i>CHD2</i>	X	X	X
<i>CHD3</i>		X	
<i>CHD7</i>	X	X	
<i>CHD8</i>	X	X	X
<i>CIC</i>	X		X
<i>CNOT3</i>	X		X
<i>CNTN4</i>			X
<i>CNTNAP2</i>			X
<i>CREBBP</i>	X		
<i>CTBP2</i>		X	
<i>CTCF</i>	X		
<i>CTNNB1</i>	X		

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<i>CTNND2</i>			X
<i>CUL3</i>	X	X	X
<i>CUX1</i>			X
<i>DDX3X</i>	X	X	X
<i>DEAF1</i>			X
<i>DHX57</i>	X		
<i>DIP2C</i>			X
<i>DMD</i>	X		
<i>DNM1L</i>		X	
<i>DNMT3A</i>	X		
<i>DOCK8</i>		X	
<i>DPP6</i>	X		
<i>DPYD</i>	X		
<i>DSCAM</i>	X	X	X
<i>DYRK1A</i>	X	X	X
<i>DYSF</i>		X	
<i>EFTUD2</i>	X		
<i>ENO3</i>		X	
<i>EP300</i>		X	
<i>ERBIN</i>		X	X
<i>FOXP1</i>	X		X
<i>GABRB3</i>		X	X
<i>GIGYF2</i>			X
<i>GRIA1</i>			X
<i>GRIA2</i>		X	
<i>GRIN2B</i>	X		X
<i>GRIP1</i>			X
<i>HHAT</i>		X	
<i>HIVEP2</i>	X		
<i>HIVEP3</i>		X	
<i>IL1RAPL1</i>	X		
<i>ILF2</i>			X
<i>INSC</i>		X	
<i>INTS6</i>			X
<i>IQSEC2</i>	X		
<i>IRF2BPL</i>			X
<i>ITSN1</i>	X		
<i>KANSL1</i>	X		
<i>KAT2B</i>			X

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<i>KAT6A</i>	X		
<i>KATNAL2</i>			X
<i>KCNQ2</i>	X	X	
<i>KDM5B</i>	X	X	X
<i>KDM6A</i>	X		X
<i>KIF11</i>	X		
<i>KMT2A</i>	X	X	X
<i>KMT2C</i>	X	X	X
<i>KMT5B</i>		X	X
<i>LEO1</i>			X
<i>LMTK3</i>	X		
<i>MACROD2</i>			X
<i>MAGEL2</i>	X		X
<i>MAPK9</i>		X	
<i>MBD5</i>	X		
<i>MBOAT7</i>			X
<i>MECP2</i>	X	X	X
<i>MED13</i>			X
<i>MED13L</i>	X		X
<i>MEF2C</i>	X		
<i>MET</i>			X
<i>MYT1L</i>	X	X	X
<i>NAA15</i>		X	X
<i>NCKAP1</i>	X		X
<i>NCOR1</i>			X
<i>NEXMIF</i>	X	X	
<i>NLGN3</i>			X
<i>NRXN1</i>	X	X	X
<i>NSD1</i>	X	X	
<i>NSD2</i>		X	
<i>OXR1</i>		X	
<i>PAX5</i>		X	
<i>PCDH11X</i>		X	
<i>PCDH19</i>	X		
<i>PDE11A</i>		X	
<i>PHF12</i>		X	
<i>PHF3</i>			X
<i>PHIP</i>	X		
<i>POGZ</i>	X	X	X

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<i>PRKAR1B</i>		X	
<i>PRMT2</i>		X	
<i>PTCHD1</i>	X		X
<i>PTEN</i>	X		X
<i>QRICH1</i>		X	
<i>RAI1</i>	X		
<i>RANBP17</i>			X
<i>RB1CC1</i>	X		
<i>RELN</i>			X
<i>RIMS1</i>	X		X
<i>RPH3A</i>	X		
<i>SATB2</i>	X		
<i>SCN1A</i>	X	X	
<i>SCN2A</i>	X	X	X
<i>SCN9A</i>			X
<i>SET</i>		X	X
<i>SETBP1</i>	X		
<i>SETD2</i>	X		
<i>SETD5</i>	X	X	X
<i>SHANK2</i>	X		X
<i>SHANK3</i>	X	X	X
<i>SLC12A6</i>		X	
<i>SLC6A1</i>	X	X	X
<i>SLC9A6</i>	X		
<i>SMARCC2</i>		X	X
<i>SMC1A</i>	X		
<i>SOX5</i>	X	X	
<i>SPAST</i>			X
<i>SPRED2</i>		X	
<i>SRCAP</i>	X	X	X
<i>SRRM2</i>		X	
<i>SRSF11</i>		X	X
<i>ST3GAL6</i>		X	
<i>STAU1</i>		X	
<i>STXBP1</i>	X	X	
<i>SYNGAP1</i>	X	X	X
<i>TAOK2</i>			X
<i>TBL1XR1</i>			X
<i>TBR1</i>	X		X

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<i>TCF12</i>		X	
<i>TCF20</i>	X	X	X
<i>TCF4</i>	X	X	
<i>TNRC6B</i>			X
<i>TRIO</i>	X		X
<i>TRIP12</i>		X	X
<i>TTN</i>		X	
<i>UBE3A</i>	X		
<i>UBN2</i>			X
<i>UPF3B</i>		X	X
<i>USP15</i>			X
<i>USP7</i>			X
<i>WAC</i>	X	X	X
<i>WDFY3</i>	X		X
<i>WDR45</i>	X		
<i>ZC3H14</i>		X	
<i>ZFAND5</i>		X	
<i>ZMYND11</i>	X		
<i>ZNF462</i>	X		