

Table S2. Cross-Validation Experiment, Related to Figure 2

Network(s) with highest pASD enrichment	Occurrence	Percent (%)
Period 3-5 MFC-MSC	106	53
Period 4-6 PFC-MSC	0	0
Period 8-10 MD-CBC	42	21
Period 3-5 and Period 4-6 PFC-MSC	4	2
Period 3-5 PFC-MSC and Period 8-10 MD-CBC network	47	23.5
Period 4-6 PFC-MSC and Period 8-10 MD-CBC	0	0
Period 3-5 and Period 4-6 PFC-MSC, and Period 8-10 MD-CBC	1	0.5

This table summarizes the results from the cross-validation experiment. In each of the 200 iterations performed, 1 hcASD and 10% (12) of the pASD genes were removed randomly, the co-expression analysis was conducted in each of the 52 spatio-temporal points, and the networks with the greatest number of pASD genes were recorded. 100% of the time, the network with the most pASD genes corresponded to one or more of the three networks identified with the full set of data.

Table S6. Cell-Type-Specific Marker Genes, Related to Figure 4

Cell type	Marker genes
Astrocyte	<i>GFAP, S100B, ALDOC</i>
Cortical GABA interneuron	<i>CALB2, CALB1, NOS1, PVALB, CCK, VIP, DLX1, DLX2, NKX2-1, ASCL1, GAD1, GAD2</i>
Cortical glutamatergic neuron	<i>RELN, CUX1, UNC5D, RORB, BCL11B, ETV1, FEZF2, OTX1, FOXP2, NTSR1, SOX5, SSTR2, TBR1, TLE4, ZFPM2, CTGF, UNC5C</i>
L5 & L6 Cortical glutamatergic neuron	<i>ZFPM2, NTSR1, TLE4, FOXP2, TBR1, SOX5, SSTR2, FEZF2, BCL11B, OTX1, ETV1</i>
L1-L4 Cortical glutamatergic neuron	<i>CUX1, UNC5D, RORB, CUX2, SATB2, WFS1, RELN</i>
Microglia	<i>CFH, FCER1G, TNIP2</i>
Oligodendrocyte	<i>CNP, CSPG4, OLIG1, OLIG2, PDGFRA</i>

This table summarizes cell-type specific marker genes from Kang et al. (2011). Enrichment of these markers within the period 3-5 and period 4-6 PFC-MSC networks were assessed by permutation test.