**Supplemental Text S2. Enrichment of genes associated with schizotypy-associated hierarchy pattern**

**Table 1. Enrichment of genes associated with schizotypy-associated hierarchy pattern**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| GO term | Description | [P](http://cbl-gorilla.cs.technion.ac.il/GOrilla/jg1tpvds/GOResultsPROCESS.html" \l "p_value_info) | [FDR q](http://cbl-gorilla.cs.technion.ac.il/GOrilla/jg1tpvds/GOResultsPROCESS.html" \l "fdr_info) | [Enrichment](http://cbl-gorilla.cs.technion.ac.il/GOrilla/jg1tpvds/GOResultsPROCESS.html" \l "enrich_info) | [Genes](http://cbl-gorilla.cs.technion.ac.il/GOrilla/jg1tpvds/GOResultsPROCESS.html" \l "genes_info) |
| Biological Process | | | | | |
| [GO:0050808](http://www.godatabase.org/cgi-bin/amigo/go.cgi?query=GO:0050808&view=details" \t "https://cbl-gorilla.cs.technion.ac.il/GOrilla/2nx6vl9u/_blank) | synapse organization | 2.69E-8 | 3.32E-4 | 3.67 | TNR，SHANK3，ERC2，CACNB3，PPFIA4，EPHA4，PPFIA2，KALRN，PDZRN3，FARP1，SHANK1，SHANK2，GPM6A，LRRTM1，GPHN，NLGN1，KIRREL3，NLGN4X，PLXND1，DLGAP3，BSN，GRM5，PCDHGC5，FGF13，NRXN2，SYBU，CDH2 |
| [GO:0050804](http://www.godatabase.org/cgi-bin/amigo/go.cgi?query=GO:0050804&view=details" \t "https://cbl-gorilla.cs.technion.ac.il/GOrilla/2nx6vl9u/_blank) | modulation of chemical synaptic transmission | 1.12E-7 | 6.9E-4 | 2.50 | TNR，TSHZ3，SHISA9，SHANK3，DCC，ERC2，DLGAP，CACNB3，PTPRS，DLGAP4，EPHA4，PPFIA2，APBA1，SLC4A10，CALB1，PLK2，NPTX1，CSPG5，STX1A，NTNG1，MEF2C，ABR，AKAP5，SHANK1，SHANK2，JPH3，CAMK2A，NLGN1，GRIK2，NLGN4，HTR2A，GRIN2B，RAB3B，DLGAP3，GRM5，GRM7，CREB1，GRM8，CHRNA3，PRRT，NPTXR，RAPGEF2，CDH2 |
| [GO:0099177](http://www.godatabase.org/cgi-bin/amigo/go.cgi?query=GO:0099177&view=details" \t "https://cbl-gorilla.cs.technion.ac.il/GOrilla/2nx6vl9u/_blank) | regulation of trans-synaptic signaling | 1.29E-7 | 5.31E-4 | 2.49 | TNR，TSHZ3，SHISA9，SHANK3，DCC，ERC2，DLGAP1，CACNB3，PTPRS，DLGAP4，EPHA4，PPFIA2，APBA1，SLC4A10，CALB1，PLK2，NPTX1，CSPG5，STX1A，NTNG1，MEF2C，ABR，AKAP5，SHANK1，SHANK2，JPH3，CAMK2A，NLGN1，GRIK2，NLGN4X，HTR2A，GRIN2B，RAB3B，DLGAP3，GRM5，GRM7，CREB1，GRM8，CHRNA3，PRRT2，NPTXR，RAPGEF2，CDH2 |
| [GO:0050773](http://www.godatabase.org/cgi-bin/amigo/go.cgi?query=GO:0050773&view=details" \t "https://cbl-gorilla.cs.technion.ac.il/GOrilla/2nx6vl9u/_blank) | regulation of dendrite development | 4.64E-7 | 1.15E-3 | 2.88 | TIAM1，BHLHB9，ZDHHC15，CSMD3，ITPKA，SHANK3，DCC，PTPRS，EPHA4，NEURL，DLG5，PPFIA2，KIAA0319，ABI2，SARM1，PLK2，FSTL4，KALRN，MEF2C，SHANK1，SHANK2，NLGN1，KNDC1，CAMK1，HECW2，CDK5R1，CHRNA3，RAPGEF2，BCL11A，VLDLR |
| [GO:0007399](http://www.godatabase.org/cgi-bin/amigo/go.cgi?query=GO:0007399&view=details" \t "https://cbl-gorilla.cs.technion.ac.il/GOrilla/1cxolb2p/_blank) | nervous system development | 7.17E-7 | 1.48E-3 | 2.20 | BDNF，SCN3B，BZW2，OLFM1，SRRM4，CRMP1，NEURL，EVL，APBA1，MST1R，ABI2，DCX，TYRO3，FAM5C，SARM1，RAPGEFL1，ST8SIA4，CSPG5，AVIL，PCDHB12，KALRN，NR2F1，MYLIP，MERTK，MEF2C，DLG4，NUMBL，FGF17，CNTN3，GRIK1，NLGN1，C3orf70，ARID1A，NELL1，NR2C2，MET，NRSN2，CPNE6，CAMK1，SCN2A，MBD5，NRG4，DPYSL4，CHRNA3，FGF13，TCF4，LDB1，VLDLR |
| [GO:0048731](http://www.godatabase.org/cgi-bin/amigo/go.cgi?query=GO:0048731&view=details" \t "https://cbl-gorilla.cs.technion.ac.il/GOrilla/1cxolb2p/_blank) | system development | 1.47E-4 | 4.44E-2 | 1.61 | PLEKHA5，BDNF，SCN3B，FRZB，CRMP1，TEK，NEURL，EVL，APBA1,IL1RAPL2,FAM5C,TYRO3,PPP1R9B,SARM1,NPTX1,ST8SIA4,CSPG5,PCDHB12,AVIL,KALRN,NR2F1,MYLIP,MEF2C,DLL3,DLG4,FGF17,BMP8B,CNTN3,C3orf70,NELL1,NR2C2,MET,CPNE6,MARCKS,CAMK1,SCN2A,COL10A1,NRG4,DPYSL4,CHRNA3,FGF13,TCF4,NCAN,TRIO,LDB1,RAPGEF2,PAPSS2,BZW2,OLFM1,SRRM4,ACVR2A,MST1R,ACVR2B,ABI2,DCX，RAPGEFL1，TLL1，SOX4，MERTK，NUMBL，WDR5，GRIK1，NLGN1，ARID1A，NRSN2，MBD5，MMP16，NDN，HPCAL4，CACNA1C，VLDLR |
| [Component](https://cbl-gorilla.cs.technion.ac.il/GOrilla/2nx6vl9u/GOResultsCOMPONENT.html" \t "https://cbl-gorilla.cs.technion.ac.il/GOrilla/2nx6vl9u/result) |  |  |  |  |  |
| [GO:0044456](http://www.godatabase.org/cgi-bin/amigo/go.cgi?query=GO:0044456&view=details" \t "https://cbl-gorilla.cs.technion.ac.il/GOrilla/2nx6vl9u/_blank) | synapse part | 3.41E-10 | 5.62E-7 | 2.17 | 352DENND1A，SHISA9，ZNRF2，SHANK3，PTPRO，ERC2，PPFIA4，PTPRS，EPHA4，PPFIA2，APBA1，SLC4A10，CALB1，LRRC7，CSPG5，CAMK2N1，MEF2C，ABR，AKAP5，SHANK1，SHANK2，GPM6A，KCNA4，LRFN4，NRP2，GPHN，CAMK4，CAMK2A，MX2，ZNRF1，KCND3，RAB3B，ANKS1B，CAMK1，SCN2A，CDK5R1，CHRNA3，TENM2，NRXN2，BCL11A，CDH2，CDH8，DCC，DLGAP1，DLGAP4，DLG5，STRN4，MINK1，ABI2，CASK，STX1A，PRR12，NTNG1，GLRA2，FARP1，DAGLB，NR1D1，PDE4B，LRRTM1，NLGN1，KIRREL3，GRIK2，NLGN4X，GRIN2B，HTR2A，DLGAP3，CPEB4，CAP2，BSN，GRM5，GRM7，PRRT2，HOMER2，PDYN，SYT5，CACNA1C，CACNA1D.17.62 |
| [GO:0097458](http://www.godatabase.org/cgi-bin/amigo/go.cgi?query=GO:0097458&view=details" \t "https://cbl-gorilla.cs.technion.ac.il/GOrilla/2nx6vl9u/_blank) | neuron part | 6.67E-9 | 5.5E-6 | 1.76 | TRAK1，GPRIN1，KCNB2，DENND1A，ZNRF2，SHANK3，APBA1，SLC4A10，CAMK2N1，ABR，RGS8，GPM6A，SHANK2，KCNA4，GPHN，MYRIP，BRINP2，KCND3，ANKS1B，SCN2A，SCN3A，TENM2，FGF13，NRXN2，RAPGEF2，CDH2，CDH8，DCC，MINK1，DCX，PRR12，PDE4B，LRRTM1，DOCK4，GRIK2，NLGN4X，GRIN2B，DLGAP3，CPEB4，CCSAP，AGBL4，GRM5 ，GRM7，CREB1，PRRT2，HOMER2，PDYN，SYBU，CACNA1C，CACNA1D，AUTS2，NPHP1，ASTN1，SHISA9，PTPRO，ERC2，PPFIA4，PTPRS，EPHA3，EPHA4，PPFIA2，EPHA5，NPPA，CALB1，FAM5C，LRRC7，SARM1，SLC25A27，NPTX1，AKAP5，SHANK1，LRFN4，NRP2，CAMK2A，CAMK2D，MX2，EXOC6，ZNRF1，RAB3B，SYT13，CAMK1，CDK5R1，CHRNA3，STMN1，BCL11A，ACAP3，TSHZ3，DLGAP1，DLG5，ABI2，MYO7A，PLK2，CASK，STX1A，NTNG1，GLRA2，FARP1，NR1D1，FCHSD2，NLGN1，KIRREL3，ARID1A，HTR2A，NRSN2，HTR2C，CAP2，BSN，FAM161A，SYT5，LMTK3，PRPH2，CD200 |
| [GO:0043005](http://www.godatabase.org/cgi-bin/amigo/go.cgi?query=GO:0043005&view=details" \t "https://cbl-gorilla.cs.technion.ac.il/GOrilla/2nx6vl9u/_blank) | neuron projection | 7.48E-9 | 4.11E-6 | 2.05 | TRAK1，KCNB2，DENND1A ，SHANK3，PTPRO，PTPRS，EPHA3，EPHA4，EPHA5，PPFIA2，APBA1，SLC4A10，CALB1，FAM5C，SARM1，CAMK2N1，ABR，RGS8，SHANK1，SHANK2，GPM6A，KCNA4，NRP2，GPHN，CAMK2A，MX2，CAMK2D，BRINP2，KCND3，SYT13，ANKS1B，SCN2A，SCN3A，CDK5R1，CHRNA3，STMN1，TENM2，FGF13，RAPGEF2，CDH2，DCC，MINK1，ABI2，DCX，MYO7A，PLK2，STX1A，PRR12，GLRA2，FARP1，NR1D1，PDE4B，LRRTM1，DOCK4，KIRREL3，GRIN2B ，HTR2A，NRSN2，HTR2C，CPEB4，BSN，CCSAP，GRM5，GRM7，CREB1，PRRT2，HOMER2，PDYN，SYT5，LMTK3，CACNA1C，CD200， |
| [GO:0043197](http://www.godatabase.org/cgi-bin/amigo/go.cgi?query=GO:0043197&view=details" \t "https://cbl-gorilla.cs.technion.ac.il/GOrilla/2nx6vl9u/_blank) | dendritic spine | 4.47E-8 | 1.84E-5 | 3.78 | PTPRO，SHANK3，EPHA4，STRN4，PPFIA2，APBA1，CALB1，ABI2，FARP1，ABR，AKAP5，NR1D1，SHANK1，PDE4B，GPM6A，SHANK2，KCNA4，CAMK2A，NLGN1，KCND3，ANKS1B，CPEB4，CDK5R1，PRRT2，TENM2 |
| [GO:0044309](http://www.godatabase.org/cgi-bin/amigo/go.cgi?query=GO:0044309&view=details" \t "https://cbl-gorilla.cs.technion.ac.il/GOrilla/2nx6vl9u/_blank) | neuron spine | 4.47E-8 | 1.47E-5 | 3.78 | PTPRO，SHANK3，EPHA4，STRN4，PPFIA2，APBA1，CALB1，ABI2，FARP1，ABR，AKAP5，NR1D1，SHANK1，PDE4B，GPM6A，SHANK2，KCNA4，CAMK2A，NLGN1，KCND3，ANKS1B，CPEB4，CDK5R1，PRRT2，TENM2 |
| [GO:0098794](http://www.godatabase.org/cgi-bin/amigo/go.cgi?query=GO:0098794&view=details" \t "https://cbl-gorilla.cs.technion.ac.il/GOrilla/1cxolb2p/_blank) | postsynapse | 4.94E-8 | 1.36E-5 | 2.72 | TIAM1，ZDHHC15，ITPKA，GABRE，SHANK3，PTPRO，EPHA4，NEURL，STRN4，PPFIA2，APBA1，SLC4A10，CALB1，ABI2，FARP1，MEF2C，ABR，DLG4，AKAP5，NR1D1，PDE4B，SHANK1，GPM6A，SHANK2，KCNA4，CAMK4，CAMK2A，NLGN1，KCND3，ARHGAP32，ANKS1B，CPEB4，CDK5R1，PRRT2，WASF1，TENM2，GABRA2，CPT1C |
| [GO:0099572](http://www.godatabase.org/cgi-bin/amigo/go.cgi?query=GO:0099572&view=details" \t "https://cbl-gorilla.cs.technion.ac.il/GOrilla/1cxolb2p/_blank) | postsynaptic specialization | 7.42E-8 | 1.75E-5 | 3.05 | SHISA9，SHANK3，DLGAP1，DLGAP4，DLG5，MINK1，LRRC7，PRR12，STX1A，CAMK2N1，AKAP5，PDE4B，SHANK1，SHANK2，GPHN，CAMK2A，NLGN1，GRIK2，MX2，GRIN2B，KCND3，ANKS1B，DLGAP3，CAMK1，CPEB4，BSN，CAP2，CDK5R1，CHRNA3，HOMER2，BCL11A，CDH2，CACNA1C |