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| **Supplementary File 02: Gene Ontology of the Differentially Expressed Genes through gProfiler software** | | | |
| **source** | **term\_name** | **term\_id** | **intersections** |
| GO:MF | cation channel activity | GO:0005261 | SLC12A2,MT-ATP6, UNC80,SCN2A,PEX5L,KCNG3,GRIK3,KCNQ2,CACNA1B,PKD2L1,GRIA2,KCNA1,CACNA1A,KCNC2,KCNK17 |
| GO:MF | channel activity | GO:0015267 | SLC12A2,MT-ATP6,UNC80,SCN2A,PEX5L,KCNG3,ANO4,GRIK3,KCNQ2,CACNA1B,PKD2L1,GRIA2,KCNA1,CACNA1A,KCNC2,KCNK17,GJC2 |
| GO:MF | ion channel activity | GO:0005216 | SLC12A2,MT-ATP6,UNC80,SCN2A,PEX5L,KCNG3,ANO4,GRIK3,KCNQ2,CACNA1B,PKD2L1,GRIA2,KCNA1,CACNA1A,KCNC2,KCNK17 |
| GO:MF | passive transmembrane transporter activity | GO:0022803 | SLC12A2,MT-ATP6,UNC80,SCN2A,PEX5L,KCNG3,ANO4,GRIK3,KCNQ2,CACNA1B,PKD2L1,GRIA2,KCNA1,CACNA1A,KCNC2,KCNK17,GJC2 |
| GO:BP | developmental process | GO:0032502 | PIWIL1,RPE65,CALB1,GCNT3,GDA,ALOX15,SERPINB5,F2RL1,DHRS9,SLC12A2,GPR21,MT-ATP6,MT-CO2,SELENOT,ATXN1L,BRD2,H4C12,CCHCR1,CEP131,H4C15,STMN3,H4C11,TNXB,EHMT2,LMO3,TUBB3,IGFBP2,APC2,LHB,CRB1,SYNGAP1,LST1,PCDH19,SCX,RBP1,FOXC2,APLP1,MYT1,RGS7,IGSF9,TNF,SP6,KRT7,CKB,AMH,UNC13A,HSPA1A,SCN2A,MAST1,UCHL1,PCLO,NCAM1,VPS52,YTHDC1,COL22A1,MYT1L,H2BS1,FMN2,BSN,AIF1,KCNQ2,DLX6,CELF4,DSCAML1,CELF3,LTB,FREM2,CPLX2,SOX11,SPAG6,PRAMEF15,PRAMEF17,FOXE1,TTBK1,RING1,RXRB,ZNF536,DCX,PTPRZ1,HOXD10,SOX2,ELAVL4,SULT4A1,CTNNA2,EDN2,KCNA1,TUBB,RIPPLY3,PRAMEF19,TAGLN3,DAPL1,AMER2,VCX3B,KCNC2,PCP4,DPYSL5,FOXD4L6,DACH2,MOG,CDK5R2,NRSN1,VGF,INA,PRAMEF14,KIF1A,FOXD3,XKR7,PRAMEF6,MSI1,SOX21,MB,GJC2,FOXI3,FOXJ1,FOXD4L5,PRAMEF27,FOXN4,FOXD4L4,CALCA |
| GO:BP | nervous system development | GO:0007399 | GDA,ATXN1L,BRD2,STMN3,EHMT2,TUBB3,APC2,CRB1,SYNGAP1,LST1,PCDH19,APLP1,MYT1,RGS7,IGSF9,TNF,CKB,UNC13A,SCN2A,MAST1,UCHL1,PCLO,NCAM1,MYT1L,H2BS1,BSN,AIF1,KCNQ2,DLX6,DSCAML1,CPLX2,SOX11,SPAG6,TTBK1,ZNF536,DCX,PTPRZ1,HOXD10,SOX2,ELAVL4,SULT4A1,CTNNA2,EDN2,KCNA1,TAGLN3,VCX3B,KCNC2,PCP4,DPYSL5,MOG,CDK5R2,NRSN1,INA,KIF1A,MSI1,GJC2,FOXJ1,FOXN4 |
| GO:BP | anatomical structure development | GO:0048856 | PIWIL1,RPE65,CALB1,GCNT3,GDA,ALOX15,SERPINB5,F2RL1,DHRS9,SLC12A2,MT-CO2,SELENOT,ATXN1L,BRD2,H4C12,CEP131,H4C15,STMN3,H4C11,EHMT2,TUBB3,APC2,LHB,CRB1,SYNGAP1,LST1,PCDH19,SCX,RBP1,FOXC2,APLP1,MYT1,RGS7,IGSF9,TNF,SP6,KRT7,CKB,AMH,UNC13A,HSPA1A,SCN2A,MAST1,UCHL1,PCLO,NCAM1,VPS52,YTHDC1,COL22A1,MYT1L,H2BS1,FMN2,BSN,AIF1,KCNQ2,DLX6,CELF4,DSCAML1,LTB,FREM2,CPLX2,SOX11,SPAG6,FOXE1,TTBK1,RING1,RXRB,ZNF536,DCX,PTPRZ1,HOXD10,SOX2,ELAVL4,SULT4A1,CTNNA2,EDN2,KCNA1,TUBB,RIPPLY3,TAGLN3,AMER2,VCX3B,KCNC2,PCP4,DPYSL5,FOXD4L6,DACH2,MOG,CDK5R2,NRSN1,VGF,INA,KIF1A,FOXD3,XKR7,MSI1,SOX21,MB,GJC2,FOXI3,FOXJ1,FOXD4L5,FOXN4,FOXD4L4,CALCA |
| GO:BP | system development | GO:0048731 | RPE65,CALB1,GCNT3,GDA,SERPINB5,F2RL1,SLC12A2,ATXN1L,BRD2,H4C12,H4C15,STMN3,H4C11,EHMT2,TUBB3,APC2,LHB,CRB1,SYNGAP1,LST1,PCDH19,SCX,RBP1,FOXC2,APLP1,MYT1,RGS7,IGSF9,TNF,CKB,AMH,UNC13A,HSPA1A,SCN2A,MAST1,UCHL1,PCLO,NCAM1,VPS52,COL22A1,MYT1L,H2BS1,BSN,AIF1,KCNQ2,DLX6,CELF4,DSCAML1,LTB,FREM2,CPLX2,SOX11,SPAG6,FOXE1,TTBK1,RING1,ZNF536,DCX,PTPRZ1,HOXD10,SOX2,ELAVL4,SULT4A1,CTNNA2,EDN2,KCNA1,RIPPLY3,TAGLN3,VCX3B,KCNC2,PCP4,DPYSL5,MOG,CDK5R2,NRSN1,VGF,INA,KIF1A,MSI1,MB,GJC2,FOXJ1,FOXN4,CALCA |
| GO:BP | multicellular organism development | GO:0007275 | RPE65,CALB1,GCNT3,GDA,SERPINB5,F2RL1,SLC12A2,ATXN1L,BRD2,H4C12,H4C15,STMN3,H4C11,EHMT2,TUBB3,APC2,LHB,CRB1,SYNGAP1,LST1,PCDH19,SCX,RBP1,FOXC2,APLP1,MYT1,RGS7,IGSF9,TNF,CKB,AMH,UNC13A,HSPA1A,SCN2A,MAST1,UCHL1,PCLO,NCAM1,VPS52,YTHDC1,COL22A1,MYT1L,H2BS1,BSN,AIF1,KCNQ2,DLX6,CELF4,DSCAML1,LTB,FREM2,CPLX2,SOX11,SPAG6,FOXE1,TTBK1,RING1,RXRB,ZNF536,DCX,PTPRZ1,HOXD10,SOX2,ELAVL4,SULT4A1,CTNNA2,EDN2,KCNA1,RIPPLY3,TAGLN3,VCX3B,KCNC2,PCP4,DPYSL5,DACH2,MOG,CDK5R2,NRSN1,VGF,INA,KIF1A,FOXD3,MSI1,MB,GJC2,FOXJ1,FOXN4,CALCA |
| GO:BP | cell differentiation | GO:0030154 | PIWIL1,F2RL1,DHRS9,H4C12,CCHCR1,CEP131,H4C15,STMN3,H4C11,TNXB,EHMT2,LMO3,TUBB3,APC2,CRB1,SYNGAP1,LST1,SCX,RBP1,FOXC2,APLP1,MYT1,IGSF9,TNF,KRT7,AMH,UNC13A,HSPA1A,UCHL1,NCAM1,VPS52,YTHDC1,COL22A1,MYT1L,FMN2,DLX6,CELF4,DSCAML1,CPLX2,SOX11,SPAG6,PRAMEF15,PRAMEF17,FOXE1,TTBK1,RXRB,ZNF536,DCX,PTPRZ1,HOXD10,SOX2,ELAVL4,SULT4A1,CTNNA2,EDN2,KCNA1,TUBB,PRAMEF19,DAPL1,PCP4,DPYSL5,FOXD4L6,CDK5R2,INA,PRAMEF14,KIF1A,FOXD3,PRAMEF6,MSI1,SOX21,MB,GJC2,FOXI3,FOXJ1,FOXD4L5,PRAMEF27,FOXN4,FOXD4L4,CALCA |
| GO:BP | cellular developmental process | GO:0048869 | PIWIL1,F2RL1,DHRS9,H4C12,CCHCR1,CEP131,H4C15,STMN3,H4C11,TNXB,EHMT2,LMO3,TUBB3,APC2,CRB1,SYNGAP1,LST1,SCX,RBP1,FOXC2,APLP1,MYT1,IGSF9,TNF,KRT7,AMH,UNC13A,HSPA1A,UCHL1,NCAM1,VPS52,YTHDC1,COL22A1,MYT1L,FMN2,DLX6,CELF4,DSCAML1,CPLX2,SOX11,SPAG6,PRAMEF15,PRAMEF17,FOXE1,TTBK1,RXRB,ZNF536,DCX,PTPRZ1,HOXD10,SOX2,ELAVL4,SULT4A1,CTNNA2,EDN2,KCNA1,TUBB,PRAMEF19,DAPL1,PCP4,DPYSL5,FOXD4L6,CDK5R2,INA,PRAMEF14,KIF1A,FOXD3,PRAMEF6,MSI1,SOX21,MB,GJC2,FOXI3,FOXJ1,FOXD4L5,PRAMEF27,FOXN4,FOXD4L4,CALCA |
| GO:BP | biological regulation | GO:0065007 | TFF2,OR13H1,PIWIL1,RPE65,CALB1,IGHE,ALOX15,FCER1A,SERPINB5,F2RL1,DHRS9,CLDN16,P2RY10,ADRA2A,PHLDA1,SLC12A2,GPR21,MT-CO2,FAS,SELENOT,ADGRL4,ATXN1L,SOGA1,BRD2,COL4A5,H4C12,POTEI,CEP131,H4C15,STMN3,H4C11,TNXB,PHF1,SKIV2L,EHMT2,IGLC3,LMO3,TUBB3,MICB,DXO,IGFBP2,APC2,LHB,HLA-DMB,CRB1,DLGAP3,ATF6B,SYNGAP1,LST1,ELOA2,SCX,RBP1,FOXC2,RGS17,POTEF,APLP1,HSD17B8,MYT1,RGS7,IGSF9,TNF,SP6,CKB,TRIM26,AMH,UNC13A,HLA-DPA1,HSPA1A,ASAH2,UNC80,SCN2A,MAST1,STXBP5L,UCHL1,SPDYE2B,STK19,PEX5L,COL4A6,PCLO,KCNG3,LSM2,NCAM1,PNRC2,YTHDC1,MYT1L,ANO4,ARHGAP27,GRIK3,FMN2,BSN,AIF1,KCNQ2,CACNA1B,RPS17,DLX6,PKD2L1,CASTOR2,CELF4,CELF3,LTB,CPLX2,SALL3,ZNF723,SOX11,GRIA2,PRAMEF15,PRAMEF17,FOXE1,NELFE,JSRP1,TTBK1,RING1,RXRB,SLC39A7,ZNF536,DCX,PTPRZ1,MDC1,HOXD10,SOX2,RAB3B,DGKB,ELAVL4,IGFBPL1,CTNNA2,EDN2,KCNA1,TUBB,CACNA1A,NKAIN2,EFCAB1,ZNF84,CST4,PLEKHG4B,ATP2B3,MS4A8,RIPPLY3,H3C6,ZBED9,TAAR1,PRAMEF19,TAGLN3,DAPL1,AMER2,EEF1A2,KCNC2,PAK5,KCNK17,PCP4,DPYSL5,FOXD4L6,MC3R,DACH2,RDH16,MOG,CDK5R2,SHISA9,FCN2,VGF,TBC1D3B,NCR3,PRAMEF14,ZBTB9,KIF1A,XIST,FOXD3,XKR7,PRAMEF6,SOX21,MB,GJC2,SCGB2A2,OR51A2,FOXI3,CAMK2N2,FOXJ1,FOXD4L5,PRAMEF27,CST2,TRIM48,FOXN4,TGIF2LX,FOXD4L4,CALCA |
| GO:BP | chemical synaptic transmission | GO:0007268 | CALB1,ADRA2A,SLC12A2,DLGAP3,SYNGAP1,TNF,UNC13A,STXBP5L,PCLO,GRIK3,BSN,KCNQ2,CACNA1B,CELF4,CPLX2,GRIA2,RAB3B,DGKB,ELAVL4,KCNA1,CACNA1A,SHISA9,VGF |
| GO:BP | anterograde trans-synaptic signaling | GO:0098916 | CALB1,ADRA2A,SLC12A2,DLGAP3,SYNGAP1,TNF,UNC13A,STXBP5L,PCLO,GRIK3,BSN,KCNQ2,CACNA1B,CELF4,CPLX2,GRIA2,RAB3B,DGKB,ELAVL4,KCNA1,CACNA1A,SHISA9,VGF |
| GO:BP | trans-synaptic signaling | GO:0099537 | CALB1,ADRA2A,SLC12A2,DLGAP3,SYNGAP1,TNF,UNC13A,STXBP5L,PCLO,GRIK3,BSN,KCNQ2,CACNA1B,CELF4,CPLX2,GRIA2,RAB3B,DGKB,ELAVL4,KCNA1,CACNA1A,SHISA9,VGF |
| GO:BP | modulation of chemical synaptic transmission | GO:0050804 | CALB1,ADRA2A,SLC12A2,DLGAP3,SYNGAP1,TNF,UNC13A,STXBP5L,GRIK3,CACNA1B,CELF4,CPLX2,DGKB,ELAVL4,CACNA1A,SHISA9,VGF |
| GO:CC | axon | GO:0030424 | CALB1,NEFM,ADRA2A,STMN3,NMNAT2,TUBB3,IGSF9,UNC13A,UNC80,SCN2A,MAST1,UCHL1,PCLO,GRIK3,BSN,KCNQ2,DSCAML1,CPLX2,AP3B2,ELAVL4,CTNNA2,KCNA1,ATP2B3,KCNC2,CDK5R2,NRSN1,KIF1A,GJC2,CALCA |
| GO:CC | cell body | GO:0044297 | RPE65,CALB1,ADRA2A,SLC12A2,TUBB3,RBP1,TNF,CKB,MAST1,UCHL1,GRIK3,AIF1,CACNA1B,CPLX2,GRIA2,TTBK1,ELAVL4,KCNA1,TUBB,CACNA1A,KCNC2,DPYSL5,NRSN1,VGF,GJC2,CALCA |
| GO:CC | neuron projection | GO:0043005 | CALB1,NEFM,ADRA2A,SLC12A2,ATXN1L,STMN3,NMNAT2,TUBB3,CRB1,SYNGAP1,SEPTIN3,RGS17,IGSF9,CKB,UNC13A,UNC80,SCN2A,MAST1,UCHL1,PCLO,NCAM1,GRIK3,BSN,KCNQ2,DSCAML1,CPLX2,AP3B2,GRIA2,DCX,ELAVL4,CTNNA2,KCNA1,ATP2B3,KCNC2,DPYSL5,CDK5R2,SHISA9,NRSN1,VGF,KIF1A,GJC2,CALCA |
| GO:CC | synapse | GO:0045202 | CALB1,NEFM,ADRA2A,MT-ND2,COL4A5,NMNAT2,APC2,DLGAP3,SYNGAP1,SEPTIN3,RGS17,IGSF9,UNC13A,SCN2A,STXBP5L,PCLO,GRIK3,BSN,KCNQ2,CACNA1B,RPS17,DSCAML1,CPLX2,AP3B2,GRIA2,PTPRZ1,RAB3B,DGKB,ELAVL4,KCNA1,CACNA1A,ATP2B3,EEF1A2,KCNC2,PAK5,SHISA9,VGF,INA,KIF1A,CAMK2N2,CALCA |
| GO:CC | neuronal cell body | GO:0043025 | CALB1,ADRA2A,SLC12A2,TUBB3,TNF,CKB,MAST1,UCHL1,GRIK3,AIF1,CACNA1B,CPLX2,GRIA2,TTBK1,ELAVL4,KCNA1,CACNA1A,KCNC2,DPYSL5,NRSN1,VGF,GJC2,CALCA |
| GO:CC | somatodendritic compartment | GO:0036477 | CALB1,ADRA2A,SLC12A2,ATXN1L,TUBB3,SYNGAP1,IGSF9,TNF,CKB,MAST1,UCHL1,GRIK3,BSN,AIF1,CACNA1B,CPLX2,GRIA2,TTBK1,ELAVL4,KCNA1,CACNA1A,KCNC2,DPYSL5,SHISA9,NRSN1,VGF,KIF1A,GJC2,CALCA |
| GO:CC | plasma membrane bounded cell projection | GO:0120025 | CALB1,F2RL1,NEFM,ADRA2A,SLC12A2,ATXN1L,CEP131,STMN3,NMNAT2,TUBB3,APC2,CRB1,SYNGAP1,SEPTIN3,RGS17,IGSF9,CFAP61,CKB,UNC13A,UNC80,SCN2A,MAST1,UCHL1,PCLO,NCAM1,GRIK3,FMN2,BSN,AIF1,KCNQ2,PKD2L1,DSCAML1,CPLX2,AP3B2,SPAG6,GRIA2,DCX,ELAVL4,CTNNA2,KCNA1,EFCAB1,ATP2B3,KCNC2,DPYSL5,CDK5R2,SHISA9,NRSN1,VGF,OXCT2,KIF1A,GJC2,CALCA |
| GO:CC | neuron projection terminus | GO:0044306 | CALB1,ADRA2A,UNC13A,UCHL1,GRIK3,BSN,CPLX2,KCNA1,KCNC2,CALCA |
| GO:CC | cell projection | GO:0042995 | CALB1,F2RL1,NEFM,ADRA2A,SLC12A2,ATXN1L,CEP131,STMN3,NMNAT2,TUBB3,APC2,CRB1,SYNGAP1,SEPTIN3,RGS17,IGSF9,CFAP61,CKB,UNC13A,UNC80,SCN2A,MAST1,UCHL1,PCLO,NCAM1,GRIK3,FMN2,BSN,AIF1,KCNQ2,PKD2L1,DSCAML1,CPLX2,AP3B2,SPAG6,GRIA2,DCX,ELAVL4,CTNNA2,KCNA1,CACNA1A,EFCAB1,ATP2B3,KCNC2,DPYSL5,CDK5R2,SHISA9,NRSN1,VGF,OXCT2,KIF1A,GJC2,CALCA |
| GO:CC | cell junction | GO:0030054 | CALB1,CLDN16,NEFM,ADRA2A,MT-ND2,COL4A5,NMNAT2,APC2,CRB1,DLGAP3,SYNGAP1,SEPTIN3,RGS17,IGSF9,UNC13A,NEU1,HSPA1A,SCN2A,STXBP5L,PCLO,GRIK3,BSN,KCNQ2,CACNA1B,RPS17,DSCAML1,CPLX2,AP3B2,GRIA2,PTPRZ1,MDC1,RAB3B,DGKB,ELAVL4,CTNNA2,KCNA1,CACNA1A,ATP2B3,EEF1A2,KCNC2,PAK5,SHISA9,VGF,INA,KIF1A,GJC2,CAMK2N2,CALCA |
| GO:CC | terminal bouton | GO:0043195 | CALB1,UNC13A,GRIK3,CPLX2,KCNC2,CALCA |
| GO:CC | cation channel complex | GO:0034703 | UNC80,SCN2A,KCNG3,GRIK3,KCNQ2,CACNA1B,PKD2L1,GRIA2,KCNA1,CACNA1A,KCNC2,SHISA9 |
| GO:CC | distal axon | GO:0150034 | CALB1,ADRA2A,STMN3,TUBB3,UNC13A,GRIK3,CPLX2,ELAVL4,KCNA1,KCNC2,CDK5R2,NRSN1,CALCA |
| GO:CC | axon terminus | GO:0043679 | CALB1,ADRA2A,UNC13A,GRIK3,CPLX2,KCNA1,KCNC2,CALCA |
| GO:CC | IgE immunoglobulin complex | GO:0071742 | IGHE,IGLC3 |
| KEGG | Systemic lupus erythematosus | KEGG:05322 | H4C12,H4C15,H4C11,HLA-DMB,TNF,HLA-DPA1,H2BS1,H3C6 |
| KEGG | Asthma | KEGG:05310 | FCER1A,HLA-DMB,TNF,HLA-DPA1 |
| REAC | Role of LAT2/NTAL/LAB on calcium mobilization | REAC:R-HSA-2730905 | IGHE,FCER1A,IGLC3,IGKV1D-33,IGKV1-33,IGKV2D-28,IGKV2D-30 |
| REAC | FCERI mediated Ca+2 mobilization | REAC:R-HSA-2871809 | IGHE,FCER1A,IGLC3,IGKV1D-33,IGKV1-33,IGKV2D-28,IGKV2D-30 |
| REAC | FCERI mediated MAPK activation | REAC:R-HSA-2871796 | IGHE,FCER1A,IGLC3,IGKV1D-33,IGKV1-33,IGKV2D-28,IGKV2D-30 |
| MIRNA | hsa-miR-3960 | MIRNA:hsa-miR-3960 | NMNAT2,PDZD4,CACNA1B,CELF4,RXRB,VGF,MSI1 |
| MIRNA | hsa-miR-8072 | MIRNA:hsa-miR-8072 | NMNAT2,PDZD4,CACNA1B,CELF4,RXRB,VGF,MSI1 |
| HPA | cerebellum; Purkinje cells - cytoplasm/membrane[â‰¥Low] | HPA:0090941 | CALB1,NEFM,STMN3,DLGAP3,PCDH19,RGS7,CKB,MAST1,UCHL1,DYNC1I1,MAP7D2,AP3B2,GRIA2,TTBK1,ST8SIA3,ELAVL4,SULT4A1,KCNA1,CACNA1A,ATP2B3,PAK5,PCP4,MOG,INA |
| HPA | cerebellum; GLUC cells - cytoplasm/membrane[â‰¥Low] | HPA:0090921 | STMN3,PCDH19,APLP1,RGS7,UCHL1,DYNC1I1,MAP7D2,CELF4,AP3B2,TTBK1,ELAVL4,SULT4A1,SCG3,KCNA1,PAK5 |
| HPA | cerebellum; GLUC cells - cytoplasm/membrane[â‰¥Medium] | HPA:0090922 | STMN3,PCDH19,APLP1,RGS7,UCHL1,DYNC1I1,MAP7D2,AP3B2,ELAVL4,SULT4A1,SCG3,KCNA1,PAK5 |
| HPA | cerebellum; Purkinje cells - cytoplasm/membrane[High] | HPA:0090943 | CALB1,STMN3,CKB,UCHL1,DYNC1I1,MAP7D2,AP3B2,TTBK1,CACNA1A,ATP2B3,PAK5,PCP4,INA |
| HPA | cerebellum; Purkinje cells - cytoplasm/membrane[â‰¥Medium] | HPA:0090942 | CALB1,STMN3,CKB,MAST1,UCHL1,DYNC1I1,MAP7D2,AP3B2,GRIA2,TTBK1,SULT4A1,KCNA1,CACNA1A,ATP2B3,PAK5,PCP4,MOG,INA |
| HPA | cerebellum; molecular layer - neuropil[â‰¥Low] | HPA:0090991 | STMN3,DLGAP3,RGS7,SCN2A,UCHL1,NCAM1,DYNC1I1,BSN,AP3B2,GRIA2,PTPRZ1,SULT4A1,TAGLN3,AMER2,PAK5 |
| HPA | cerebellum; synaptic glomeruli - core[â‰¥Low] | HPA:0091061 | STMN3,DLGAP3,PCDH19,RGS7,SCN2A,MAST1,UCHL1,DYNC1I1,BSN,GRIA2,SULT4A1,SCG3,ATP2B3,TAGLN3,PAK5 |
| HPA | cerebellum; GLUC cells - cytoplasm/membrane[High] | HPA:0090923 | APLP1,RGS7,UCHL1,DYNC1I1,MAP7D2,AP3B2,ELAVL4,SCG3,PAK5 |
| HPA | cerebellum; synaptic glomeruli - core[â‰¥Medium] | HPA:0091062 | STMN3,DLGAP3,RGS7,SCN2A,MAST1,UCHL1,DYNC1I1,BSN,GRIA2,SCG3,ATP2B3,TAGLN3,PAK5 |
| HPA | cerebellum; molecular layer cells - cytoplasm/membrane[â‰¥Low] | HPA:0091001 | PHLDA1,STMN3,SYNGAP1,RGS7,UCHL1,DYNC1I1,MAP7D2,AIF1,AP3B2,TTBK1,PTPRZ1,ELAVL4,SULT4A1,SCG3,AMER2,PAK5 |
| HPA | cerebellum; processes in molecular layer[â‰¥Medium] | HPA:0091032 | CALB1,NEFM,SYNGAP1,PCDH19,APLP1,CKB,UNC80,MAST1,AIF1,ATP2B3,INA |
| HPA | cerebellum; processes in molecular layer[â‰¥Low] | HPA:0091031 | CALB1,NEFM,SYNGAP1,PCDH19,APLP1,CKB,UNC80,MAST1,AIF1,ATP2B3,INA |
| HPA | cerebellum; Purkinje cells - dendrites[High] | HPA:0090953 | CALB1,STMN3,CKB,UCHL1,DYNC1I1,MAP7D2,CACNA1A,ATP2B3 |
| HPA | cerebellum; processes in white matter[â‰¥Low] | HPA:0091041 | CALB1,NEFM,PCDH19,APLP1,CKB,UNC80,UCHL1,AIF1,PTPRZ1,MOG,INA |
| HPA | cerebellum; Purkinje cells - dendrites[â‰¥Medium] | HPA:0090952 | CALB1,NEFM,STMN3,CKB,UCHL1,DYNC1I1,MAP7D2,CACNA1A,ATP2B3,PCP4,MOG |
| HPA | cerebellum; processes in granular layer[â‰¥Medium] | HPA:0091022 | CALB1,NEFM,STMN3,SYNGAP1,APLP1,UNC80,UCHL1,AIF1,MOG,INA |
| HPA | cerebellum; processes in granular layer[High] | HPA:0091023 | CALB1,NEFM,SYNGAP1,UNC80,UCHL1,AIF1,MOG,INA |
| CORUM | 2AR-mGluR2 complex | CORUM:5748 | ADRA2A,GRIA2 |
| CORUM | 2AR-mGluR2 complex | CORUM:5747 | ADRA2A,GRIA2 |
| HP | Dyskinesia | HP:0100660 | SLC12A2,MT-ATP6,MT-ND2,SYNGAP1,UNC80,SCN2A,UCHL1,MYT1L,FMN2,KCNQ2,CACNA1B,AP3B2,KCNA1,CACNA1A,EEF1A2,KIF1A |
| HP | Focal-onset seizure | HP:0007359 | SLC12A2,MT-CO2,TUBB3,APC2,SYNGAP1,PCDH19,SCN2A,MYT1L,FMN2,KCNQ2,GRIA2,DCX,KCNA1,CACNA1A,EEF1A2,DPYSL5,KIF1A |
| HP | Chorea | HP:0002072 | SLC12A2,MT-ATP6,MT-ND2,SYNGAP1,SCN2A,MYT1L,FMN2,KCNQ2,CACNA1B,GRIA2,KCNA1,CACNA1A,EEF1A2,DPYSL5,KIF1A,GJC2 |
| HP | Upper motor neuron dysfunction | HP:0002493 | RPE65,SLC12A2,MT-ATP6,MT-ND2,MT-CO2,FAS,TUBB3,APC2,CRB1,SYNGAP1,UNC13A,HLA-DPA1,NEU1,UNC80,SCN2A,UCHL1,PCLO,MYT1L,FMN2,KCNQ2,CACNA1B,AP3B2,GRIA2,DCX,SOX2,CTNNA2,KCNA1,CACNA1A,METTL27,ATP2B3,EEF1A2,KIF1A,GJC2 |
| HP | Spasticity | HP:0001257 | SLC12A2,MT-ATP6,MT-ND2,TUBB3,APC2,SYNGAP1,UNC13A,NEU1,UNC80,SCN2A,UCHL1,PCLO,MYT1L,FMN2,KCNQ2,CACNA1B,AP3B2,GRIA2,DCX,SOX2,CTNNA2,KCNA1,CACNA1A,METTL27,ATP2B3,EEF1A2,KIF1A,GJC2 |
| HP | Abnormal hippocampus morphology | HP:0025100 | TUBB3,SYNGAP1,PCDH19,SCN2A,MYT1L,KCNQ2,EEF1A2,DPYSL5,KIF1A |
| HP | Abnormal morphology of the limbic system | HP:0007343 | TUBB3,SYNGAP1,PCDH19,SCN2A,MYT1L,KCNQ2,EEF1A2,DPYSL5,KIF1A |
| HP | Generalized myoclonic seizure | HP:0002123 | MT-ATP6,MT-ND2,APC2,SYNGAP1,PCDH19,NEU1,SCN2A,MYT1L,KCNQ2,CACNA1A,EEF1A2,KIF1A |
| HP | Hypsarrhythmia | HP:0002521 | SLC12A2,APC2,SYNGAP1,SCN2A,FMN2,KCNQ2,CACNA1B,AP3B2,DCX,KCNA1,CACNA1A,EEF1A2,KIF1A |
| HP | Tonic seizure | HP:0032792 | SYNGAP1,PCDH19,SCN2A,MYT1L,KCNQ2,GRIA2,KCNA1,CACNA1A,EEF1A2,KIF1A |
| HP | Generalized-onset motor seizure | HP:0032677 | MT-ATP6,MT-ND2,APC2,SYNGAP1,PCDH19,NEU1,SCN2A,MYT1L,KCNQ2,KCNA1,CACNA1A,EEF1A2,KIF1A |
| HP | Generalized tonic seizure | HP:0010818 | SYNGAP1,PCDH19,SCN2A,MYT1L,KCNQ2,KCNA1,CACNA1A,EEF1A2,KIF1A |
| HP | Hypoplasia of the corpus callosum | HP:0002079 | SLC12A2,MT-CO2,TUBB3,APC2,SYNGAP1,UNC80,SCN2A,PCLO,MYT1L,FMN2,KCNQ2,AP3B2,DCX,SOX2,CTNNA2,KCNA1,TUBB,EEF1A2,KIF1A,GJC2 |
| HP | Autistic behavior | HP:0000729 | SLC12A2,MT-ND2,TUBB3,APC2,SYNGAP1,PCDH19,SCN2A,UCHL1,MYT1L,FMN2,KCNQ2,CACNA1B,AP3B2,SOX11,GRIA2,DCX,SOX2,KCNA1,CACNA1A,METTL27,EEF1A2,DPYSL5,KIF1A |
| HP | Motor seizure | HP:0020219 | SLC12A2,MT-ATP6,MT-ND2,APC2,SYNGAP1,PCDH19,NEU1,SCN2A,MYT1L,FMN2,KCNQ2,GRIA2,DCX,KCNA1,CACNA1A,EEF1A2,KIF1A |
| HP | Epileptic spasm | HP:0011097 | SLC12A2,MT-ATP6,MT-ND2,APC2,SYNGAP1,SCN2A,MYT1L,FMN2,KCNQ2,DCX,KCNA1,EEF1A2,KIF1A |
| HP | EEG with generalized epileptiform discharges | HP:0011198 | SLC12A2,APC2,SYNGAP1,PCDH19,SCN2A,FMN2,KCNQ2,CACNA1B,AP3B2,DCX,KCNA1,CACNA1A,EEF1A2,KIF1A |
| HP | Generalized-onset seizure | HP:0002197 | SLC12A2,MT-ATP6,MT-ND2,APC2,SYNGAP1,PCDH19,NEU1,SCN2A,MYT1L,FMN2,KCNQ2,DCX,KCNA1,CACNA1A,EEF1A2,KIF1A |
| HP | Hypertonia | HP:0001276 | SLC12A2,MT-ATP6,MT-ND2,TUBB3,APC2,SYNGAP1,PCDH19,UNC13A,NEU1,UNC80,SCN2A,UCHL1,PCLO,MYT1L,FMN2,KCNQ2,CACNA1B,AP3B2,GRIA2,DCX,SOX2,CTNNA2,KCNA1,CACNA1A,METTL27,ATP2B3,EEF1A2,KIF1A,GJC2 |
| HP | Bilateral tonic-clonic seizure | HP:0002069 | MT-ATP6,MT-ND2,MT-CO2,APC2,SYNGAP1,PCDH19,SCN2A,MYT1L,KCNQ2,GRIA2,KCNA1,CACNA1A,EEF1A2,DPYSL5,KIF1A |
| HP | Myoclonic seizure | HP:0032794 | MT-ATP6,MT-ND2,APC2,SYNGAP1,PCDH19,NEU1,SCN2A,MYT1L,KCNQ2,CACNA1A,EEF1A2,KIF1A |
| HP | Atonic seizure | HP:0010819 | SYNGAP1,PCDH19,SCN2A,MYT1L,KCNQ2,KCNA1,CACNA1A,EEF1A2,KIF1A |
| HP | Impulsivity | HP:0100710 | SLC12A2,SYNGAP1,PCDH19,SCN2A,UCHL1,FMN2,CACNA1B,AP3B2,CACNA1A,EEF1A2,DPYSL5 |
| HP | Facial tics | HP:0011468 | PCDH19,SCN2A,KCNQ2,CACNA1A |
| HP | Focal impaired awareness seizure | HP:0002384 | APC2,SYNGAP1,PCDH19,SCN2A,MYT1L,FMN2,KCNQ2,EEF1A2,KIF1A |
| HP | Abnormality of coordination | HP:0011443 | MT-ATP6,MT-ND2,MT-CO2,FAS,TUBB3,APC2,SYNGAP1,PCDH19,NEU1,SCN2A,MAST1,UCHL1,KCNQ2,CACNA1B,AP3B2,GRIA2,DCX,CTNNA2,KCNA1,TUBB,CACNA1A,METTL27,ATP2B3,EEF1A2,DPYSL5,MOG,KIF1A,GJC2 |
| HP | Abnormality of central nervous system electrophysiology | HP:0030178 | SLC12A2,MT-CO2,APC2,SYNGAP1,PCDH19,NEU1,UNC80,SCN2A,FMN2,KCNQ2,CACNA1B,AP3B2,DCX,CTNNA2,KCNA1,CACNA1A,EEF1A2,KIF1A,GJC2 |
| HP | Interictal epileptiform activity | HP:0011182 | SLC12A2,APC2,SYNGAP1,PCDH19,SCN2A,FMN2,KCNQ2,CACNA1B,AP3B2,DCX,KCNA1,CACNA1A,EEF1A2,KIF1A |
| HP | Interictal EEG abnormality | HP:0025373 | SLC12A2,APC2,SYNGAP1,PCDH19,SCN2A,FMN2,KCNQ2,CACNA1B,AP3B2,DCX,KCNA1,CACNA1A,EEF1A2,KIF1A |
| HP | Focal non-motor seizure | HP:0032679 | SYNGAP1,MYT1L,KCNQ2,KCNA1,CACNA1A,EEF1A2,KIF1A |
| HP | Dysgenesis of the hippocampus | HP:0025101 | TUBB3,PCDH19,SCN2A,DPYSL5 |
| HP | Cerebral atrophy | HP:0002059 | SLC12A2,MT-ATP6,MT-CO2,APC2,SYNGAP1,UNC80,SCN2A,UCHL1,PCLO,MYT1L,FMN2,KCNQ2,CACNA1B,AP3B2,GRIA2,KCNA1,CACNA1A,METTL27,EEF1A2,DPYSL5,KIF1A,GJC2 |
| HP | EEG abnormality | HP:0002353 | SLC12A2,MT-CO2,APC2,SYNGAP1,PCDH19,NEU1,UNC80,SCN2A,FMN2,KCNQ2,CACNA1B,AP3B2,DCX,CTNNA2,KCNA1,CACNA1A,EEF1A2,KIF1A |
| HP | Disinhibition | HP:0000734 | SLC12A2,SYNGAP1,PCDH19,SCN2A,UCHL1,FMN2,CACNA1B,AP3B2,CACNA1A,EEF1A2,DPYSL5 |
| HP | Atrophy/Degeneration affecting the cerebrum | HP:0007369 | SLC12A2,MT-ATP6,MT-CO2,APC2,SYNGAP1,UNC80,SCN2A,UCHL1,PCLO,MYT1L,FMN2,KCNQ2,CACNA1B,AP3B2,GRIA2,KCNA1,CACNA1A,METTL27,EEF1A2,DPYSL5,KIF1A,GJC2 |
| HP | Gait disturbance | HP:0001288 | RPE65,SLC12A2,MT-ATP6,MT-ND2,MT-CO2,FAS,TUBB3,SYNGAP1,PCDH19,NEU1,UNC80,SCN2A,MAST1,UCHL1,MYT1L,KCNQ2,CACNA1B,AP3B2,GRIA2,CTNNA2,KCNA1,CACNA1A,METTL27,ATP2B3,EEF1A2,DPYSL5,KIF1A,GJC2 |