**Supplementary File 5. Ingenuity Pathway Analysis (IPA®) reveals “development of the central nervous system” as one of the top 10 enriched Diseases and Biological Functions related to the nervous system.** DEGs were further analyzed with (IPA®) to identify the most enriched biological functions related to the nervous system in SLOS mutant NPCs. The table below shows the top ten enriched terms corresponding to Diseases/Bio-functions along with the *p*-value and overlapping number of genes in the dataset.

|  |  |  |
| --- | --- | --- |
| **Disease or Function**  | **p-Value** | **# genes in dataset** |
| Development of neurons | 1.59E-47 | 275 |
| Morphology of nervous system | 4.71E-47 | 311 |
| Abnormal morphology of nervous system | 7.45E-42 | 265 |
| Development of sensory organ | 9.01E-33 | 186 |
| Development of central nervous system | 3.28E-29 | 199 |
| Neurotransmission | 6.97E-29 | 143 |
| Abnormal morphology of central nervous system | 1.42E-28 | 162 |
| Morphogenesis of neurons | 1.53E-28 | 192 |
| Neuritogenesis | 5.85E-28 | 189 |
| Morphology of central nervous system | 7.02E-28 | 184 |