

Supplementary Table 1: Antibodies for immunostaining with their purpose.

| Name | Purpose |
|---|---|
| General markers in human brain | |
| SOX2 | Neural progenitor marker |
| Ki67 | Proliferative cells marker |
| NEUN | Mature neurons marker |
| DCX | Immature neuron marker |
| TUJ1 | Neuron marker |
| MAP2 | Mature neurons marker |
| Bassoon | Pre-synaptic proteins marker |
| PSD95 | Post-synaptic proteins marker |
| GFAP | Astrocytes marker |
| MBP | Myelin essential protein |
| PAX6 | Neuroectoderm markers |
| SOX1 | Neuroectoderm markers |
| OTX2 | Forebrain marker |
| FOXG1 | Forebrain marker |
| Region-specific markers in human brain | |
| Cortex | |
| PAX6 | Dorsal forebrain progenitor marker |
| TBR1 | One of cortical layer neuron markers |
| CTIP2 | One of cortical layer neuron markers |
| SATB2 | One of cortical layer neuron markers |
| LGE | |
| GSH2 | LGE progenitor cells marker |
| MASH1 | LGE Intermediate progenitor cells marker |
| DLX2 | Ventral forebrain marker |
| GABA | GABAergic neuron marker |
| MEIS1/2 | Striatal MSN marker |
| CTIP2 | Striatal MSN marker |
| DARPP32 | Striatal MSN marker/Striosome-enriched marker |
| FOXP2 | Striosome-enriched marker |
| CALB2 | Striosome-enriched marker |
| MOR1 | Striosome-enriched marker |
| CALB1 | Matrix-enriched marker |
| MGE | |
| NKX2.1 | MGE marker |
| Mid-brain | |
| FOXA2 | Midbrain marker |
| TH | Dopaminergic neurons marker |