

| Gene Name   | Symbol         | Typical expression    | Assays ID     |
|---|----------------|-----------------------|---------------|
| GLI-Kruppel family member GLI1                        | <i>Gli1</i>    | Shh pathway           | Mm00494654_m1 |
| GLI-Kruppel family member GLI2                        | <i>Gli2</i>    | Shh pathway           | Mm01293111_m1 |
| GLI-Kruppel family member GLI3                        | <i>Gli3</i>    | Shh pathway           | Mm00492345_m1 |
| Patched 1   | <i>Ptch1</i>   | Shh pathway           | Mm00436026_m1 |
| Sonic hedgehog  | <i>Shh</i>     | Shh pathway           | Mm00436528_m1 |
| Smoothened  | <i>Smo</i>     | Shh pathway           | Mm01162710_m1 |
| Deiodinase type III                                   | <i>Dio3</i>    | T3 signaling pathway  | Mm00548953_s1 |
| Thyroid hormone receptor alpha                        | <i>Thra</i>    | T3 signaling pathway  | Mm00579691_m1 |
| Thyroid hormone receptor beta                         | <i>Thrb</i>    | T3 signaling pathway  | Mm00437044_m1 |
| Cyclin D1   | <i>Ccnd1</i>   | Mitotic cell cycle    | Mm00432359_m1 |
| POU domain, class 5, transcription factor 1 (Oct-3/4) | <i>Pou5f1</i>  | Stem cells            | Mm03053917_g1 |
| Nestin  | <i>Nes</i>     | CNS progenitor cells  | Mm00450205_m1 |
| Tubulin, beta 3 class III                             | <i>Tubb3</i>   | Neurons               | Mm00727586_s1 |
| Glial fibrillary acidic protein                       | <i>Gfap</i>    | Astrocytes            | Mm01253033_m1 |
| Oligodendrocyte transcription factor 2                | <i>Olig2</i>   | Oligodendroglia       | Mm01210556_m1 |
| Solute carrier family 6, member 3 (Dat1)              | <i>Slc6a3</i>  | Dopaminergic neurons  | Mm00438388_m1 |
| Glutamate decarboxylase 1                             | <i>Gad1</i>    | GABAergic neurons     | Mm00725661_s1 |
| Tryptophan hydroxylase 1                              | <i>Tph1</i>    | Serotonergic neurons  | Mm01202614_m1 |
| solute carrier family 17, member 7 (Vglut1)           | <i>Slc17a7</i> | Glutamatergic neurons | Mm00812886_m1 |
| solute carrier family 17, member 7 (Vglut2)           | <i>Slc17a6</i> | Glutamatergic neurons | Mm00499876_m1 |
| Glyceraldehyde 3-phosphate dehydrogenase              | <i>Gapdh</i>   | Reference gene        | Mm99999915_g1 |
| Hypoxanthine guanine phosphoribosyl transferase       | <i>Hprt1</i>   | Reference gene        | Mm00446968_m1 |
| Actin, beta   | <i>Actb</i>    | Reference gene        | Mm00607939_s1 |

**S1 Table.** List of used genes and corresponding TaqMan® probes.