

| Gene    | Primer Sequence                                    |
|---------|----------------------------------------------------|
| HB9     | GCCTAAGATGCCCCACTTCAAC<br>CGCGACAGGTA CTGTGAGCT    |
| Islet1  | GCAGAGTGACATAGATCAGCCTG<br>GCCTCAATAGGACTGGCTACCA  |
| NEUROD1 | AGACACTCGTCTGTCCAGCTT<br>GCCCCAGGGTTATGAGACTA      |
| GDNF    | CGCCGAAGACCGCTCCCTCG<br>ATCCATGACATCATCGAACTGATC   |
| RET     | GTCCTCTTGCTCCACTTCAACG<br>CCTGGCAGTTTTCCACACAGAC   |
| NTRK2   | ACAGTCAGCTCAAGCCAGACAC<br>GTCCTGCTCAGGACAGAGGTTA   |
| VGF     | ACCCACAGCCTGGATAACAG<br>ACTGGTTGCCATCAA ACTCC      |
| GRB2    | GAAATGCTTAGCAAACAGCGGCA<br>TCCATCTCGGAGCACCTTGAAG  |
| RASD2   | GACATCCTGGATACCTCTGGCA<br>CGGTTATCCAGGCTGAACACCA   |
| CAT     | GTGCGG AGATTCAAC ACTGCCA<br>CGGCAATGTTCTCACACAGACG |
| GPX7    | CGACTTCAAGGCGGTCAACATC<br>TCGGTAGTGCTGGTCTGTGAAG   |
| GRIA1   | GGATGCTCTTTCAGGACCTGGA<br>GTAGTGGTAGCCGATGCCATTC   |
| GRIA2   | CCTGGATTCAAAGGCTATGGC<br>GTCTAAGACGCCTTGCTCACTG    |
| GRIA3   | GGTTCAGCAGTTCATACAGCC<br>CTCCTCAGGTAGCGGAAA GCTT   |
| GRID1   | AGGAAGGCTACCTCCAGATGCT<br>CAGTTGAGGCTCGCCATGCTAT   |
| GRID2   | TCTTACACGGCAAACCTCGCTG<br>TACCGCAGAGTCTAGGACTGTG   |
| GRIK4   | ATGGACAGCCACCTCTATGCCT<br>GTAGCGGTCATTGCCTTCCATC   |
| GRIN2B  | TTCCACTGGCTATGGCATTGCC<br>GACAAATGCCAGTGAGCCAGAG   |
| SLC1A2  | TGCCAACAGAGGACATCAGCCT<br>CAGCTCAGACTTGAGAGGTGA    |
| BAX     | TCAGGATGCGTCCACCAAGAAG<br>TGTGTCCACGGCGGCAATCATC   |
| SOD1    | CTCACTCTCAGGAGACCATTGC<br>CCACAAGCCAAACGACTTCCAG   |
| SOD2    | CTGGACAAACCTCAGCCCTAAC<br>AACCTGAGCCTTGGACACCAAC   |
| CYCS    | AAGGGAGGCAAGCACAAGACTG                             |

|               |                         |
|---------------|-------------------------|
|               | CTCCATCAGTGTATCCTCTCCC  |
| <b>GRIK1</b>  | GGATGTATGTGCTCTTAGCCTGC |
|               | GTTTTCCACCACGTCTGAGTCAG |
| <b>GFRA1</b>  | CATAGACTCCAGTAGCCTCAGTG |
|               | GTCACATCGGAGCCATTGCCAA  |
| <b>CYGB</b>   | ACCGCTGCCTACAAGGAAGTGG  |
|               | AAGGAGGGTCTTCAGAACTCGG  |
| <b>NQO1</b>   | CCTGCCATTCTGAA GGCTGGT  |
|               | GTGGTGATGGAAGCACTGCCT   |
| <b>HOXB5</b>  | GACTCCGCAAATATCCCCTGG   |
|               | GGAACCTCTTTCCAGCTCCAG   |
| <b>PHOX2B</b> | CCTGAAGATCGACCTCACAGAG  |
|               | TTTTGCCCCGAGGAGCCGTTCTT |
| <b>NKX2.1</b> | CAGGACACCATGAGGAACAGCG  |
|               | GCCATGTTCTTGCTCACGTCCC  |
| <b>GAPDH</b>  | GTCTCCTCTGACTTCAACAGCG  |
|               | ACCACCCTGTTGCTGTAGCCAA  |
| <b>18S</b>    | ACCCGTTGAACCCATTCTGTGA  |
|               | GCCTCACTAAACCATCCAATCGG |

| <b>Antibody</b>        | <b>Vendor</b>             | <b>Catalog #</b> | <b>Dilution</b> |
|------------------------|---------------------------|------------------|-----------------|
| mouse anti-Olig2       | Millipore                 | MABN50           | 1:1000          |
| rabbit anti-HB9        | DSHB                      | AB2145209        | 1:300           |
| rabbit anti-Islet1     | DSHB                      | AB528315         | 1:300           |
| Goat anti-ChAT         | Millipore                 | AB144P           | 1:200           |
| rat anti-VGlu1         | SYSY                      | 135311           | 1:300           |
| rabbit anti-GAD67      | Millipore                 | Mab5406          | 1:300           |
| rabbit anti-TUJ1       | Cell Signaling Technology | 5568             | 1:500           |
| mouse anti-TUJ1        | Cell Signaling Technology | 4466             | 1:500           |
| rabbit anti-Synapsin 1 | Cell Signaling Technology | 2312             | 1:200           |
| rabbit anti-pRET       | R&D systems               | AF5009           | 1:1000          |
| rabbit anti-RET        | Cell Signaling Technology | 14556            | 1:1000          |
| rabbit anti-CAT        | Cell Signaling Technology | 12980            | 1:1000          |
| rabbit anti-GPX7       | GeneTex                   | GTX105683        | 1:1000          |
| rabbit anti-VGF        | Origene                   | TA306578         | 1:1000          |
| rabbit anti-pERK       | Cell Signaling Technology | 9101             | 1:1000          |
| mouse anti-tERK        | Cell Signaling Technology | 4696             | 1:1000          |
| rabbit anti-pAkt       | Cell Signaling Technology | 4060             | 1:1000          |
| rabbit anti-tAkt       | Cell Signaling Technology | 9272             | 1:1000          |
| rabbit anti-pSrc       | Cell Signaling Technology | 6943             | 1:1000          |
| rabbit anti-Src        | Cell Signaling Technology | 2109             | 1:1000          |
| goat anti-GFRA1        | R&D systems               | AF714            | 1:1000          |
| rabbit anti-GRIA1      | Cell Signaling Technology | 8652             | 1:1000          |

|                  |                      |         |         |
|------------------|----------------------|---------|---------|
| Mouse anti-OCT4  | Stem Cell Technology | 60093.1 | 1:200   |
| Mouse anti-O4    | R&D systems          | MAB1326 | 1 µg/mL |
| mouse anti-Actin | Proteintech          | 66009-1 | 1:2000  |