

**Supplement Table S1 : Curated RTT-L Gene List**

| <b>RTT-L Gene List</b> | <b>References</b> |
|------------------------|-------------------|
| ADAM23                 | [12]              |
| AGAP6                  | [10]              |
| ANKRD31                | [10]              |
| BTBD9                  | [10]              |
| CHRNA5                 | [13,40]           |
| CLCN5                  | [14]              |
| CREB1                  | [12]              |
| DEAF1                  | [15]              |
| EEF1A2                 | [16] [17]         |
| EIF2B2                 | [17]              |
| EIF4G1                 | [17]              |
| GABBR2                 | [17] [18]         |
| GABRD                  | [19]              |
| GABRG2                 | [20]              |
| GNAO1                  | [21]              |
| GRIN1                  | [44]              |
| GRIN2A                 | [22]              |
| GRIN2B                 | [10]              |
| HCN1                   | [10, 23]          |
| HDAC8                  | [24]              |
| HECW2                  | [25]              |
| HTT                    | [17]              |
| IQSEC2                 | [26]              |
| JMJD1C                 | [27]              |
| KAT6A                  | [28]              |
| KCNB1                  | [29]              |
| KCNQ2                  | [30]              |
| KIF1A                  | [44]              |
| KLF7                   | [12]              |
| MAP2                   | [12]              |
| MBD2                   | [31]              |
| MEF2C                  | [32]              |
| MEIS2                  | [29]              |
| MFSD8                  | [33]              |
| MGRN1                  | [10]              |
| PDLIM7                 | [10]              |
| PTPN4                  | [34]              |
| RHOBTB2                | [17]              |
| SATB2                  | [35]              |

|              |         |
|--------------|---------|
| SCN1A        | [10]    |
| SCN2A        | [36]    |
| <b>SCN8A</b> | [37]    |
| SHANK3       | [38]    |
| SHROOM4      | [17]    |
| SLC35A2      | [17]    |
| SLC6A1       | [10]    |
| SMARCA1      | [17]    |
| ST3GAL5      | [39]    |
| STXBP1       | [17]    |
| SYNGAP1      | [40,41] |
| TBL1XR1      | [42]    |
| TCF4         | [17]    |
| VASH2        | [10]    |
| WDR45        | [43]    |
| ZFX          | [17]    |
| ZNF238       | [17]    |
| ZNF620       | [10]    |
| GABRB2       | [20]    |