Supplementary Materials

**Table S1.** List of human brain samples and their respective RNA concentrations after isolation and RNA quantity after dilution.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sample ID** | **Group** | **Area** | **RNA concentration in sample (ng/μL)** | **RNA quantity after dilution (ng)** |
| **1** | Control | pontine raphe nucleus | 206.60 | 1000 |
| **2** | Control | pontine raphe nucleus | 144.50 | 1000 |
| **3** | Control | pontine raphe nucleus | 590.20 | 1000 |
| **4** | Control | pontine raphe nucleus | 1048.20 | 1000 |
| **5** | Control | pontine raphe nucleus | 979.90 | 1000 |
| **6** | Control | pontine raphe nucleus | 225.30 | 1000 |
| **1** | Control | temporal cortex | 210.99 | 1000 |
| **2** | Control | temporal cortex | 457.82 | 1000 |
| **1** | Control | frontopolar cortex | 263.02 | 1000 |
| **2** | Control | frontopolar cortex | 263.31 | 1000 |
| **3** | Control | frontopolar cortex | 318.17 | 1000 |
| **4** | Control | frontopolar cortex | 232.36 | 1000 |

**Table S2.** Details of the human brain samples.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Brain #ID** | **Sample ID** | **Area** | **Gender** | **Age** | **Post-mortem delay (h)** | **Cause of death** |
| **#186** | 1 | pontine raphe nucleus | female | 56 | 5 | myocardial infarction |
| **#209** | 2 | pontine raphe nucleus | male | 52 | 4.5 | myocardial infarction |
| **#211** | 3 | pontine raphe nucleus | female | 56 | 6 | cardiorespiratory insufficiency |
| **#216** | 4 | pontine raphe nucleus | male | 53 | 5 | pulmonary embolism |
| **#227** | 5 | pontine raphe nucleus | male | 55 | 6 | acute myocardial infarction |
| **#228** | 6 | pontine raphe nucleus | male | 27 | 8 | pneumonia |
| **#267** | 1 | temporal cortex | female | 91 | 8 | stroke |
| **#175** | 2 | temporal cortex | female | 49 | 6 | suicide (drug overdose) |
| **#211** | 1 | frontopolar cortex | female | 56 | 6 | cardiorespiratory insufficiency |
| **#267** | 2 | frontopolar cortex | female | 91 | 8 | stroke |
| **#159** | 3 | frontopolar cortex | male | 48 | 6 | suicide (hanging) |
| **#175** | 4 | frontopolar cortex | female | 49 | 6 | suicide (drug overdose) |

**Table S3.** List of primers for PCR.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **Primer ID** | **Bases** | **Product Size (bp)** |
| hDAT-E-1-F | 20 | GTC TGT TTG GAT TGA CGC GG | NM\_001044.5 | 205 |
| hDAT-E-1-R | 20 | ACT GTG CTT CTG TGC CAT GT |
| mDAT-F | 22 | GGT GCT GAT TGC CTT CTC CAG T | NM\_010020.3 | 112 |
| mDAT-R | 22 | GAC AAC GAA GCC AGA GGA GAA G |
| mDBH-F | 22 | GAG ACT GCC TTT GTG TTG ACC G | NM\_138942.3 | 133 |
| mDBH-R | 22 | CGA GCA CAG TAA CCA CCT TCC T |
| mGAPDH-F | 23 | CAT CAC TGC CAC CCA GAA GAC TG | NM\_001289726.2 | 153 |
| mGAPDH-R | 23 | ATG CCA GTG AGC TTC CCG TTC AG |
| mTH-F | 23 | TGC ACA CAG TAC ATC CGT CAT GC | NM\_009377.2 | 107 |
| mTH-R | 22 | GCA AAT GTG CGG TCA GCC AAC A |

A: adenine; C: cytosine; E: exon-exon junction; F: forward primer; G: guanine hDAT: human dopamine transporter; mDAT: mouse dopamine transporter; mDBH: mouse dopamine β-hydroxylase; mGAPDH: glyceraldehyde 3-phosphate dehydrogenase; mTH: mouse tyrosine hydroxylase; R: reversed primer; T: thymine.