

Supplemental materials

Behavioral test

1. Light/dark box (LDB)

LDB is composed of a light chamber and a dark chamber. The mice were placed in the dark chamber, and the video detection system was used to record the number of times the mice entered the light chamber and the time they stayed in the light chamber in the 10 min.

2. Open field test (OFT)

The OFT device is a square enclosed space surrounded by a baffle. The mice were placed in the central area of the square to detect the total distance the mice moved in the open field in the 10 min.

3. Elevated plus maze (EPM)

EPM is composed of a pair of open arms and a pair of closed arms, which cross each other perpendicular to each other. The mice were placed at the cross of the open arms and closed arms, and the number of times the mice entered the open arm in the 6 min was detected.

4. Forced swim test (FST)

FST device is composed of a plexiglass bucket with a height of 30 cm and a diameter of 10 cm, which is filled with appropriate amount of water at a temperature of 23-25 °C. The mice were put into the water for testing, and the immobility time of the mice in the 8 min was recorded. The definition of immobility is that the mice only keep their heads floating.

5. Tail suspension test (TST)

In TST, the mouse tail (2 cm from the tail end) was tied to the suspension rod (30 cm above the ground). The movement of mice was detected and the immobility time of mice in 6 min was recorded. Immobility is defined as a movement with no voluntary or escape tendency.

Table S1

Primer information

| Name | Primer sequence |
|----------------|---------------------------------|
| GAPDH | F-5'-AACGACCCCTTCATTGAC-3' |
| | R-5'-TCCACGACATACTCAGCAC -3' |
| β -actin | F-5'-TGTCCACCTTCCAGCAGATGT-3' |
| | R-5'-AGCTCAGTAACAGTCCGCCTAGA-3' |
| Tph1 | F-5'-CCAGACACCTGCCATGAACT -3' |
| | R-5'-TCCTCTGAAGCTCCAAGGGA-3' |
| CREB1 | F-5'-AGCAGCTCATGCAACATCATC-3' |
| | R-5'-AGTCCTTACAGGAAGACTGAACT-3' |
| BDNF | F-5'-AGGTCTGACGACGACATCACT-3' |
| | R-5'-CTTCGTTGGGCCGAACCTT-3' |
| 5-HT1A | F-5'-GACAGGCGGCAACGATACT-3' |
| | R-5'-CCAAGGAGCCGATGAGATAGTT-3' |
| IL-1 β | F-5'-TGCCACCTTTTGACAGTGATG-3' |
| | R-5'-AAGGTCCACGGGAAAGACAC-3' |
| IL-6 | F-5'- CCCTTTGCTATGGTGTCTT-3' |
| | R-5'-TGGTTTCTCTTCCCAAGACC-3' |
| TNF- α | F-5'-ATGAGAAGTTCCCAAATGGC-3' |
| | R-5'-CTCCACTTGGTGGTTTGCTA-3' |
| GR | F-5'-GACTCCAAAGAATCCTTAGCTCC-3' |
| | R-5'-CTCCACCCCTCAGGGTTTTAT-3' |