## **Supplementary Figure Legends**

**Figure S1**. HPLC chromatograms of marker compounds of Rhei Rhizoma and Coptidis Rhizoma. Shimadzu HPLC system (CBM-20A, Shimadzu Technologies, Kyoto, Japan) equipped with an autosampler (SIL-20A), solvent pump (LC-20AD), oven (CTO-20A), and detector (SPD-20A) was used for analysis. Separation of the marker compounds was performed on a YMC-Triat C18 column. A and B, HPLC chromatograms of crude Rhei Rhizoma extract and its standards (sennoside A, aloe-emodin, rhein, emodin, chrysophanol, and physcion); C, HPLC chromatograms of crude Coptidis Rhizoma extract and its standard compound, berberine. A and C, 40°C column temperature, 1.0 mL/min flow rate, 10 μL injection volume; B, 32°C column temperature, 0.5 mL/min flow rate, 10 μL injection volume.

**Figure S2.** Overview of the experimental procedure. One week after BCAS surgery, vehicle or DHST was used for treatment five times a week for 4 weeks. Each group contained five mice. Thirty-six days after the surgery, we conducted behavior tests, which included the Y-maze test and NORT. Thirty-seven days after the surgery, the animals were euthanized and their brains were harvested for CV staining and western blotting.

**Figure S3**. A bird's-eye view of the Y-maze for the spontaneous alternation test (A) and open-field box for NORT (B). The Y-maze is 35 cm long, 7 cm wide, and 40 cm high. The field arena used for NORT is 40 cm long, 40 cm wide, and 40 cm high.





