**Supplementary materials**

Supplementary Fig 1: Summary of animal use, experimental groups and mortality rate in this study.

Supplementary Fig 2: Summary of proposal pathway. The interventions are marked in TrkB/PI3K/FoxO1 pathway in this study.

Supplementary fig 3: Gel scans of all proteins in this study.

Supplementary fig 4: Quantity of TrkB(-) and TrkB(-) microglia, neurons and astrocytes in CNS.