Supplementary information

Supplementary method 1. Preparation Cuscuta seeds extracts

Cuscuta chinensis Lam seeds (CC) and *Cuscuta japonica Choisy* seeds (CJ) were extracted with distilled water by either boiling or sonication. For in vivo study, CC and CJ were extracted with sonication in distilled water for 1 h. Then, the extracts were filtered, evaporated in a rotary vacuum evaporator, and finally lyophilized to powders (yield; CC; 5.9%, CJ; 6.9%). For in vitro study, CC and CJ were boiled with distilled water for 2 h, filtered, evaporated in a rotary vacuum evaporator, and finally lyophilized to powders (yield; CC; 5.9%, CJ; 6.9%). For in vitro study, CC and CJ were boiled with distilled water for 2 h, filtered, evaporated in a rotary vacuum evaporator, and finally lyophilized to powders (yield; CC; 6.0%, CJ; 6.6%). The lyophilized powders were kept at -20 °C until use. The effects of CC and CJ on the induction of NGF were evaluated, and as a result, it was determined that all the extracts showed significant efficacy regardless of the extraction method of both ingredients, as shown in Supplementary fig S1.



Supplementary figure S1. Effects of *Cuscuta chinensis* Lam. seeds (CC) and *Cuscuta japonica* Choisy seeds (CJ) on NGF induction in C6 glial cells according to the different extraction methods. NGF concentration in the cell supernatant (A-D) and cell viability (E-H) were examined 24 h after treatment of CC extracted with DW boiling (A, E), CC extracted with sonication in DW (B, F) CJ extracted with DW boiling (C, G), and CJ extracted with sonication in DW (D, H). DW; distilled water.