**Supplementary Material**

 The supplementary material is available in the electronic version of this article: http://dx.doi.org/10.3233/JAD-000000.

# Supplementary Material

 To provethe*in vivo* test strategy regarding the suitability of *Sideritis* extracts as memory enhancer, littermates were additionally treated with amedically used *Ginkgo biloba* extract as an independent treatment control.This extract was also prepared by Finzelberg GmbH & Co KG. With a drug-extract-ratio of 35-67:1,*Ginkgo biloba*leaves were extractedusing 60% acetone. The extraction medium was fully evaporated so that the extract resulted in an acetone-free and water soluble powder which was re-dissolved in tap water before administration. The extract suspension was daily applied according to the post-AD-onset paradigm (day 50 to day 100)with a dosage of 2.4 g/kg body weight.

**Supplementary Fig. 1.***Ginkgo biloba* did not improve cognition in APP-tg mice.To verify validity of the APP-tg mouse model with regard to translation of effects to humans mice were also treated with *Ginkgo biloba* (n=8). As seen in AD patient treatment studies, no effect was found on cognitive performance (Morris water maze).The carbonate buffer-soluble Aβ42 levelswere reduced by less than 30% (mean + SEM, \*p≤0.05).