

## **Supplementary Figure**

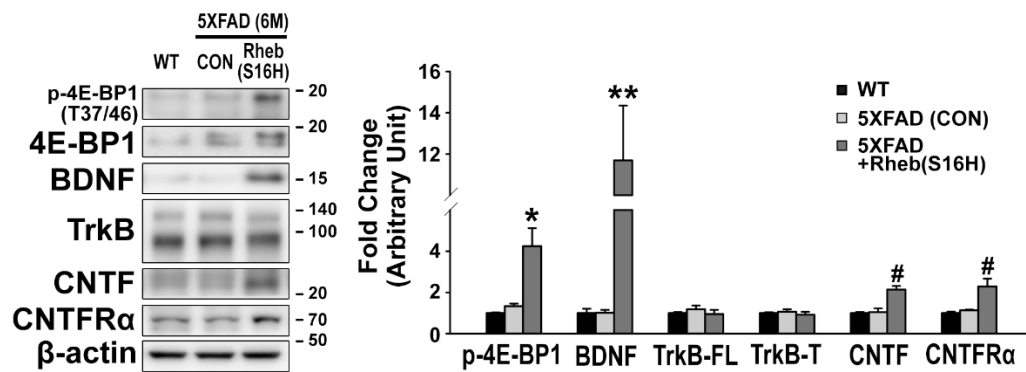
### **Therapeutic potential of AAV1-Rheb(S16H) transduction against Alzheimer's disease**

**Running Title:** Therapeutic effects of Rheb(S16H) in 5XFAD mouse

Moon et al.

## **Supplementary Figure: 1**

## Supplementary Figure



**Figure S1. Conservation of a neuroprotective system by AAV1-Rheb(S16H) transduction in the 5XFAD mouse hippocampus at 4 months post-injection**

AAV1-Rheb(S16H) transduction induced sustained increases in p-4E-BP1, BDNF, CNTF, and CNTFR $\alpha$  in the 5XFAD mouse hippocampus at 4 months after viral injection. Representative bands on western blot analysis of mTORC1 activity (p-4E-BP-1 and 4E-BP-1) and levels of neurotrophic factors (BDNF and CNTF) and their corresponding receptors (TrkB and CNTFR $\alpha$ ) in the hippocampus of WT, untreated 5XFAD (CON), and AAV1-Rheb(S16H)-treated 5XFAD mice. Differences among groups were evaluated with the Kruskal-Wallis test or one-way ANOVA and Tukey's *post-hoc* analysis. \* $p$  < 0.05 and \*\* $p$  < 0.001 vs. untreated 5XFAD mice (n = 4).