



**Supplementary Figure 1. Western analysis of APP CTFs using serial dilutions of brain lysates**

Brain lysates prepared from the olfactory bulb (OB), neocortex (NCX), hippocampus (HP), striatum (ST), thalamus and midbrain (TM), cerebellum (CB), brain stem (BS), and spinal cord (SC) of IN-PS cDKO mice at the age of 2 months were diluted as indicated (1, 1:2, 1:3, 1:5, 1:10, 1:20, 1:30) and immunoblotted with the anti-APP-Y188 antibody along with the undiluted homogenate protein lysates from each brain sub-regions of littermate controls (marked as "C" in Lanes 1, 9).