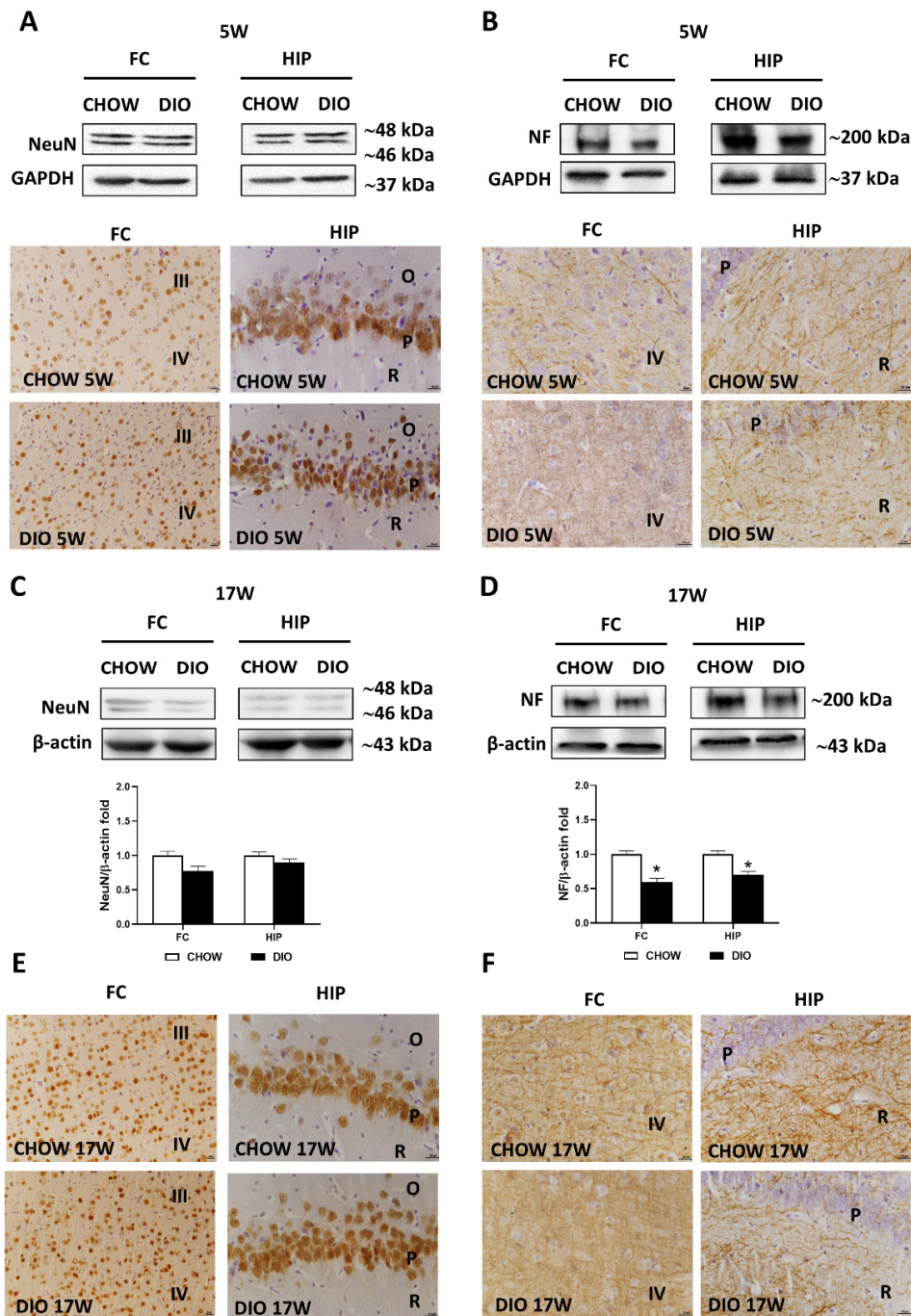


Supplementary Figure S1. Sections of rat frontal cortex (**A**) and hippocampus (**B**) stained with cresyl violet. Roman numerals indicate the layers of cerebral cortex. CA1: field CA1 of hippocampus; CA3: field CA3 of hippocampus; DG: dentate gyrus; H: hilus of the dentate gyrus. Scale bar: 100 μ m.



Supplementary Figure S2. Immunoblotting and immunoreaction of neuronal nuclei (NeuN) and neurofilament 200kDa (NF). Lysates and representative pictures in the frontal cortex (FC), and hippocampus (HIP) from rats fed with a standard diet (CHOW) and high-fat diet (DIO) for 5 weeks, were immunoblotted and stained using specific anti-NeuN (**A**) and anti-NF (**B**). Lysates and representative pictures in FC, and HIP from CHOW and DIO rats after 17 weeks were immunoblotted and stained using specific anti-NeuN (**C**, **E**) and anti-NF (**D**, **F**). Bar graphs indicate the densitometric analysis using CHOW as control, and β-actin was used as a reference loading protein. Data are mean ± S.E.M. * $p < 0.05$ vs. age-matched CHOW. III, IV: third and fourth layer of frontal cortex; O: *stratum oriens*; P: pyramidal cells; R: *stratum radiatum*. Scale bar: 25 μm.