

Fig. S3

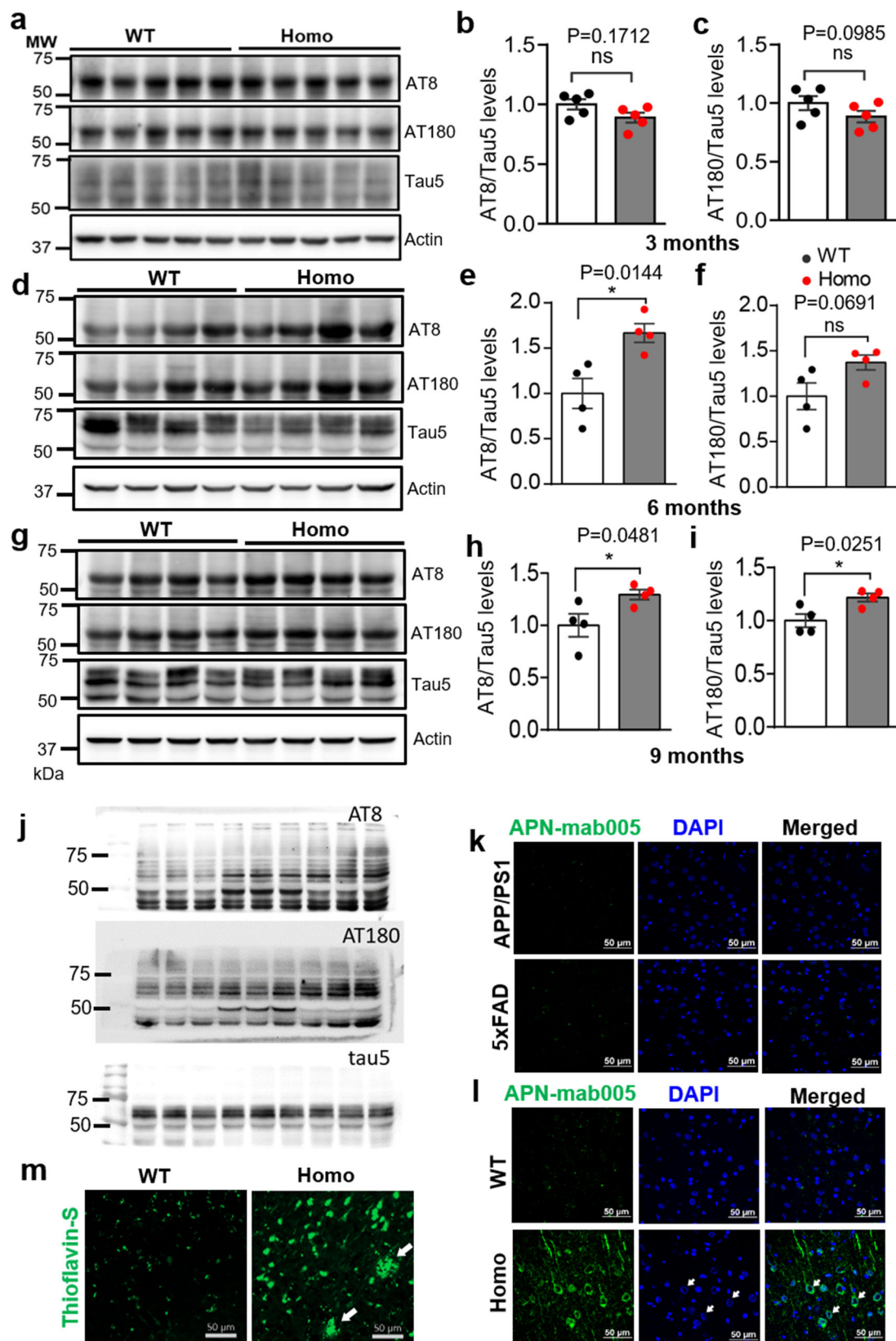


Fig. S3. Tau pathology in *App*^{NL-G-F} rat brains.

a-i, Tau phosphorylation in 3-month (**a-c**), 6-month (**d-f**) and 9-month (**g-i**) old homozygous *App*^{NL-G-F} rats. RIPA fractions of cortical lysates were immunoblotted with antibodies recognizing phosphorylated tau at residue S202/T205 (AT8), or T231 (AT180), and total tau protein was also detected as the control. The upper and lower bands in the AT8 and AT180 blots represent different tau isoforms. The levels of tau phosphorylation, quantified by densitometry and expressed as AT8/Tau5 and AT180/Tau5, are shown in the right. n=4-5 animals. **j**, The whole blots of AT8 and AT180 for **Fig. 2a**. **k**, Detection of tau aggregation using APN-mab005, a monoclonal antibody that recognizes only aggregated tau, mostly tau species segregated into the synaptic/membrane compartments. Frozen brain sections from 12-month old male APP/PS1 and 5xFAD mice were double stained with APNmab005, an antibody specifically aggregated tau (green), and DAPI in cortical region. Scale: 50 μ m. **l**, Detection of tau aggregates in 22-month old homozygous *App*^{NL-G-F} rats using APN-mab005. Frozen brain sections were double stained with APNmab005 and DAPI in cortical region. Scale: 50 μ m. **m**, Detection of tau pathology using thioflavin-S staining. Brain sections (paraffin) from 22-month old male homozygous *App*^{NL-G-F} rats were stained with thioflavin-S (green). White arrows indicate some A β plaques, which can also be detected by thioflavin-S staining. Scale: 50 μ m.