

Figure S1. Homocysteine (Hcy) has cytotoxic effects on M1C cells without tau induction (i.e., maintained on 2 μg/mL Tet). M1C cells were exposed to 1, 10, 100, 1000, and 10,000 μM L-Hcy for 24 h. Then, M1C cells treated with or without L-Hcy were subjected to morphological studies. Qualitatively, 100–10,000 μM L-Hcy induced shrinking of the cell body. Bar 100 μm (A). Quantitative measurements of cell body area showed that 10–10,000 μM Hcy decreased cell area in dose-dependent fashion. Results are presented as mean ± SD, ** $p < 0.01$ (B). The ATP assay (C) showed that 100 to 10,000 μM Hcy caused a reduction of cell viability. Results are presented as mean ± SD, ** $p < 0.01$ (C). Total tau levels in non-induced M1C cells by 1–10,000 μM of Hcy treatment were quantitated. Results are presented as mean ± SD (D).

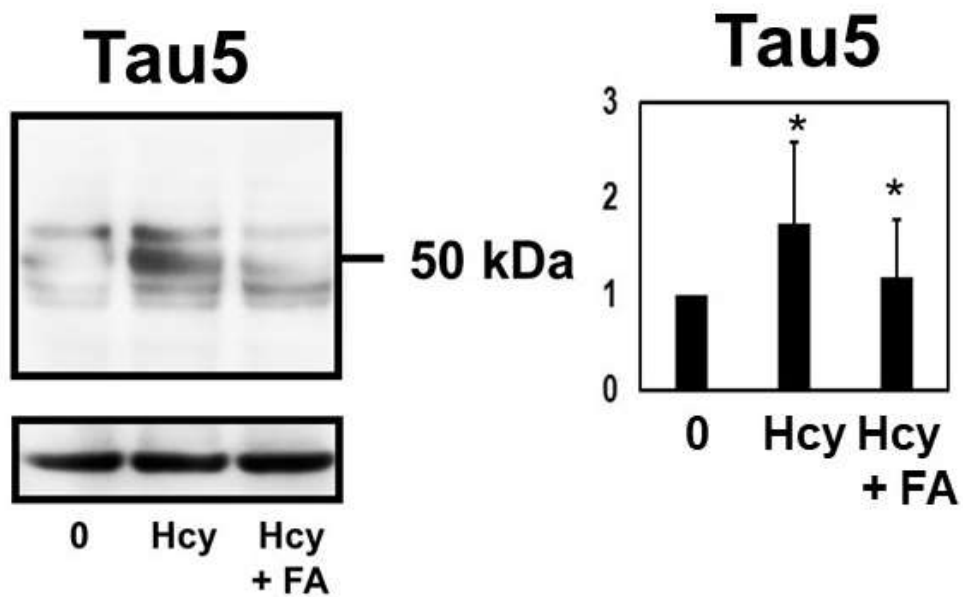


Figure S2. Homocysteine (Hcy) induced tau accumulation was reversed by the addition of folic acid (FA). We examined the effects of FA (90 μ M) with 100 μ M Hcy using tau expressing cells. FA supplementation reversed the tau accumulation induced by Hcy treatment. Results are presented as mean \pm SD, * $P < 0.05$. N = 5. NI: non induced cells, Hcy: 100 μ M Hcy, Hcy + FA: 100 μ M of Hcy + 90 μ M of FA.