

## Supplemental Figure Legends

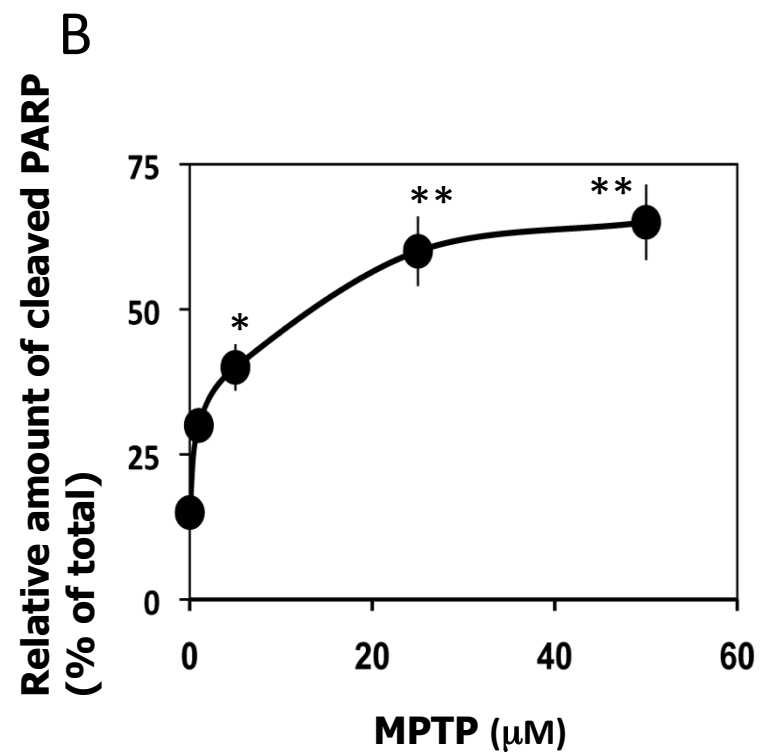
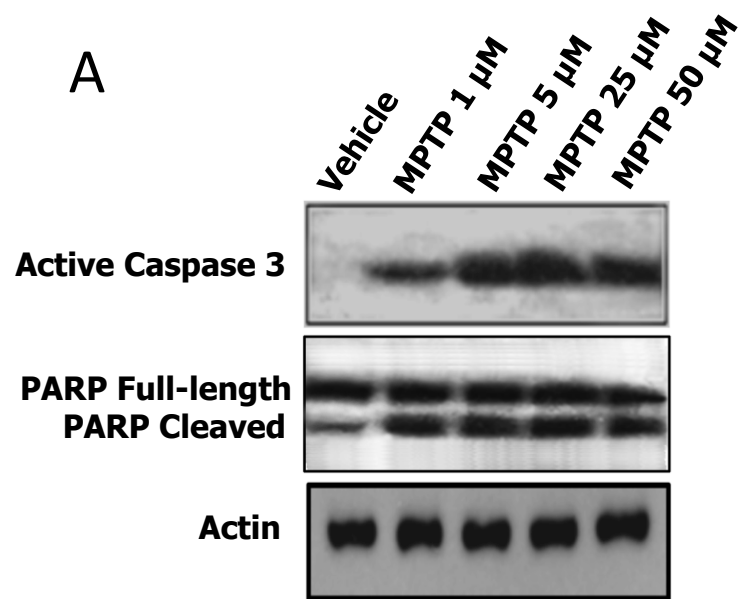
**SUPPLEMENTAL FIGURE 1. MPTP induces apoptosis in human neuroblastoma M17 cell.** Human neuroblastoma M17 cells were treated with indicated concentrations of MPTP for 48 hr. Treated cells were lysed and Western blotted against indicated antibodies. The blots were scanned, and based on blot band intensities, relative amounts were determined. *A*, Western blots. *B*, Relative amount of cleaved PARP. The relative amount of cleaved PARP was calculated by dividing the band intensity value of cleaved PARP of a sample with the sum of the band intensity value of cleaved and uncleaved PARP of that sample. Values are mean  $\pm$  SE from three determinations. \* $p$ <0.05; \*\* $p$ <0.001 with respect to vehicle treated cells (*t* test).

**SUPPLEMENTAL FIGURE 2. Pathogenic  $\alpha$ -synuclein mutations do not affect intracellular tubulin level in HEK-293 cells.** HEK-293 cells transfected with indicated genes were lysed and then analyzed by Western blotting using indicated antibodies. *A*, Western blots. *B*, Tubulin amount.

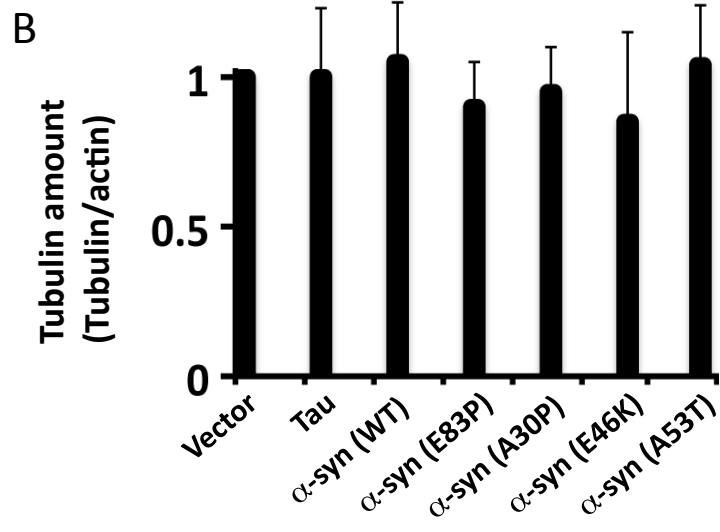
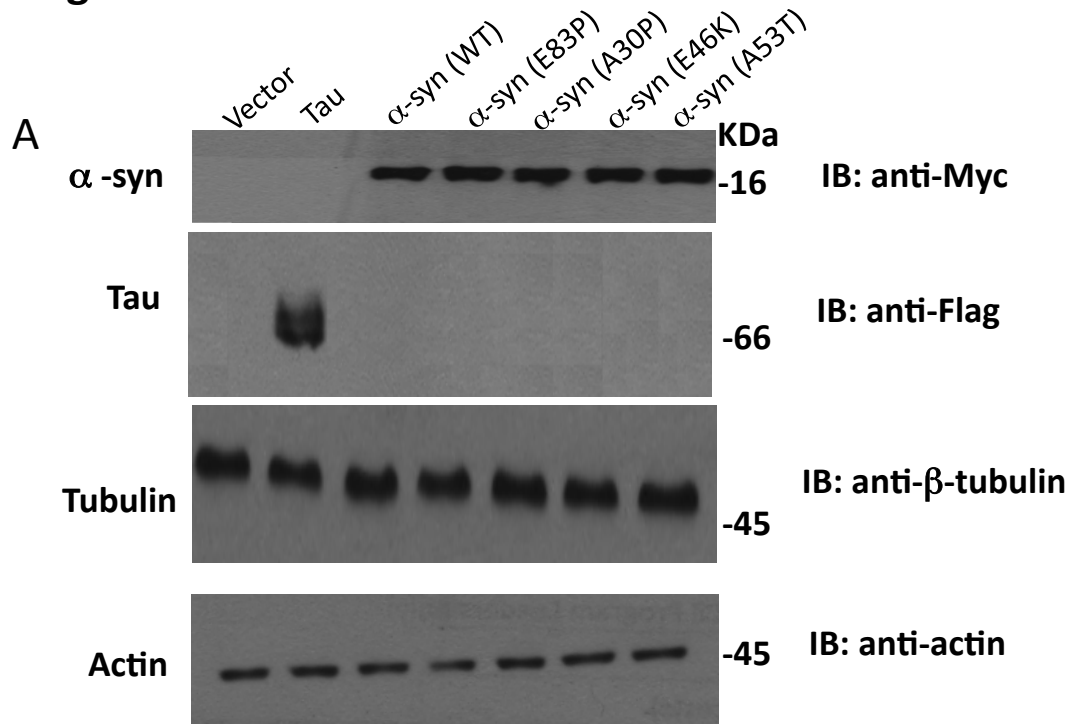
**SUPPLEMENTAL FIGURE 3. Pathogenic  $\alpha$ -synuclein mutations promote tau phosphorylation in HEK-293 cells.** Flag-tau was co-transfected with vector or indicated  $\alpha$ -synuclein species in HEK-293 cells. Transfected cells were analyzed by Western blotting using indicated antibodies and then used for generating Fig. 11. Based on blot band intensities relative tau phosphorylation was determined as in Fig. 1. *A*, Western blots *B*, *C*, Relative tau phosphorylation. Relative tau phosphorylation was determined by normalizing 12E8 immunoreactive band intensity with the corresponding tau band

intensity. Values are expressed as fold of vector (panel *B*) or  $\alpha$ -synuclein (WT) (panel *C*) and are expressed as mean  $\pm$  SE from three determinations. \* $p$ <0.05 with respect to  $\alpha$ -synuclein (WT); \*\* $p$ <0.01 with respect to vector (t test).

# Supplemental Figure 1



## Supplemental Figure 2



### Supplemental Fig. 3

