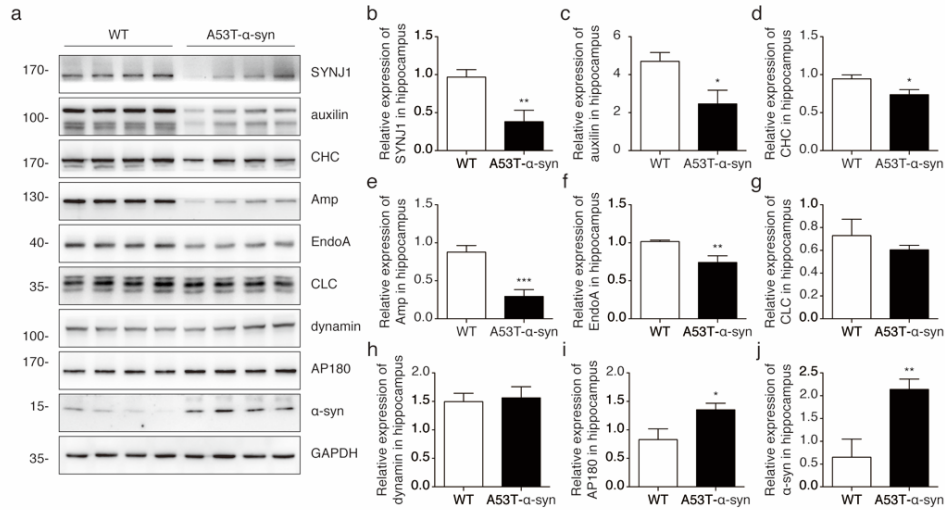


## Additional file 1

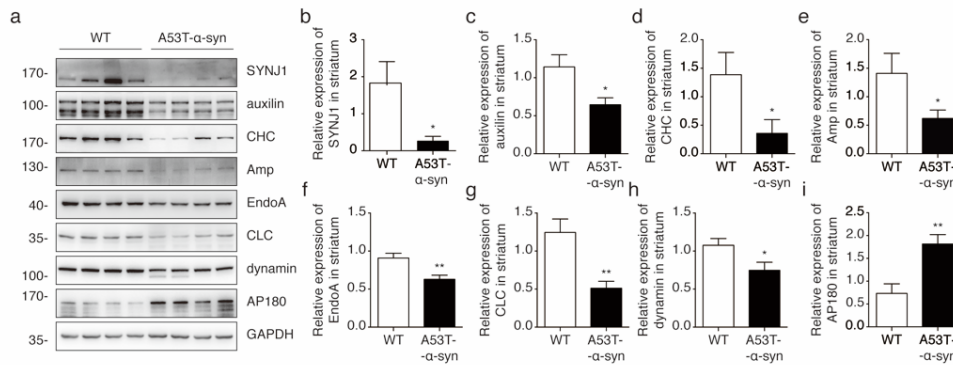
**Table S1.** List of the primary and secondary antibodies used for this study

| <b>Antibody names</b>                       | <b>Vendors</b>               | <b>Catalog No.</b> | <b>Applications</b> |
|---------------------------------------------|------------------------------|--------------------|---------------------|
| Anti-Amphiphysin                            | Synaptic Systems             | #120002            | WB                  |
| Anti-AP180                                  | Synaptic Systems             | #155003            | WB                  |
| Anti-Clathrin heavy chain                   | Abcam                        | #ab21679           | WB                  |
| Anti-Clathrin light chain                   | Synaptic systems             | #113011            | WB                  |
| Anti-DNAJC6/AUXILIN                         | Proteintech                  | #21941-1-AP        | WB                  |
| Anti-Dynamin1/2/3                           | Synaptic systems             | #115002            | WB                  |
| Anti-Endophilin 1                           | Synaptic systems             | #159002            | WB                  |
| Anti-FLAG                                   | Proteintech                  | #20543-1-AP        | ICC                 |
| Anti-GAPDH                                  | Proteintech                  | # 60004-1-Ig       | WB                  |
| Anti-PI(4,5)P <sub>2</sub>                  | Abcam                        | #ab2335            | ICC                 |
| Anti-pS129- $\alpha$ -syn                   | Abcam                        | #ab51253           | WB                  |
| Anti-SV2A                                   | Santa Cruz                   | #sc-376234         | ICC                 |
| Anti-Synaptojanin1                          | Synaptic Systems             | #145003            | WB/ICC              |
| Anti-Synaptojanin1                          | Proteintech                  | #24677-1-AP        | IHC                 |
| Anti-Uncoating<br>ATPase/Hsc70              | Synaptic systems             | #149011            | WB                  |
| Anti- $\alpha$ -synuclein211                | Santa Cruz                   | #sc-12767          | WB                  |
| Anti-rabbit IgG, HRP-linked                 | Cell Signaling<br>Technology | #7074              | WB                  |
| Anti-mouse IgG, HRP-linked                  | Cell Signaling<br>Technology | #7076              | WB                  |
| Biotinylated Goat Anti-Rabbit IgG           | Vector Laboratories          | #BA-1000           | IHC                 |
| Goat Anti-Mouse IgG<br>H&L Alexa Fluor®647  | Abcam                        | #ab150115          | ICC                 |
| Goat Anti-Rabbit IgG<br>H&L Alexa Fluor®555 | Abcam                        | #ab150086          | ICC                 |



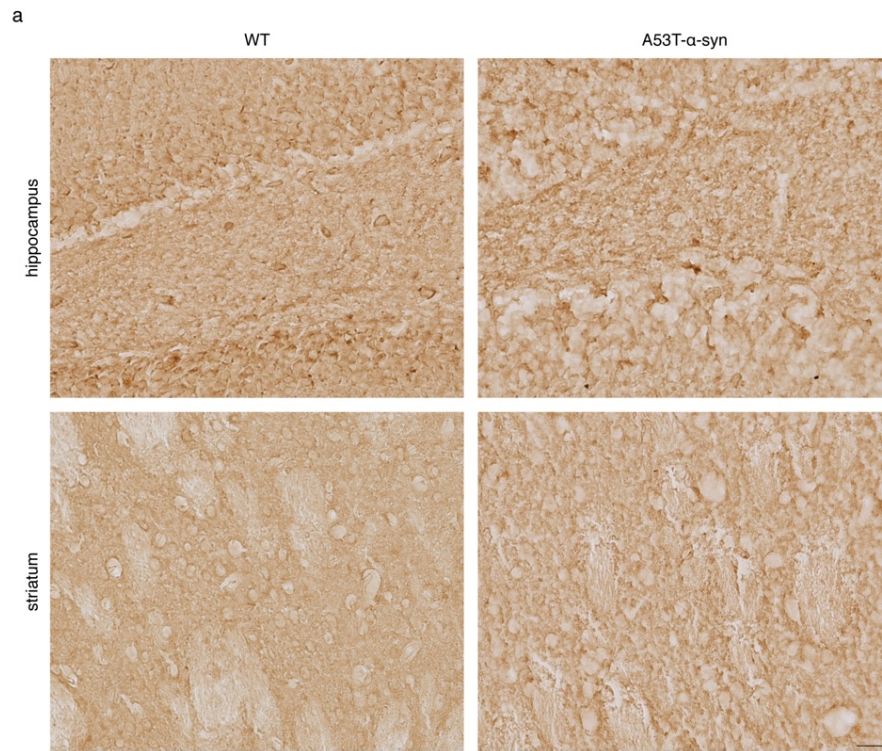
**Fig. S1. CME-associated proteins in the hippocampus of  $\alpha$ -syn-A53T mice.**

(a) Western blot showing the amounts of a variety of CME-associated proteins in the hippocampus of 14-month-old  $\alpha$ -syn-A53T and WT mice. (b-i) Quantification of relative protein levels of SYNJ1 (b), auxilin (c), CHC (d), Amp (e), EndoA (f), CLC(g), dynamin (h) and AP180 (i). (j) The expression levels of  $\alpha$ -syn were accumulated in  $\alpha$ -syn-A53T mice. n = 4. Unpaired *t*-test. \**p* < 0.05; \*\**p* < 0.01, \*\*\**p* < 0.001, \*\*\*\**p* < 0.0001 were considered to be significant.



**Fig. S2. CME-associated proteins in the striatum of  $\alpha$ -syn-A53T mice.**

(a) Western blot showing the amounts of a variety of CME-associated proteins in the striatum of 14-month-old  $\alpha$ -syn-A53T and WT mice. (b-i) Quantification of relative protein levels of SYNJ1 (b), auxilin (c), CHC (d), Amp (e), EndoA (f), CLC(g), dynamin (h) and AP180 (i). n = 4. Unpaired *t*-test. \**p* < 0.05; \*\**p* < 0.01, \*\*\**p* < 0.001, \*\*\*\**p* < 0.0001 were considered to be significant.



**Fig. S3. Clustering of SYNJ1 in  $\alpha$ -syn-A53T mice.**

(a) Immunohistochemistry for SYNJ1 in the hippocampus and striatum of 14-month-old  $\alpha$ -syn-A53T and WT mice show clustering of SYNJ1. Scale bar, 20 $\mu$ m.