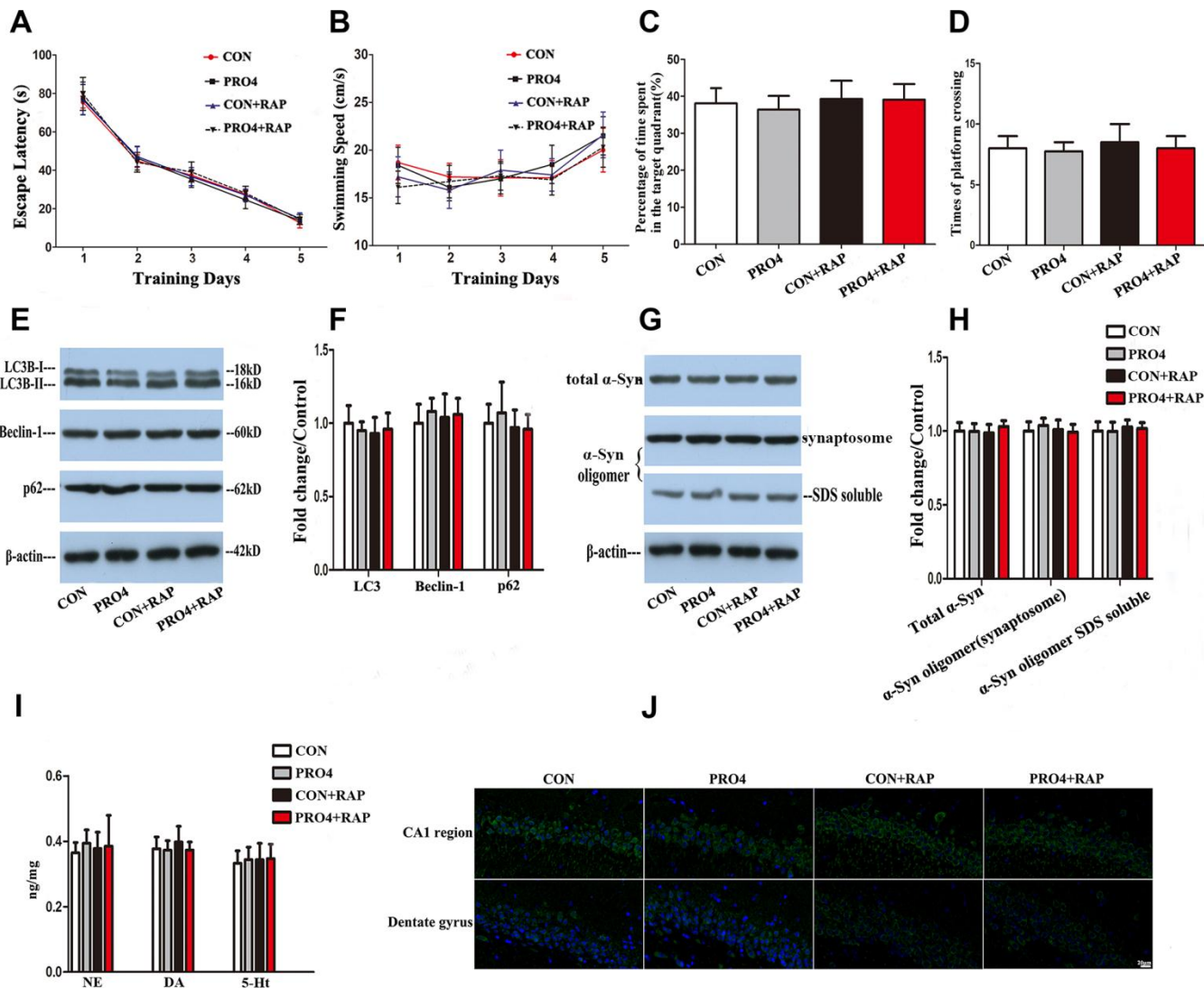
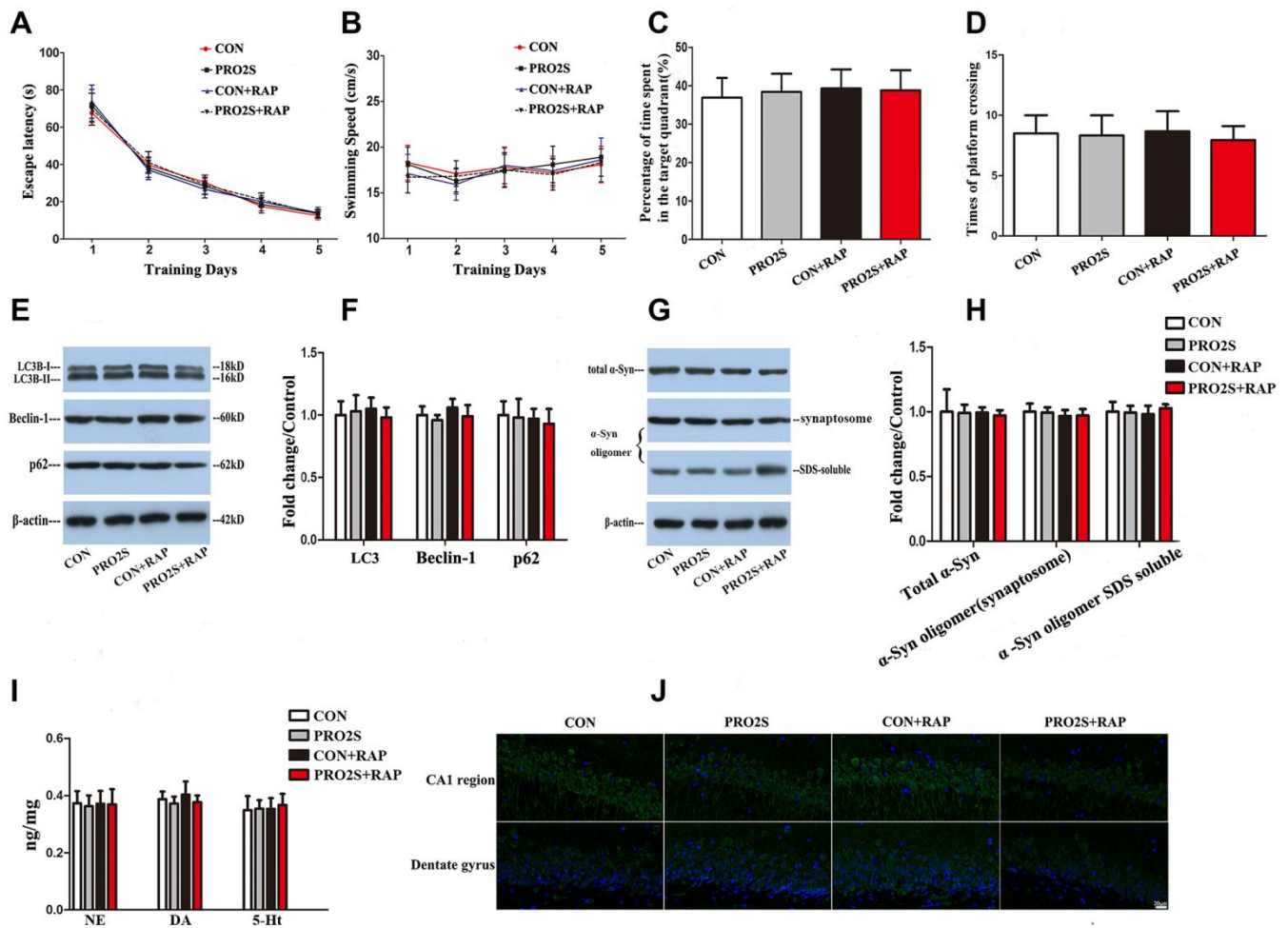


SUPPLEMENTARY FIGURES



Supplementary Figure 1. Long-term prognosis for neurobehavioral tests and α -synuclein and autophagy-related protein expression in aged rats 18 weeks after propofol anesthesia alone. (A–D) There were no significant differences in the Morris water maze test results of the PRO4 group compared with the control group 18 weeks after anesthesia alone. (E, F) Autophagy-related proteins recovered to control levels 18 weeks after anesthesia. (G, H) α -synuclein oligomers recovered to control levels 18 weeks after anesthesia alone. (I) Neurotransmitters recovered to control levels 18 weeks after anesthesia alone. (J) There was no significant difference in LC3B expression in the hippocampus 18 weeks after anesthesia alone. n=10 in each group for neurobehavioral tests, n=8 in each group for neurotransmitter detection, n=6 in each group for western blot analysis, and n=4 in each group for confocal of LC3B staining. CON: the control group, CON+RAP: the control+rapamycin group, PRO4: the 4-h propofol anesthesia group, PRO4+RAP: the 4-h propofol anesthesia+rapamycin group. α -Syn: α -synuclein. Scale bar, 20 μ m (R).



Supplementary Figure 2. Long-term prognosis for neurobehavioral tests and autophagy-related protein and α -synuclein expression in aged rats 18 weeks after anesthesia and surgery. (A–D) There were no significant differences in the Morris water maze test results of the PRO2S group compared with the control group 18 weeks after surgery. (E, F) Autophagy-related proteins recovered to control levels 18 weeks after surgery. (G, H) α -synuclein oligomers recovered to control levels 18 weeks after surgery. (I) Neurotransmitters recovered to control levels 18 weeks after surgery. (J) There was no significant difference in LC3B expression in the hippocampus 18 weeks after surgery. $n=10$ in each group for neurobehavioral tests, $n=8$ in each group for neurotransmitter detection, $n=6$ in each group for western blot analysis, and $n=4$ in each group for confocal of LC3B staining. CON: the control group, CON+RAP: the control + rapamycin group, PRO2S: the 2-h propofol anesthesia+surgery group, PRO2S+RAP: the 2-h propofol anesthesia+surgery+rapamycin group. α -Syn: α -synuclein. Scale bar, 20 μ m (R).