

Supplemental Figures and Figure Legends

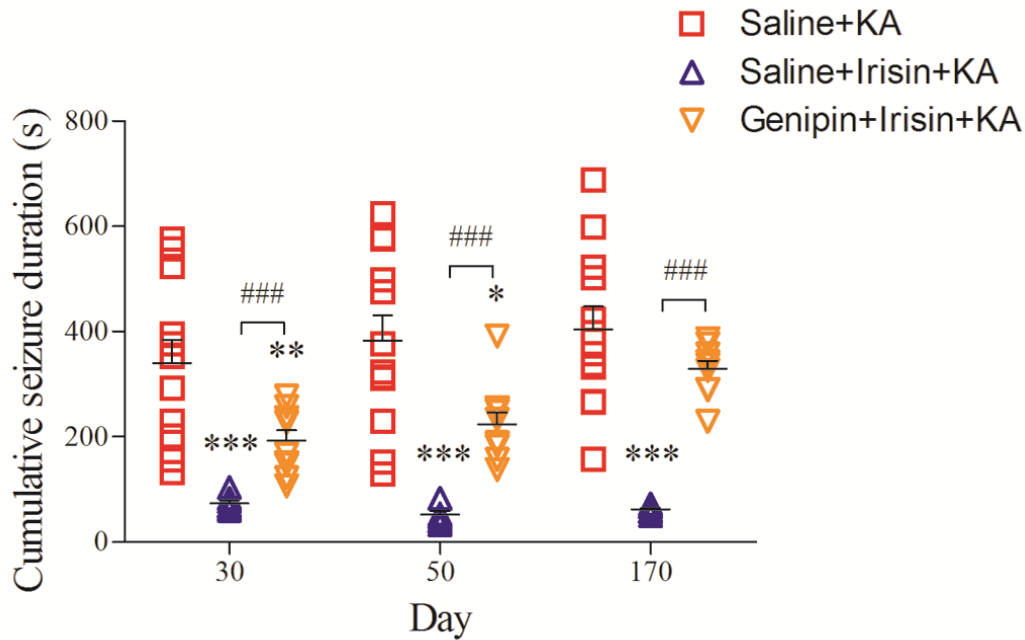


Fig. S1 Cumulative seizure duration from EEG analysis in each group. * $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$ vs Saline+KA group; ### $P < 0.001$ vs each other (one-way ANOVA with Dunnett's T3 *post-hoc* test).

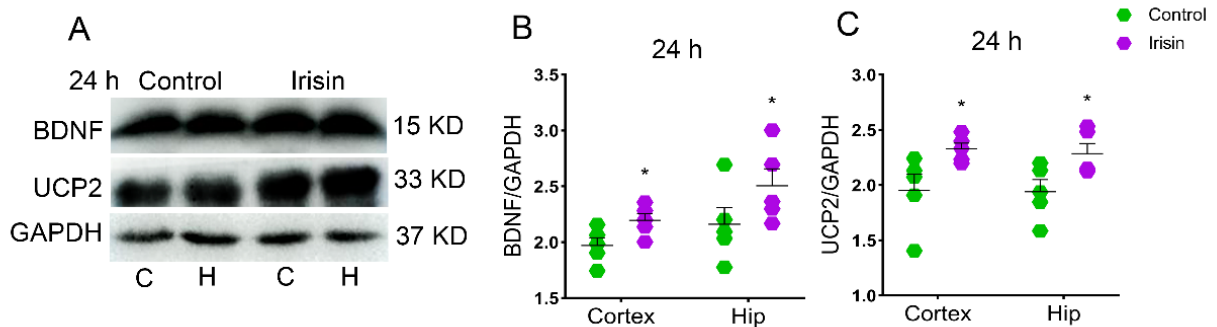


Fig. S2 A–C Levels of BDNF and UCP2 at 24 h in control and irisin groups ($n = 5/\text{group}$). * $P < 0.05$ vs control group (one-way ANOVA). C, cortex; H/Hip, hippocampus; BDNF, brain-derived neurotrophic factor; UCP2, uncoupling protein 2.

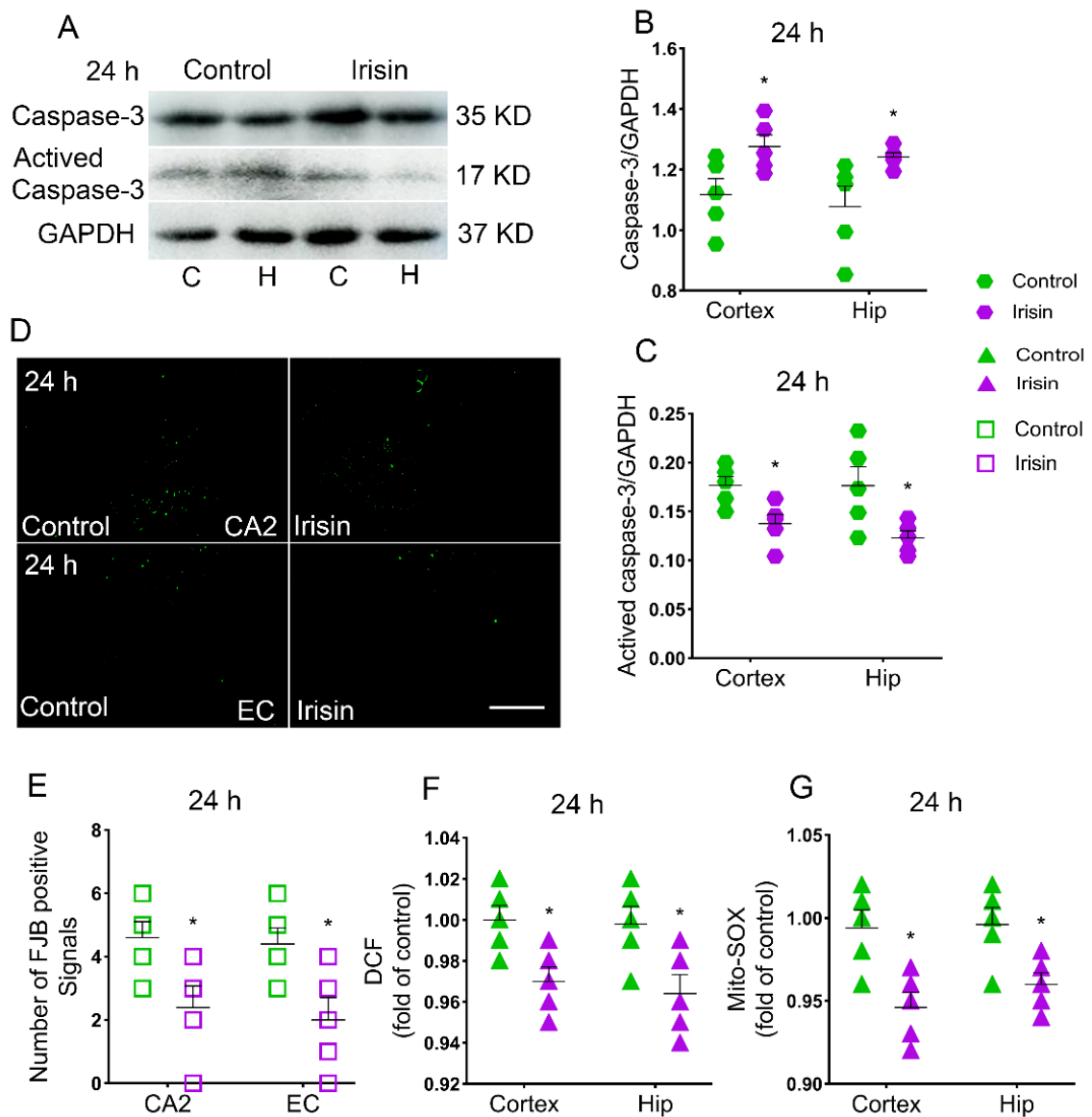


Fig. S3 A–C Levels of caspase-3 and activated caspase-3 at 24 h in control and irisin groups ($n = 5/\text{group}$). **D–H** FJB signal patterns in CA2 and EC at 24 h ($n = 5/\text{group}$; scale bar, 100 μm). $*P < 0.05$ vs control group (one-way ANOVA). C, cortex; CA2, cornu ammonis 2; EC, entorhinal cortex; H/Hip, hippocampus; DCF, 2',7'-dichlorofluorescein; FJB, Fluoro-Jade B.

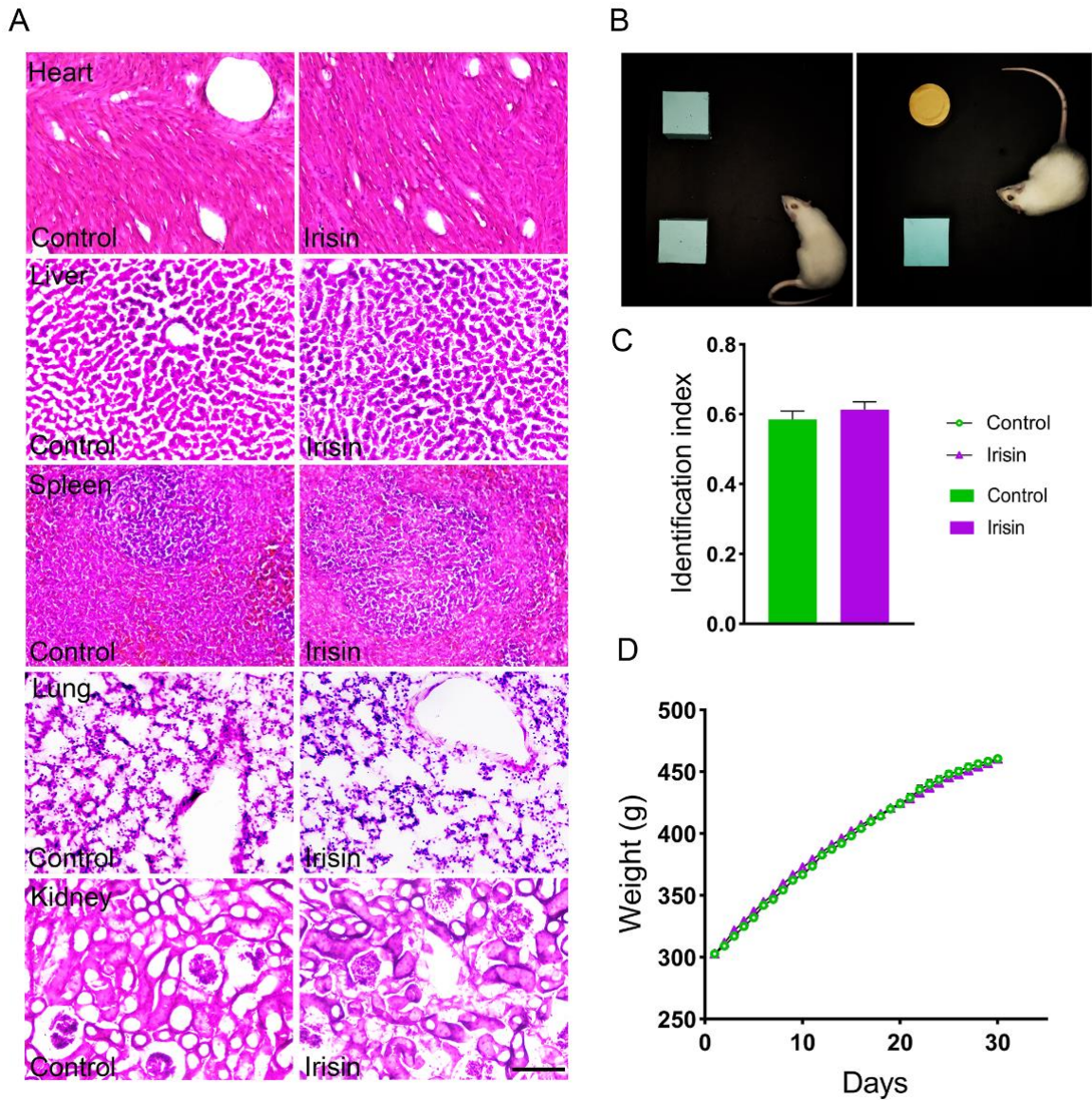


Fig. S4 **A** HE staining of heart, liver, spleen, lung, and kidney from control and irisin groups (day 30, $n = 8/\text{group}$, scale bar, $100\ \mu\text{m}$). **B**, **C** The novel object recognition test (**B**) and identification index (**C**) ($n = 10/\text{group}$, on day 30). **D** Weights of rats on a normal diet in the control and irisin groups ($n = 8/\text{group}$).