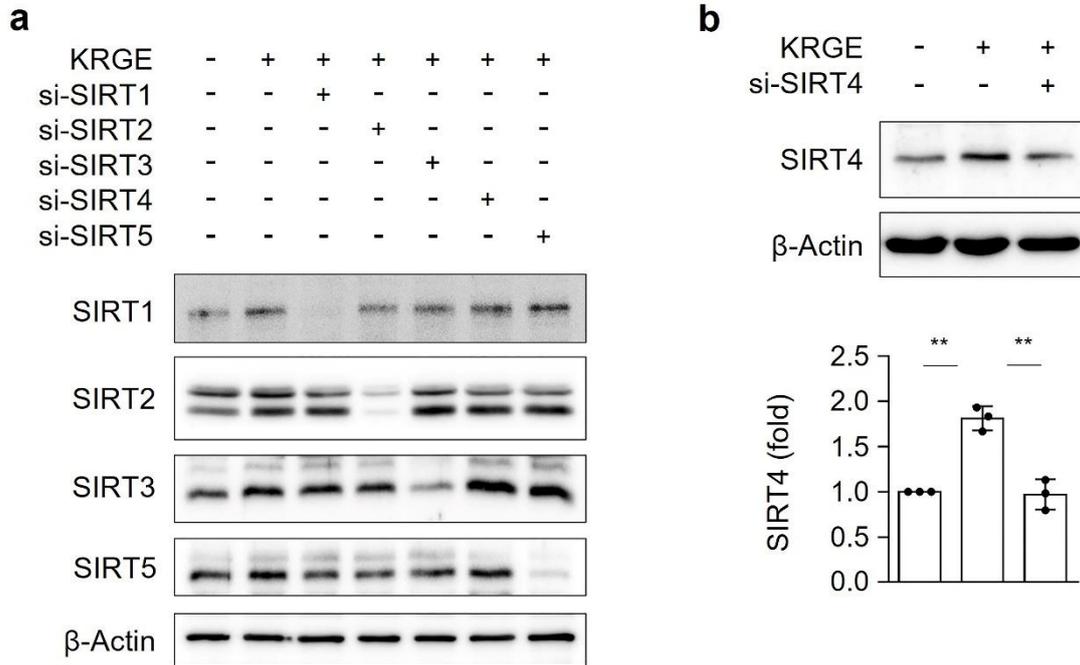
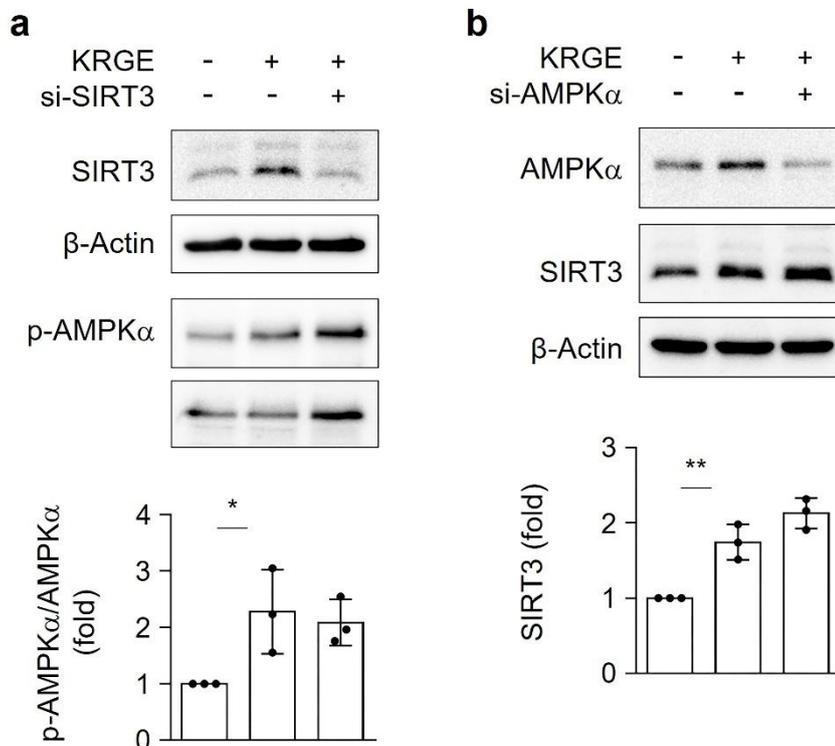


## Supplementary data



**Supplementary Figure S1.** Transfection efficiency was shown when astrocyte cells were transfected with indicated si-RNA. (a-b) Astrocytes were transfected with control or indicated si-RNA and subjected to 0.5 mg/ml KRGE for 24 h. Target protein levels in cell lysate were detected via western blotting ( $n = 3-6$ ).  $**P < 0.01$ .



**Supplementary Figure S2.** KRGE-induced SIRT3 did not regulate AMPK $\alpha$  activation and *vice versa* in astrocyte cells. Astrocytes were transfected with control or indicated si-RNA and subjected to 0.5 mg/ml KRGE for 24 h. (a)

p-AMPK $\alpha$ , AMPK $\alpha$  ( $n = 3$ ) and (b) SIRT3 ( $n = 3$ ) were detected via western blotting. Relative p-AMPK $\alpha$ /AMPK $\alpha$  ratio and SIRT3 levels were quantified. \* $P < 0.05$ ; \*\* $P < 0.01$ .