

Supplementary Fig. 1 siRNA-mediated the knockdown of SIRT1 inhibits the fusion of AV-lysosome. SIRT1, LAMP-2, and RAB7 protein expression levels in AML-12 cells were evaluated by Western blotting after transfection with a negative control or SIRT1-specific siRNA. The results are expressed as the mean±S.D. ** $P < 0.01$ versus the control group (n=3).

Supplementary Fig. 2 SalA and chronic ethanol co-treatment increase the expressions of the lysosomal marker proteins. AML-12 cells were treated with or without SalA (50 μ M) and ethanol (100 mM) for 24 h. The protein levels of LAMP-2 and RAB7 were evaluated by Western blotting. * $P < 0.05$ versus the control group, *** $P < 0.001$ versus the control group, ## $P < 0.01$ versus the ethanol group (n=3).

Supplementary Fig. 3 SalA or Torin1 induces the activation of autophagy. AML-12 cells were pretreated with SalA (50 μ M) or Torin1 (100 nM) for 6 h and then exposed to ethanol (100 mM) for 24 h. The protein levels of LAMP-2 and RAB7 were evaluated by Western blotting. ** $P < 0.01$ versus the control group, # $P < 0.05$ versus the ethanol group (n=3).

Supplementary Fig. 4 SalA regulates SIRT1 expression. AML-12 cells were incubated with or without 50 μ M SalA for 6 h and then with or without 100 mM ethanol for 24 h. The SIRT1 protein level in cellular lysates was analyzed by Western blotting. * $P < 0.05$ versus the control group, ** $P < 0.01$ versus the control

group, # $P < 0.05$ versus the ethanol group (n=3).

Supplementary Figure 1

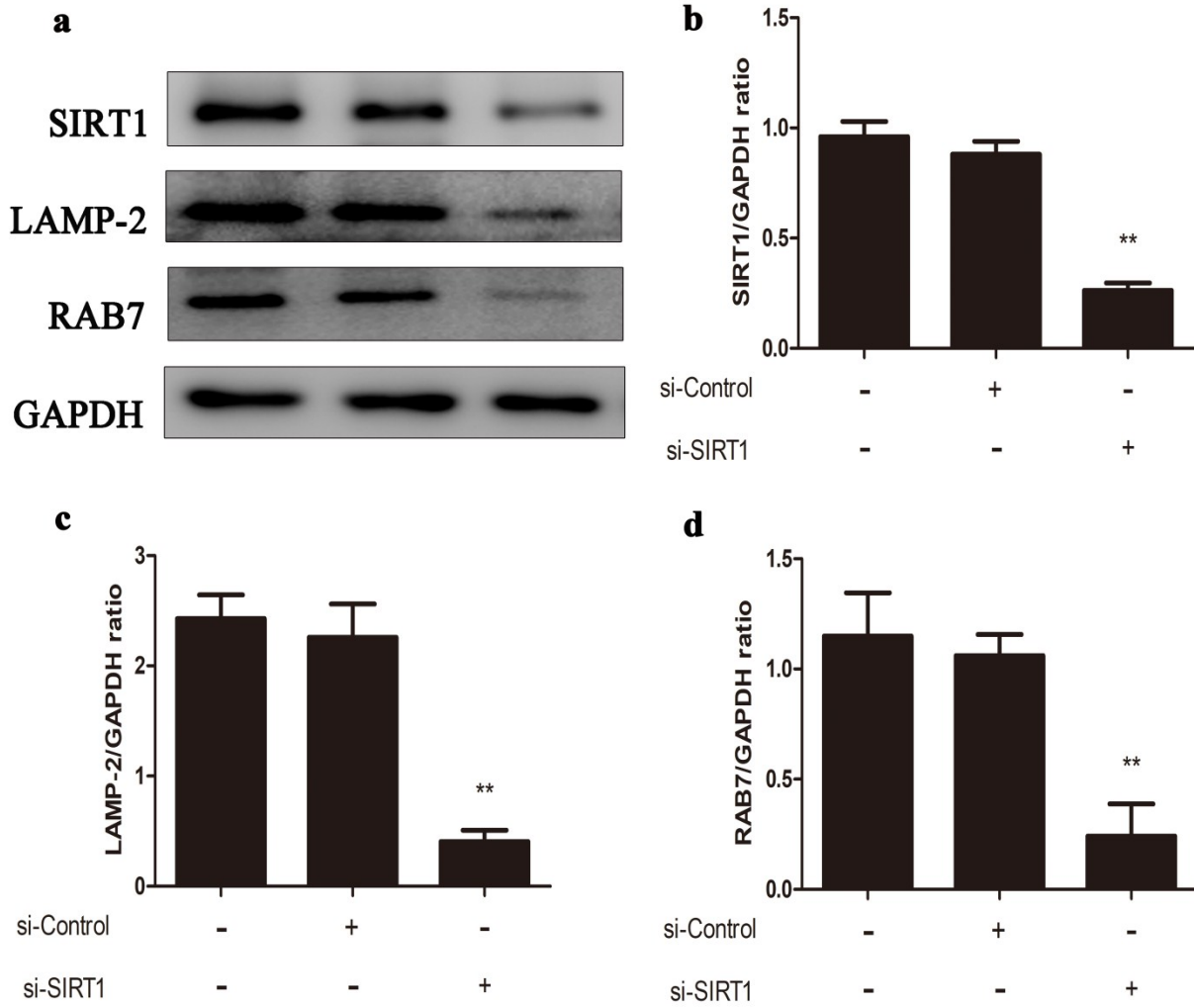


Fig S1.

Supplementary Fig. 2

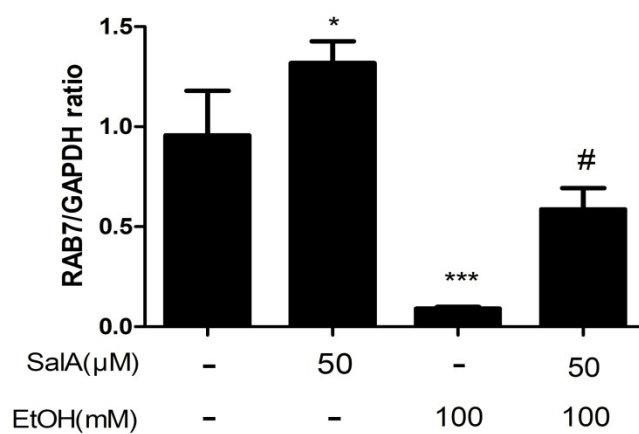
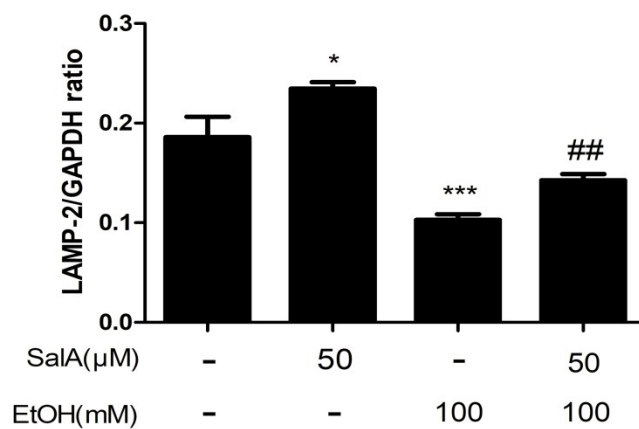
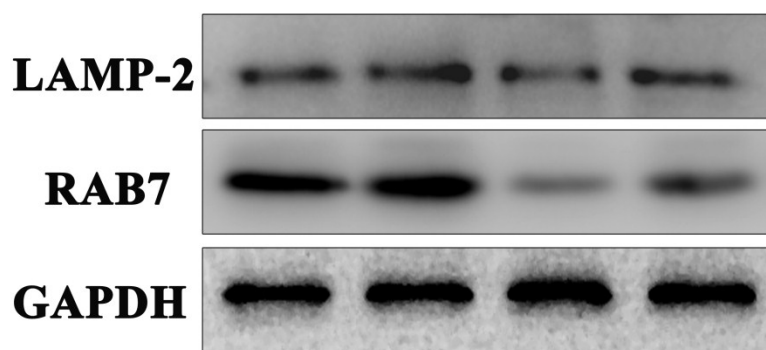


Fig S2.

Supplementary Fig. 3

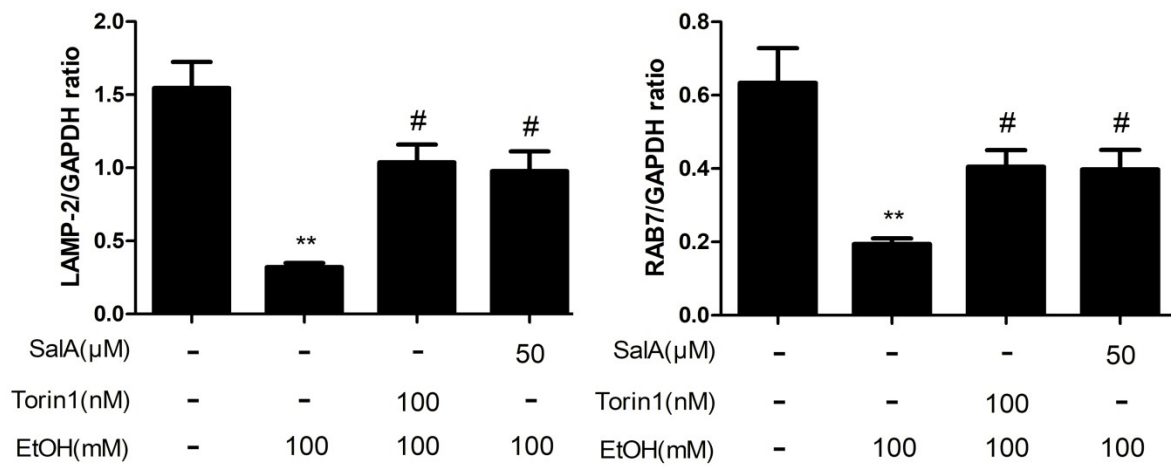
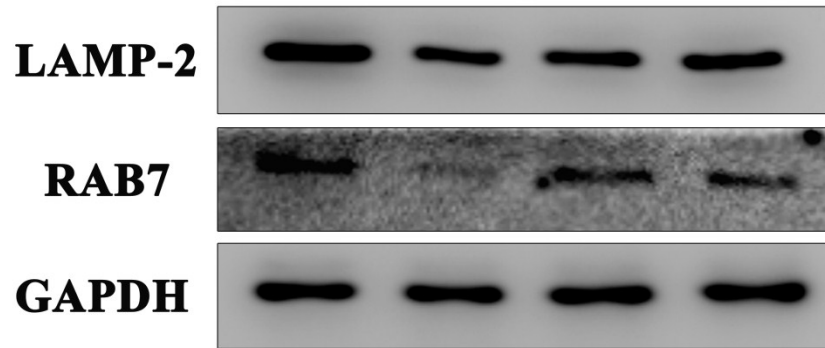


Fig S3.

Supplementary Fig. 4

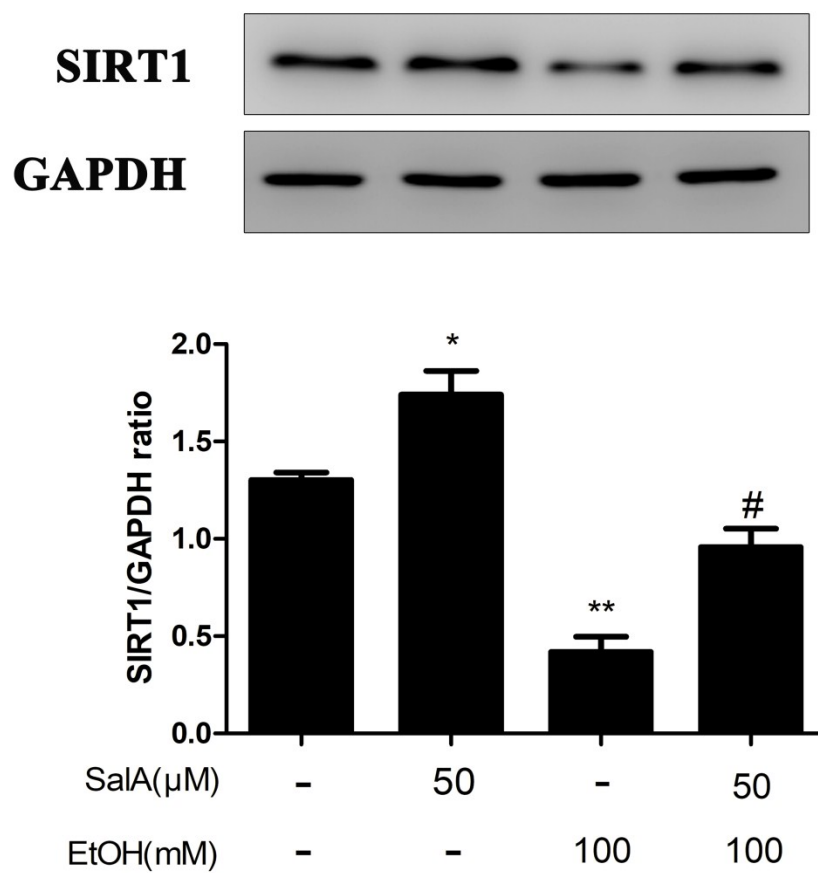


Fig S4.