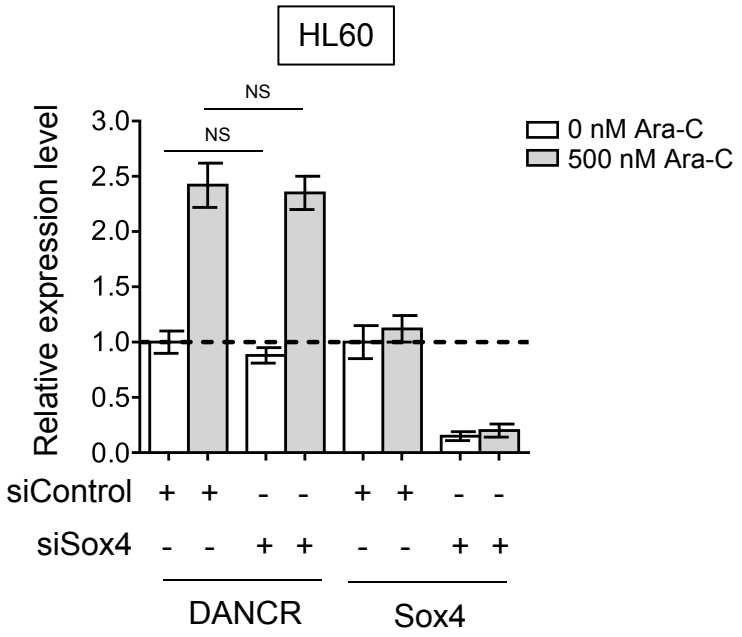
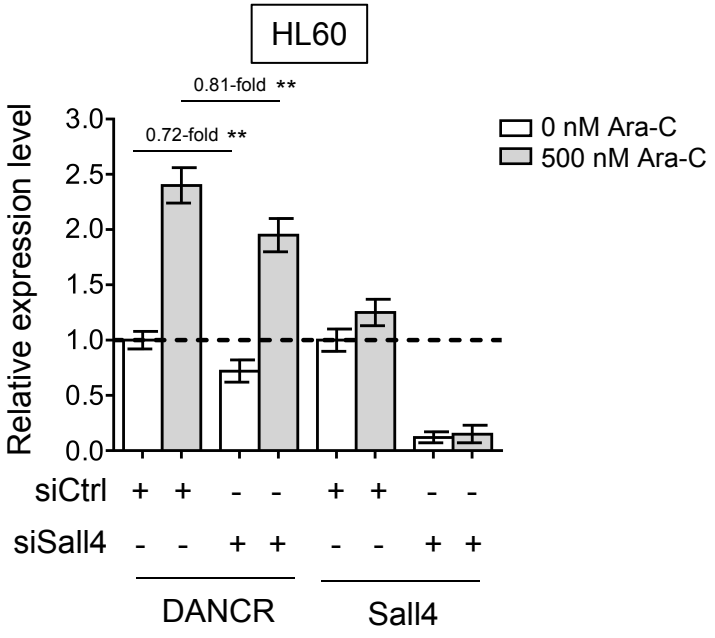
S1A



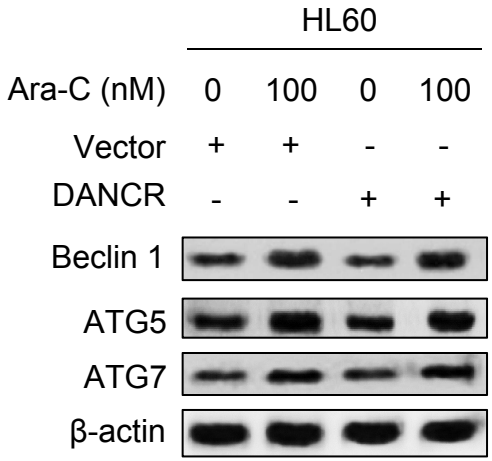
S1B



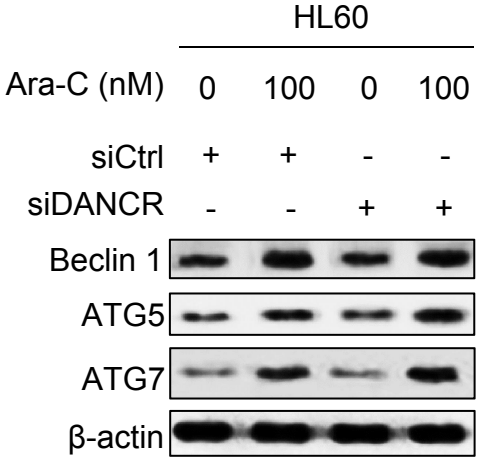
Supplementary Figure 1. Sox4 and Sall4 are irrelevant to DANCR regulation in response to Ara-C treatment

(A) Human AML HL60 cells were transfected with siCtrl or siSox4 (A) or siSall4 (B). Two days after transfection, cells were further treated with 0 or 500 nM Ara-C for 24 h. The expression of DANCR was determined by qRT-PCR analysis. β-actin was used as an endogenous control. The results are expressed as relative to vehicle treatment. Each column represents the value from 3 replicates. All data are mean ± SD. Data were analyzed using Student's t-test. **, $P<0.01$; NS, not significant.

S2A

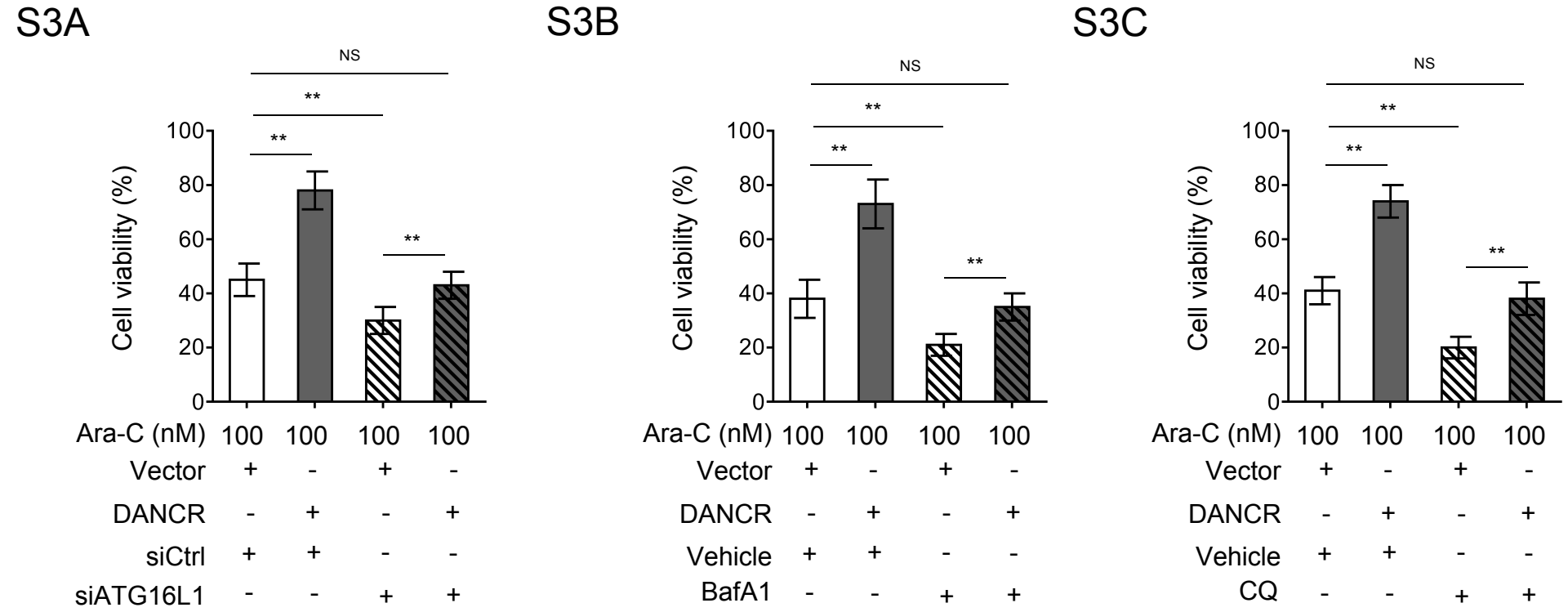


S2B



Supplementary Figure 2. DANCR does not affect the expression of Beclin-1, ATG5 and ATG7 in HL-60 cells

(**A**) HL60 cells were transfected with empty vector pcDNA3.1 or pcDNA3.1 expressing DANCR for 48 h, and then treated with or without 100 nM Ara-C for 24 h. The expression of Beclin-1, ATG5 and ATG7 was measured by immunoblotting. (**B**) HL60 cells were transfected siRNA targeting scrambled sequence (siCtrl) or DANCR (siDANCR #2) for 48 h, and then treated with or without 100 nM Ara-C for 24 h. The expression of Beclin-1, ATG5 and ATG7 was measured by immunoblotting. The images are representative from 3 independent assays.



Supplementary Figure 3. ATG16L1 silencing and autophagy inhibitors recover DANCR-conferred Ara-C resistance
(A) HL60 cells were co-transfected empty vector pcDNA3.1 or pcDNA3.1 expressing DACR with siRNA targeting scrambled sequence (siCtrl) or ATG16L1 (siATG16L1) for 48 h in the presence or absence of 100 nM Ara-C. Cell viability was analyzed by MTT assay. The results are expressed as percentage of vector group (%). (B-C) HL60 cells were treated with 200 nM BafA1 (B) or 10 μM CQ (C) in the presence or absence of 100 nM Ara-C for 48 h. Cell viability was analyzed as in (A). BafA1, Bafillomycin A1; CQ, chloroquine. Data are mean ± SD and compared using Student's t-test. n = 3. **, P<0.01; NS, not significant.