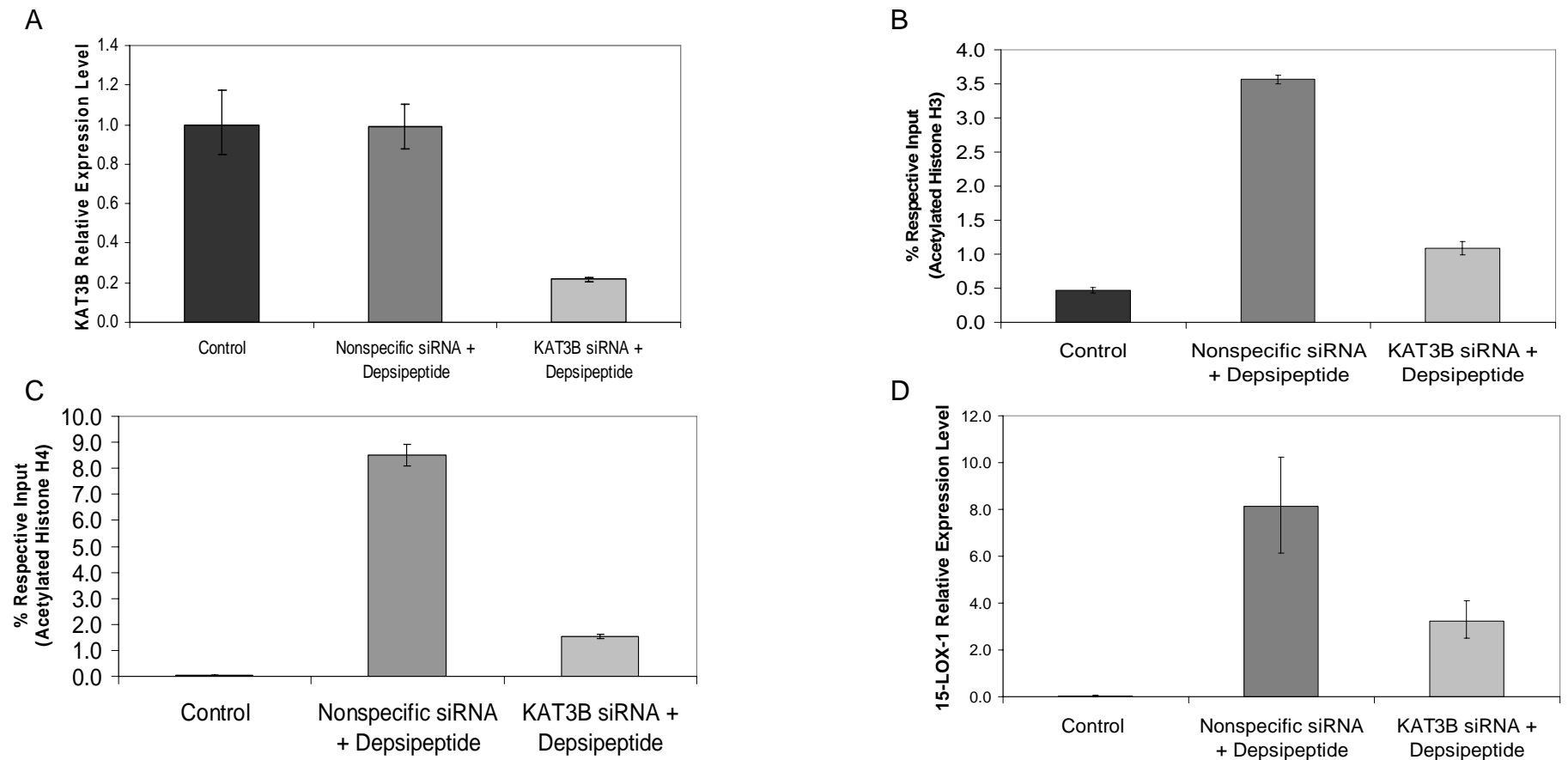Supplementary Figure 1

Figure 1. Effects of KAT3B on histone acetylation and 15-LOX-1 transcription activation in SW480 colon cancer cells. *A*, Effects of KAT3B siRNA transfection on KAT3B RNA expression. SW480 cells were transfected with a pool of four siRNA duplexes for KAT3B (KAT3B siRNA), a nonspecific siRNA sequence (nonspecific siRNA), or transfection medium only (Control) and then treated 24 h later with either depsipeptide (5 nM) or control solvent alone. Cells were harvested 48 h after transfection and KAT3B mRNA levels were measured by real-time reverse transcription-polymerase chain reaction (real-time RT-PCR). The relative expression levels were calculated as the values relative to those of the calibrator samples (nonspecific siRNA). *B and C,* Effects of KAT3B knockdown on H3 and H4 acetylation in the 15-LOX-1 promoter. SW480 cells were transfected with KAT3B siRNA, nonspecific siRNA, or transfection medium alone (control) and treated with depsipeptide as in panel *A*. Cells were subjected to chromatin immunoprecipitation (ChIP)/real-time PCR. Results are presented as percentages of the respective input genomic DNA for the 15-LOX-1 promoter. Values are the means ± SDs of triplicate measurements. *D*, Effects of KAT3B knockdown on 15-LOX-1 transcription activation by depsipeptide. SW480 cells were transfected with KAT3B siRNA, nonspecific siRNA, or control and treated with depsipeptide as described for panel *A*, and 15-LOX-1 mRNA expression was measured by real-time RT-PCR.   Values shown are the means ± SDs of triplicate experiments.
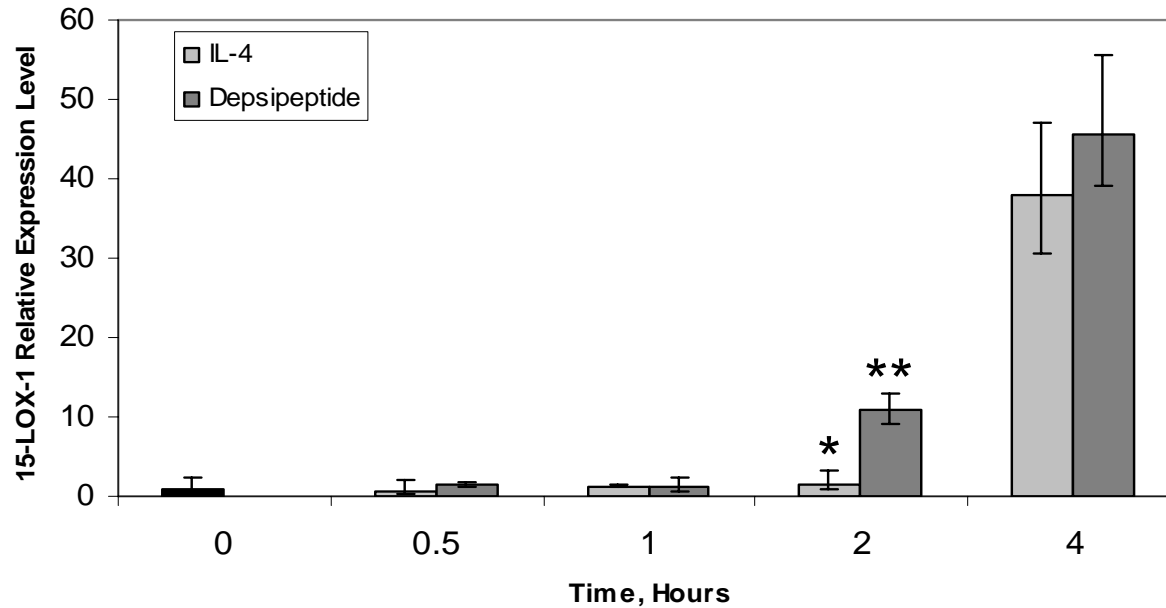
Figure 2. Kinetics of interleukin-4 (IL-4) and depsipeptide activation of 15-LOX-1 transcription in A549 lung carcinoma cells. A549 cells were treated with either depsipeptide (5 nM) or IL-4 (670 pM). Cells were harvested at the indicated times, and 15-LOX- 1 mRNA levels were measured by real-time reverse transcription-polymerase chain reaction . The relative expression levels were calculated as the values relative to those of the calibrator samples (control, time 0). Values shown are the means $\pm$ SDs of triplicate experiments. *IL-4 at 2 h vs. control at 0 h ($p = 0.83$). **Depsipeptide at 2 h vs. control at 0 h ($p = 0.0013$).