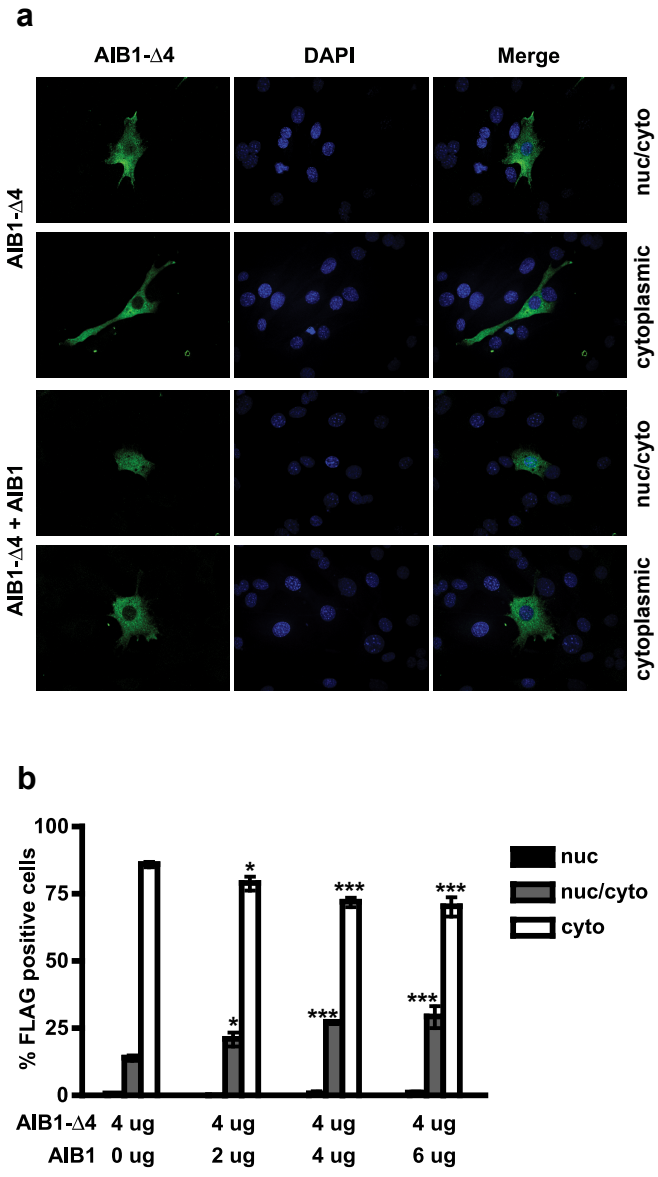
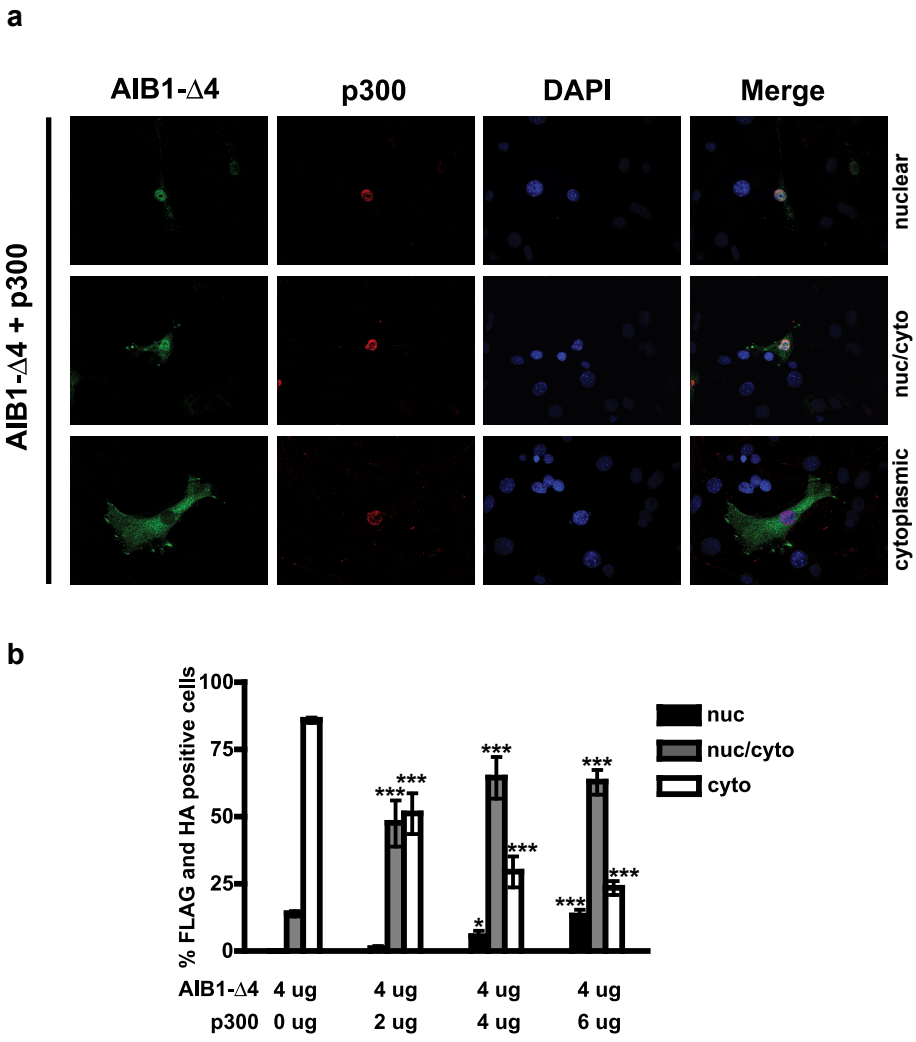
Supplemental Figure 1



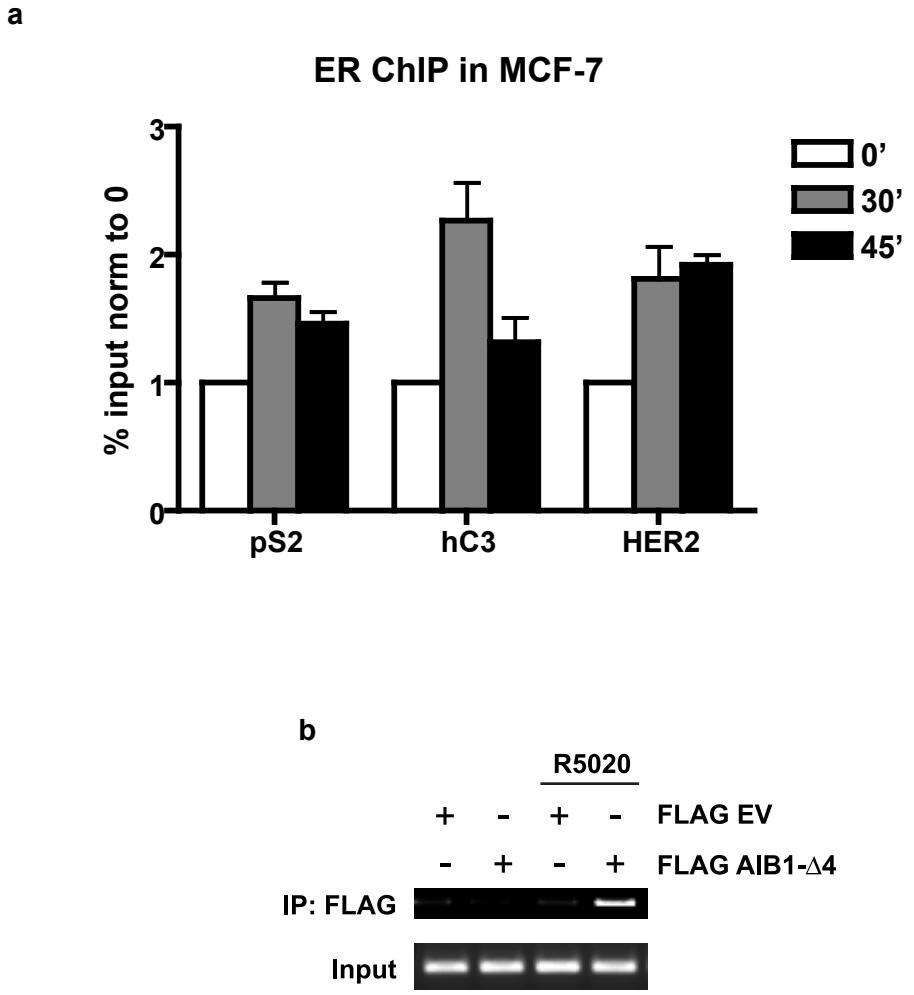
Supplemental Figure 1. **Overexpression of AIB1 localizes AIB1-Δ4 to the nucleus. a,** AIB1 knockout murine embryonic fibroblasts (KO MEFs) were transfected by electroporation with 4 μg FLAG AIB1-Δ4 alone or with 2, 4, or 6 μg of untagged AIB1 and plated on glass cover slips in DMEM+10% FBS. Cells were fixed and permeabolized 24 hours after plating and stained for FLAG containing proteins and nuclei stained with DAPI. Cells were then analyzed by confocal microscopy. **b,** The number of nuclear, nuclear/cytoplasmic, and cytoplasmic staining cells was quantified for three experiments as in Fig 2a. Data were analyzed by one way ANOVA with Tukey's multiple comparison post test. *=$p<0.05$, ***=$p<0.001$ when compared to AIB1-Δ4 transfection alone.

Supplemental Figure 2



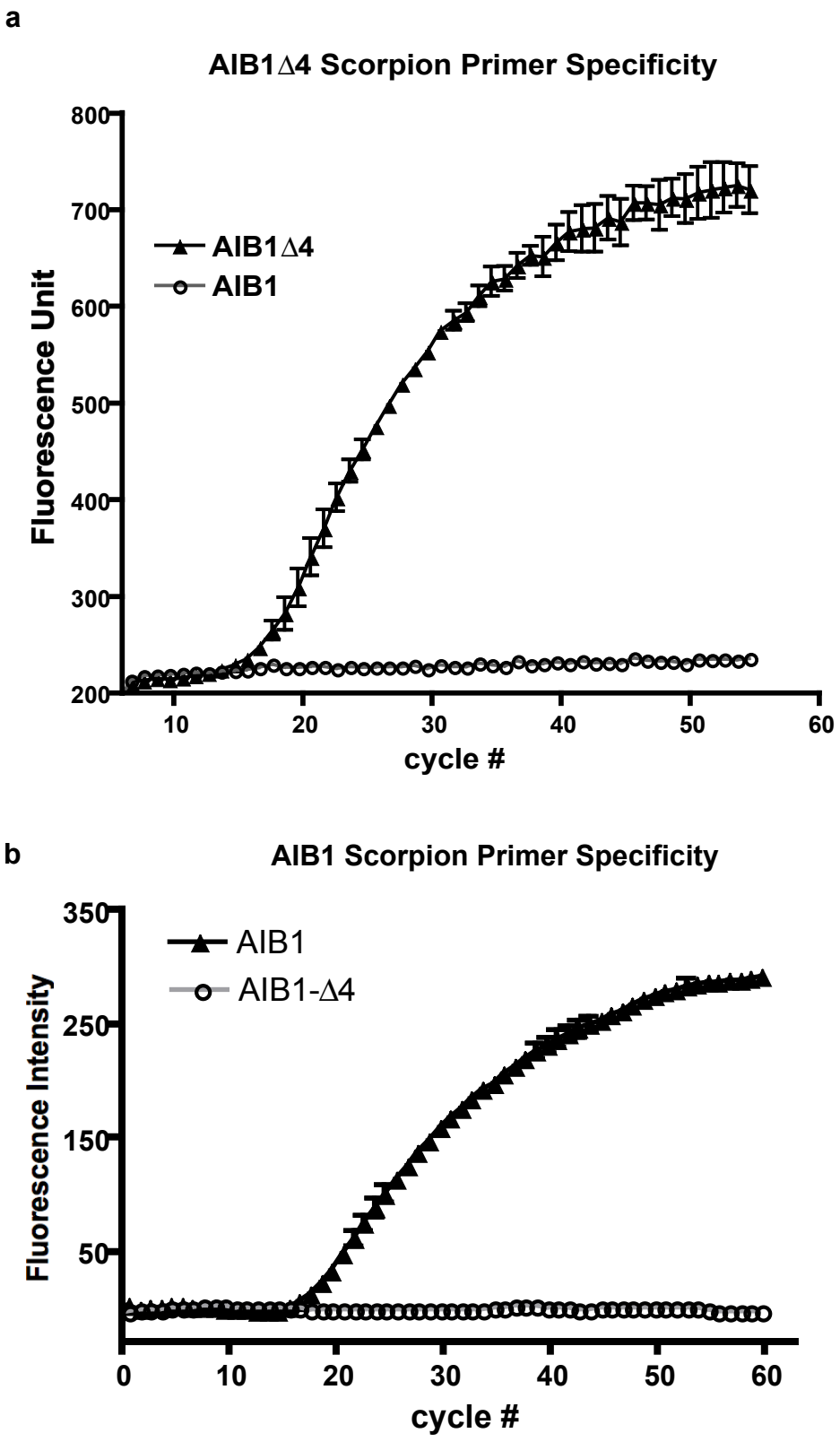
Supplemental Figure 2. **Overexpression of p300 localizes AIB1-Δ4 to the nucleus. a,** AIB1 KO MEFs were transfected by electroporation with 4 μg AIB1-Δ4 alone or with 2, 4, or 6 μg of p300-HA and plated on glass cover slips in DMEM+10% FBS. Cells were fixed and permeabolized 24 hours after plating and stained for DAPI, FLAG, and HA containing proteins. Cells were then analyzed by confocal microscopy. **b,** The number of nuclear, nuclear/cytoplasmic, and cytoplasmic staining cells was quantified as in Fig 2a. Typical nuclear, nuclear/cytoplasmic, and cytoplasmic FLAG staining (green), p300 (red, nuclear) and DAPI staining DNA in the nucleus (blue) is shown with overlay of the images in the right panels. The percentage of nuclear, nuclear/cytoplasmic, and cytoplasmic stained cells is shown in the black, gray, and white bars respectively for three experiments is shown. Data were analyzed by one way ANOVA with Tukey's multiple comparison post test. *=$p<0.05$, ***=$p<0.001$ when compared to AIB1-Δ4 transfection alone.

Supplemental figure 3



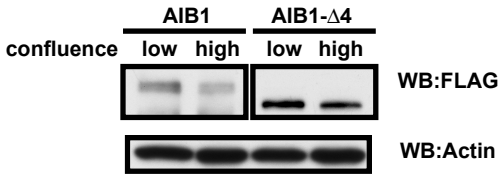
Supplemental Figure 3. **Recruitment of ER to endogenous ERE in MCF-7 cells and to PRE in the MMTV promoter in T47D cells.** a, Recruitment of ERα to ERE in endogenous pS2, hC3, and HER2 genes after estrogen stimulation in MCF-7 cells. b, T47D (A1-2) cells, which have a stable integration of the MMTV luciferase reporter in their genome, were transfected with either pCMV-Flag or FLAG AIB1-Δ4 for 24 hr and then treated with 10 nM R5020 for 1 hr. The binding of AIB1-Δ4 to the MMTV promoter was analyzed by ChIP assay with a FLAG antibody.

Supplemental Figure 4



Supplemental Figure 4. **AIB1 and AIB1-Δ4 Scorpion primer specificity.** a) Scorpion primers specific for AIB1-Δ4 were tested on plasmid cDNA constructs of AIB1 and AIB1-Δ4. b) Scorpion primers specific for AIB1 were tested on plasmid cDNA constructs of AIB1 and AIB1-Δ4.

Supplemental Figure 5



Supplemental Figure 5. **AIB1-Δ4 is resistant to density induced degradation.** HEK293T cells were transfected with FLAG AIB1 or FLAG AIB1-Δ4. Cells were plated at either low or high density to obtain low or high confluence at the time of lysate harvest. Whole cell lysates were harvested 24 hours after plating at different densities and the levels of AIB1 and AIB1-Δ4 were determined by Western blot for FLAG.