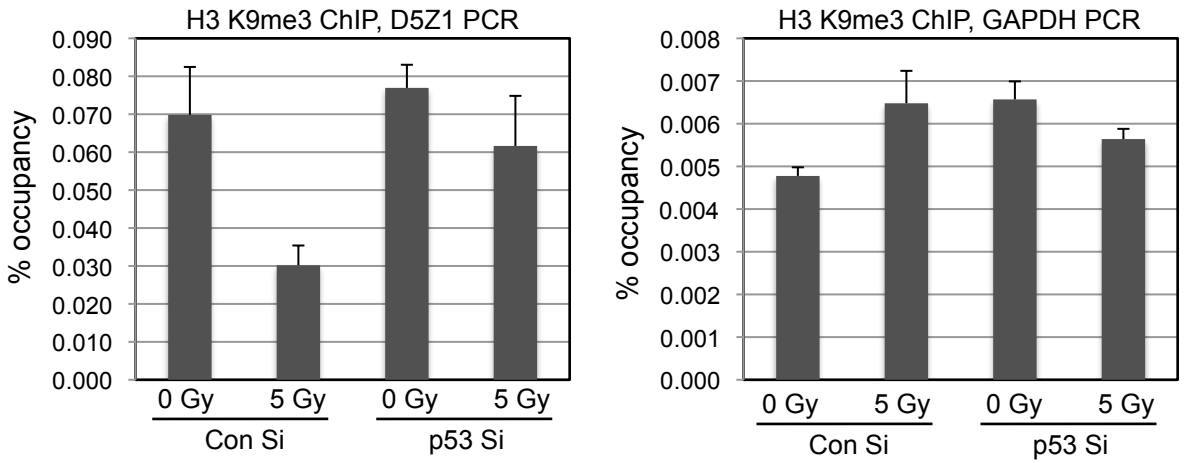
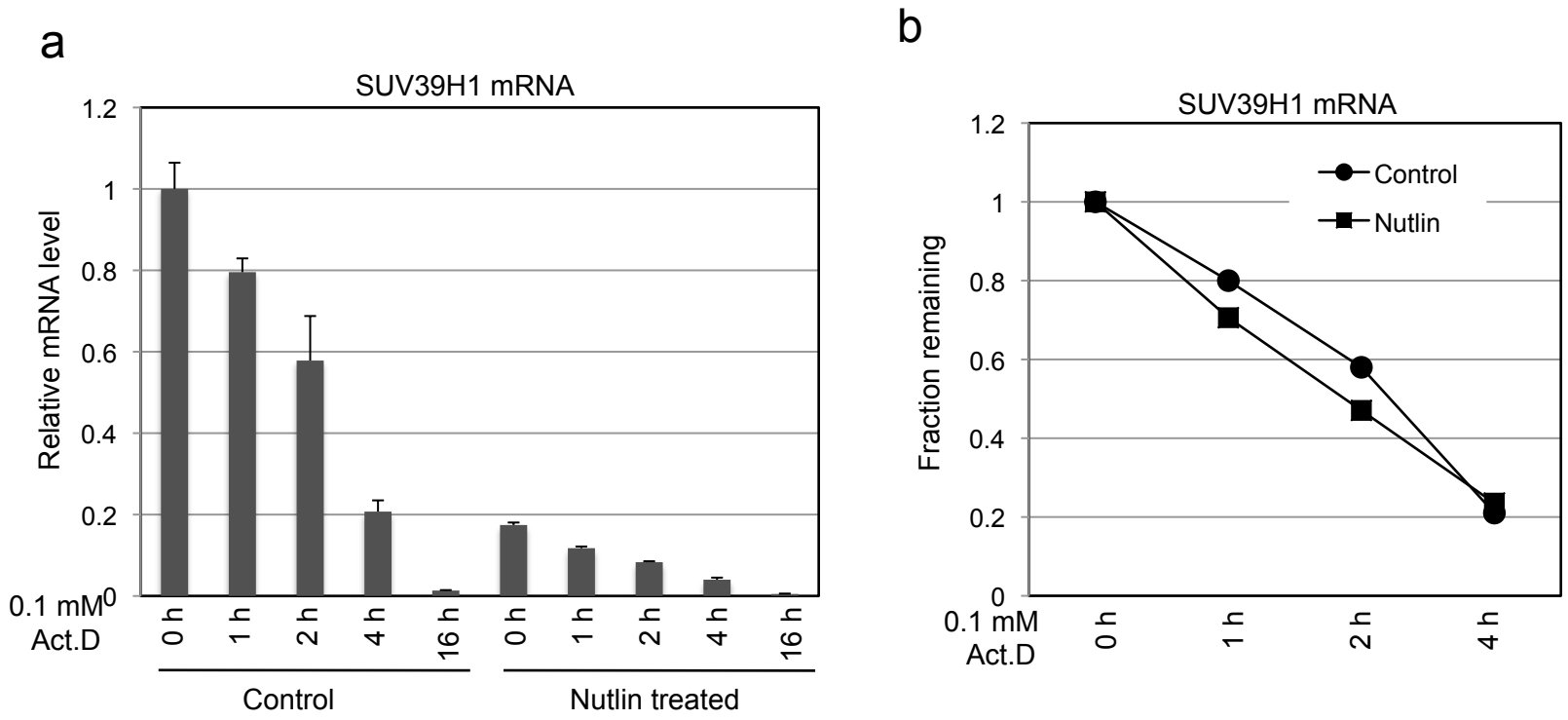
Supplemental Figure 1

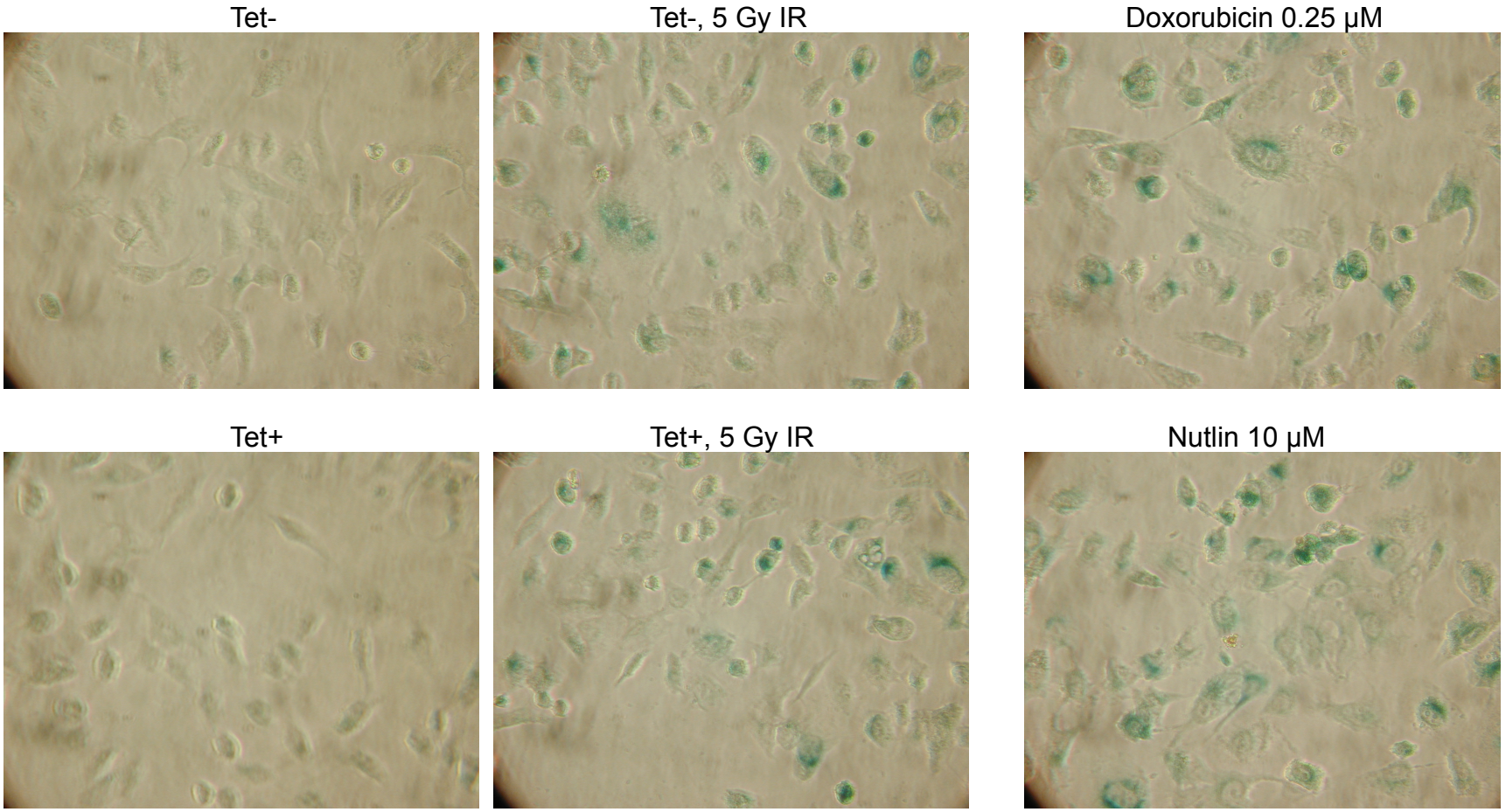


Supplemental Figure 1. Transient knockdown of p53 prevents down regulation of H3 K9 methylation by DNA damage. A549 were treated with p53 siRNA and irradiated for 24 hrs. H3 K9me3 ChIP was amplified with indicated PCR primers.



Supplemental Figure 2. P53 does not affect the turnover of SUV39H1 mRNA. (a) A549 cells were treated with 8 μM Nutlin for 16 hrs, followed by inhibition of total RNA synthesis with 0.1 mM actinomycin D for indicated hours. SUV39H1 mRNA level at each time point were determined by quantitative RTPCR and normalized to GAPDH. (b) The fraction of SUV39H1 remaining at different time points after actinomycin D treatment were plotted to compare the rates of turnover in the absence or presence of activated p53.

Supplemental Figure 3



Supplemental Figure 3. Inducible expression of SUV39H1 does not affect the expression of senescence marker SA-β-gal after irradiation. U2OS-Tet-SUV39H1 cells were cultured in the absence or presence of 5 ng/ml tetracycline and treated with 5 Gy IR. SA-β-gal staining was performed 5 days after irradiation. The cells were also treated with 0.25 μM doxorubicin or 10 μM Nutlin for 5 days as positive controls.