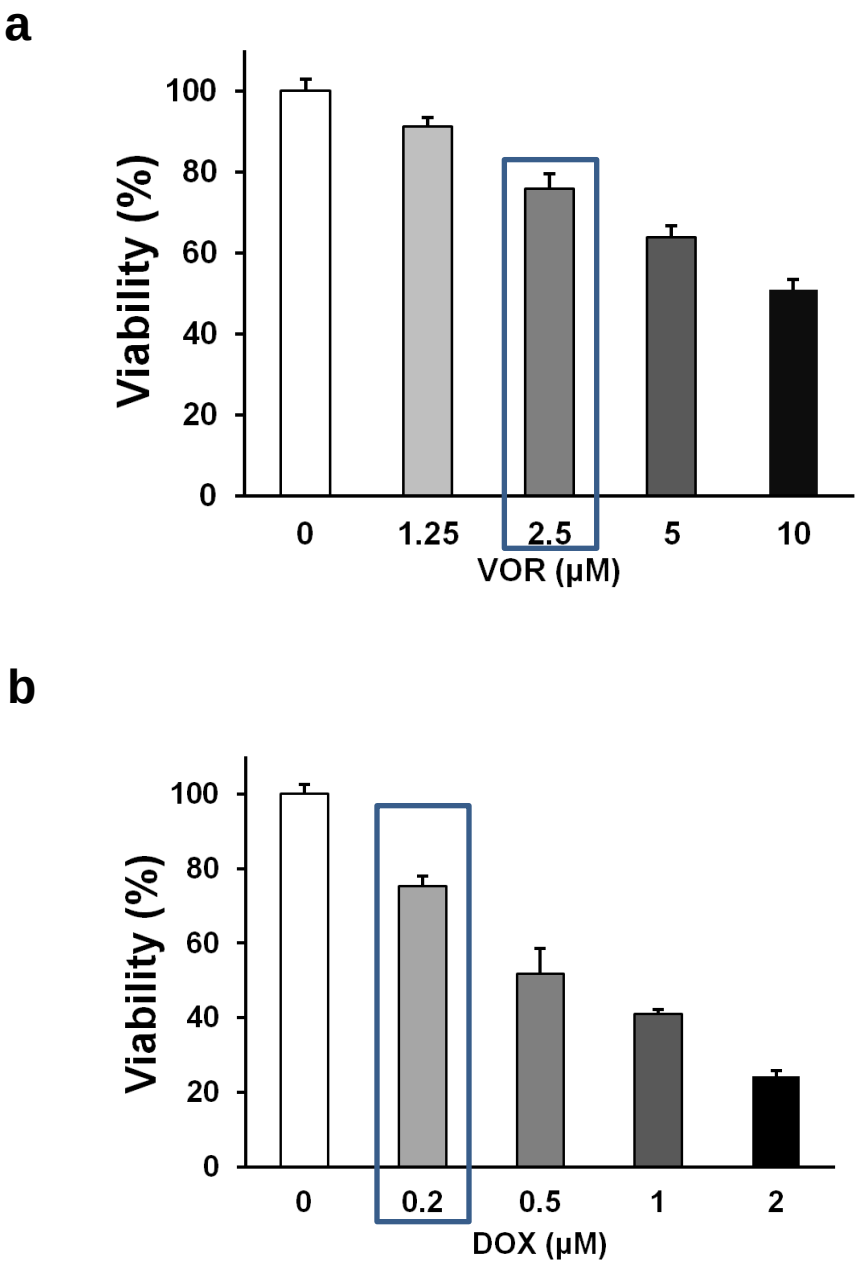
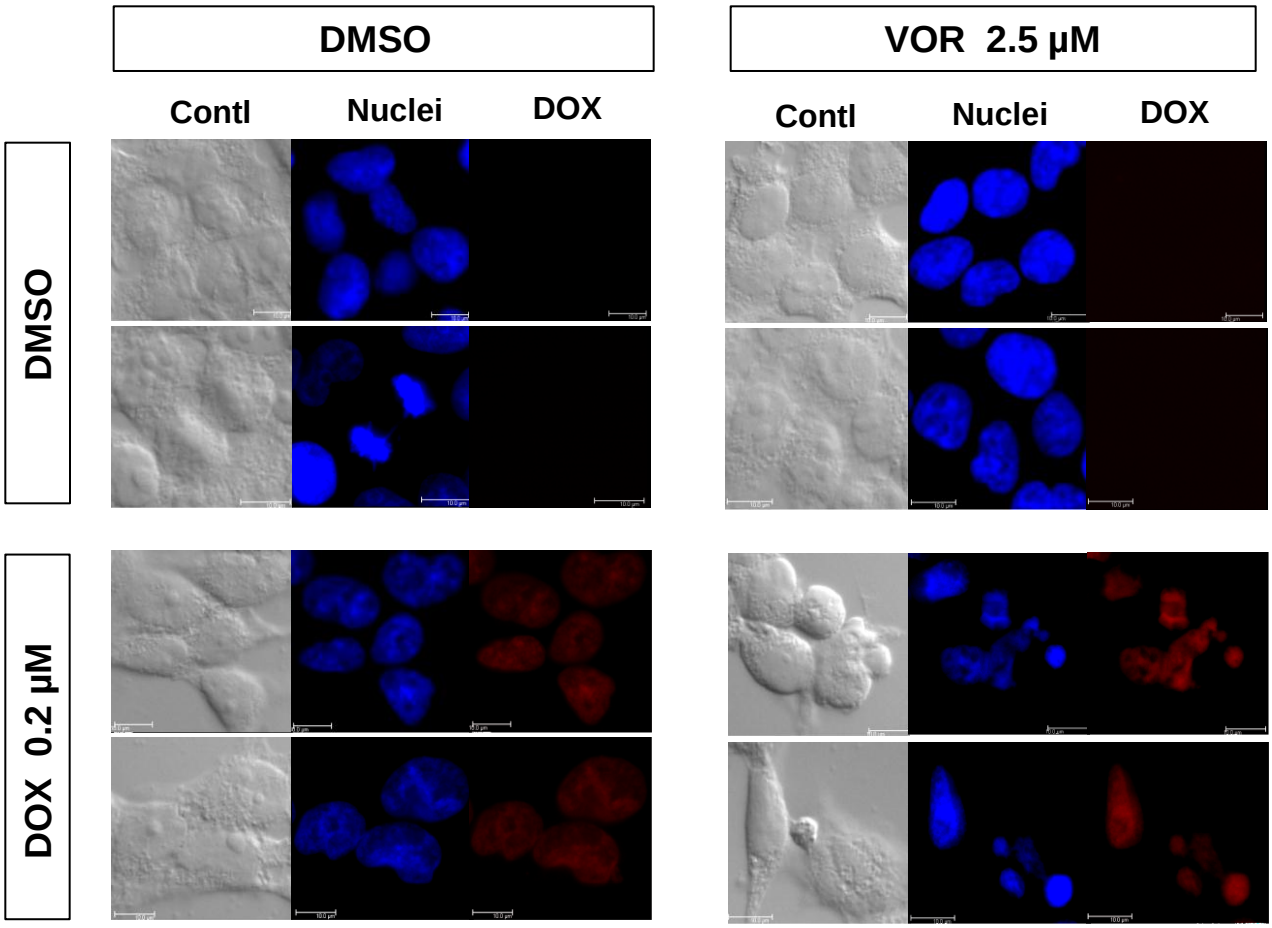
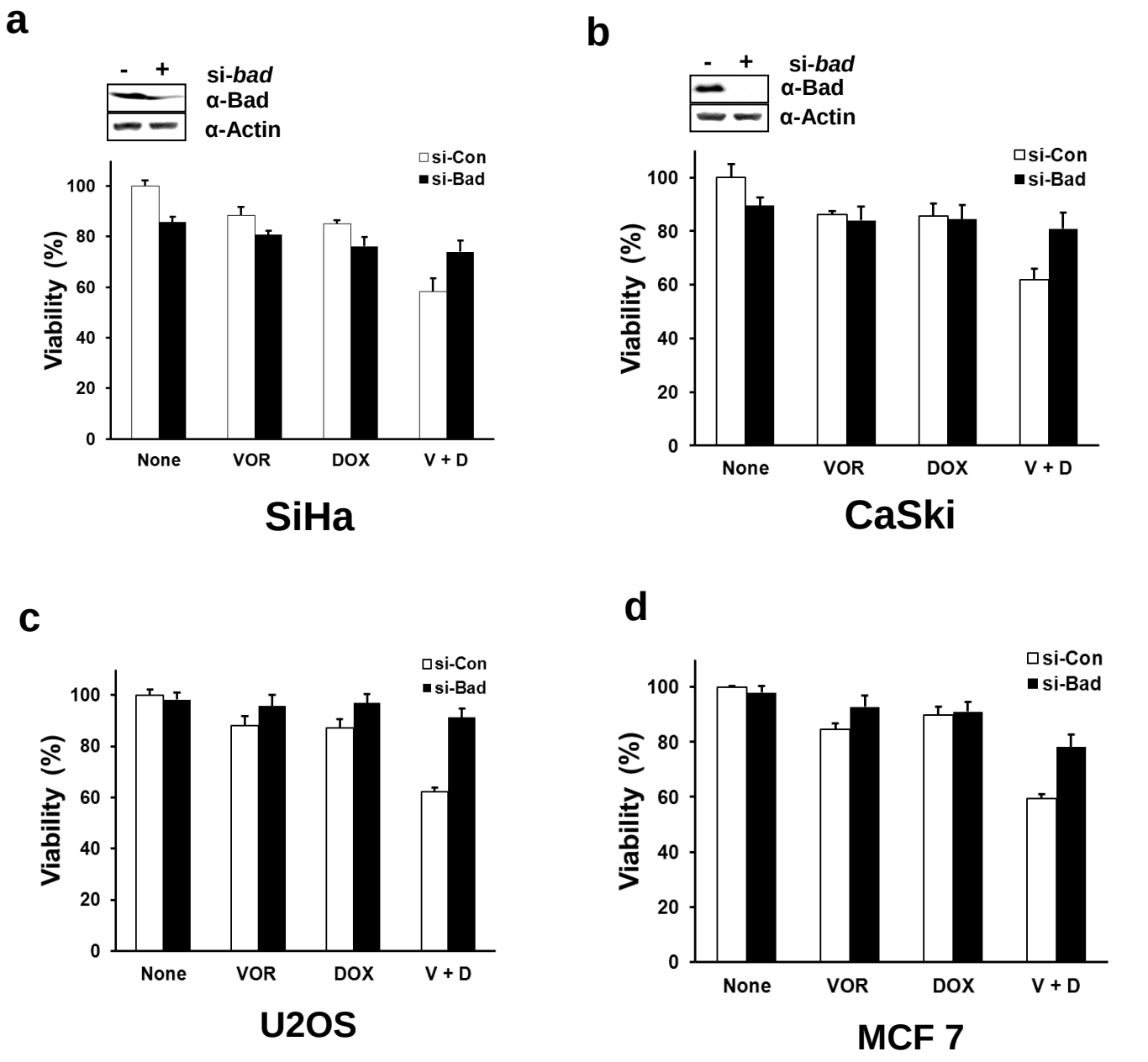


Supplementary Figure 1 Dose effects of VOR (**a**) and DOX (**b**) on viability. HeLa cells were treated with VOR or DOX at the indicated concentrations for 48 h, and then cell viability was analyzed by the MTT assay. Concentrations of 2.5 μM VOR and 0.2 μM DOX were chosen for the co-treatment because each drug showed ~75% cell viability when treated alone (upper and lower boxes).



Supplementary Figure 2 Co-treatment with VOR and DOX induces apoptosis. HeLa cells were grown on glass coverslips and treated with 2.5 µM VOR and/or 0.2 µM DOX for 24 h. Next, cells were fixed with 3.7% formaldehyde and permeabilized with 0.2% NP-40 for 5 min at room temperature. The cells were blocked in PBS-T solution containing 0.1% Tween-20 and 2% bovine serum albumin for 30 min at room temperature. Nuclei were visualized in blue by 4',6-diamidino-2-phenylindole (DAPI) staining, and DOX was detected in red under a fluorescence microscope (Leicar, Germany) due to its intrinsic fluorescence. DMSO treatments and DIC views were used as controls. Notably, co-treatment with VOR and DOX induced typical apoptotic markers, such as multi-nuclei and micronuclei (bottom right) even at the concentrations that show ~75% viability when treated alone. The scale bar represents 10 µm.



Supplementary Figure 3 Knockdown of Bad abrogated the synergistic growth inhibition induced by the co-treatment. Several cancer cell lines, SiHa (**a**), CaSki (**b**), U2OS (**c**), and DOX-resistant MCF 7 breast cancer cells (**d**), were transfected with *bad* (si-Bad) or scrambled (si-Con) si-RNA for 48 h, followed by a 16-h treatment with 2.5 μM VOR and/or 0.2 μM DOX. Next, the effects on synergistic growth inhibition by the co-treatment were observed by the MTT assay. Knockdown of Bad in the siRNA transfected cells was evaluated by Western blot analysis (inset).