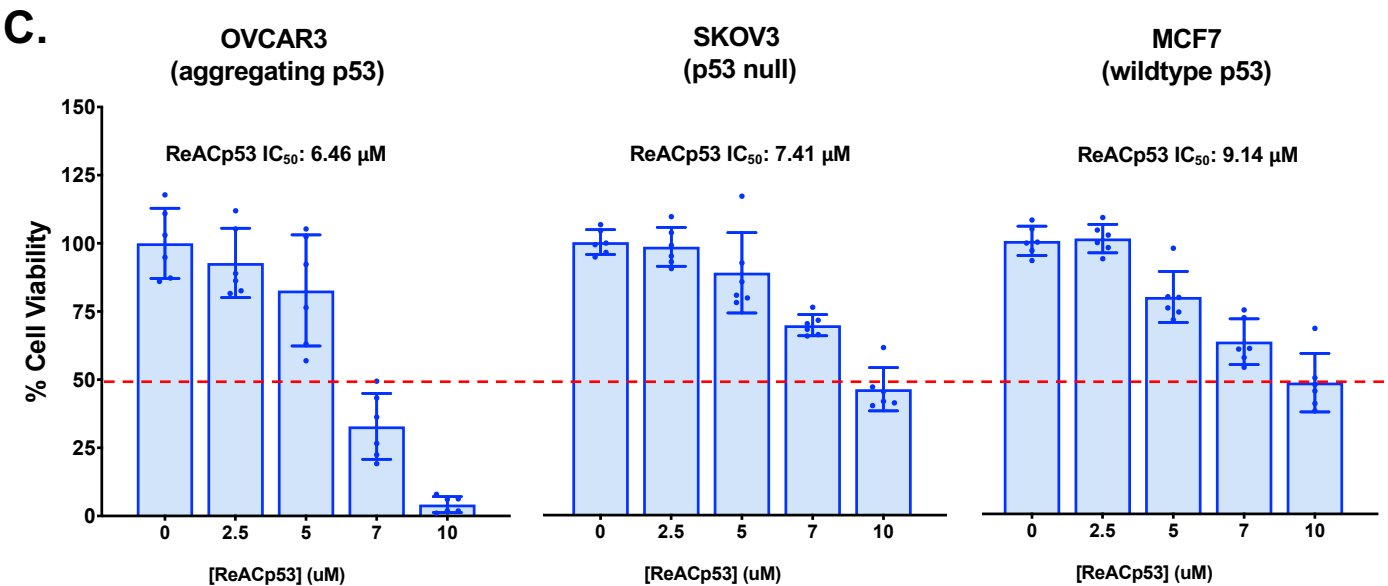
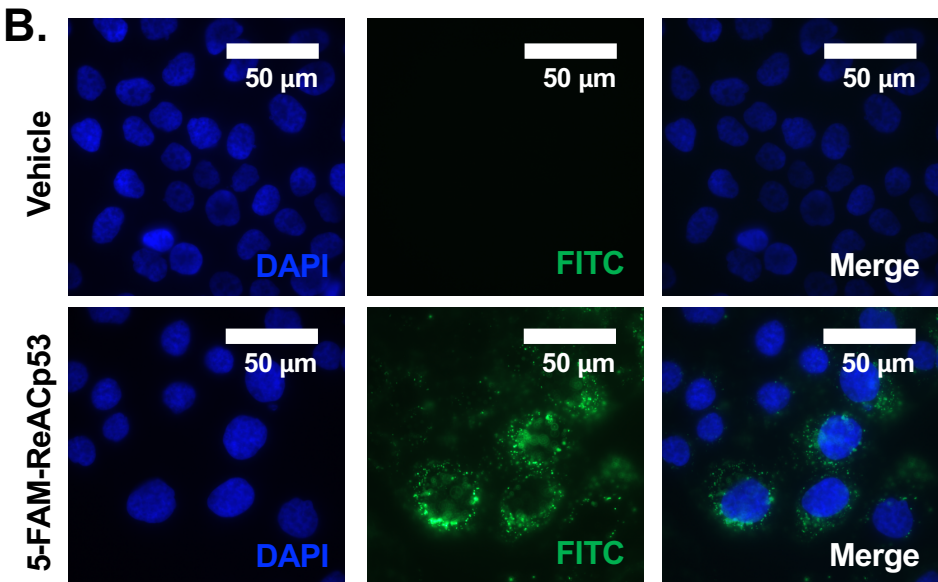
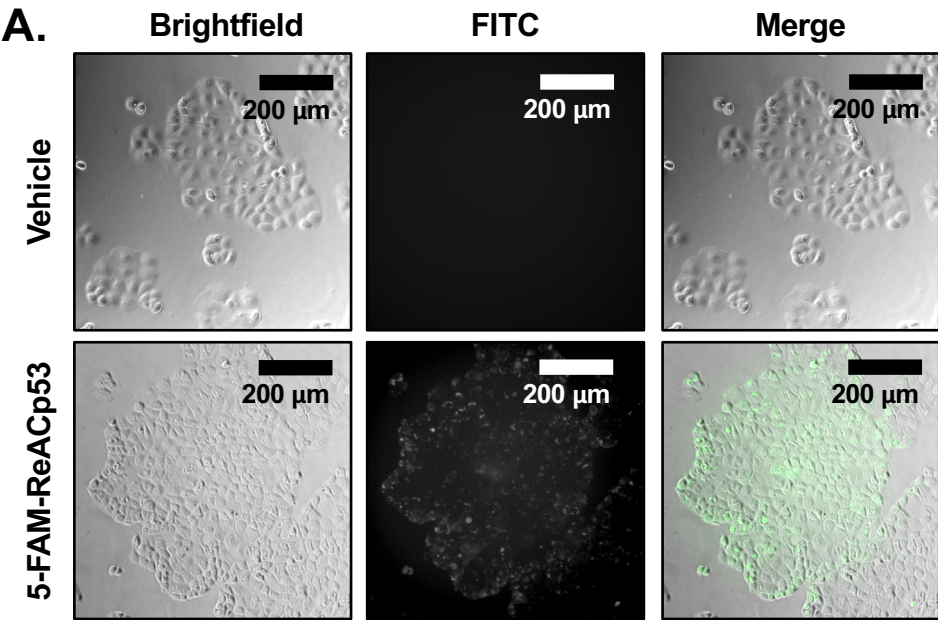


Supplementary Figure 1



Supplementary Figure 1. Functional assessment of ReACp53 peptide. (A) In order to confirm the cell penetrance of ReACp53, a version of this peptide was synthesized with a 5-FAM fluorescence conjugated tag. OVCAR3 cells were incubated with 10 μM 5-FAM-ReACp53 overnight and imaged live. Cell penetration of ReACp53 was confirmed in cells treated with the fluorescently tagged ReACp53 (green signal). (B) These same cells were formalin fixed and mounted on coverslips with DAPI for immunofluorescent imaging. (C) The efficacy of ReACp53 peptide was tested using a previously described high throughput in vitro organoid drug assay (18,19) in three cell lines: OVCAR3 (aggregating mutation in p53, predicted to be more sensitive to ReACp53), SKOV3 (p53-null, predicted to be more resistant to ReACp53), and MCF7 (wildtype p53, predicted to be more resistant to ReACp53). In vitro viability was assessed after 3 days of ReACp53 administration at various doses. Results demonstrate that OVCAR3 (IC_{50} =6.46 μM) were more sensitive to ReACp53 peptide compared to SKOV3 (IC_{50} =7.41 μM) and MCF7 cells (IC_{50} =9.14 μM).