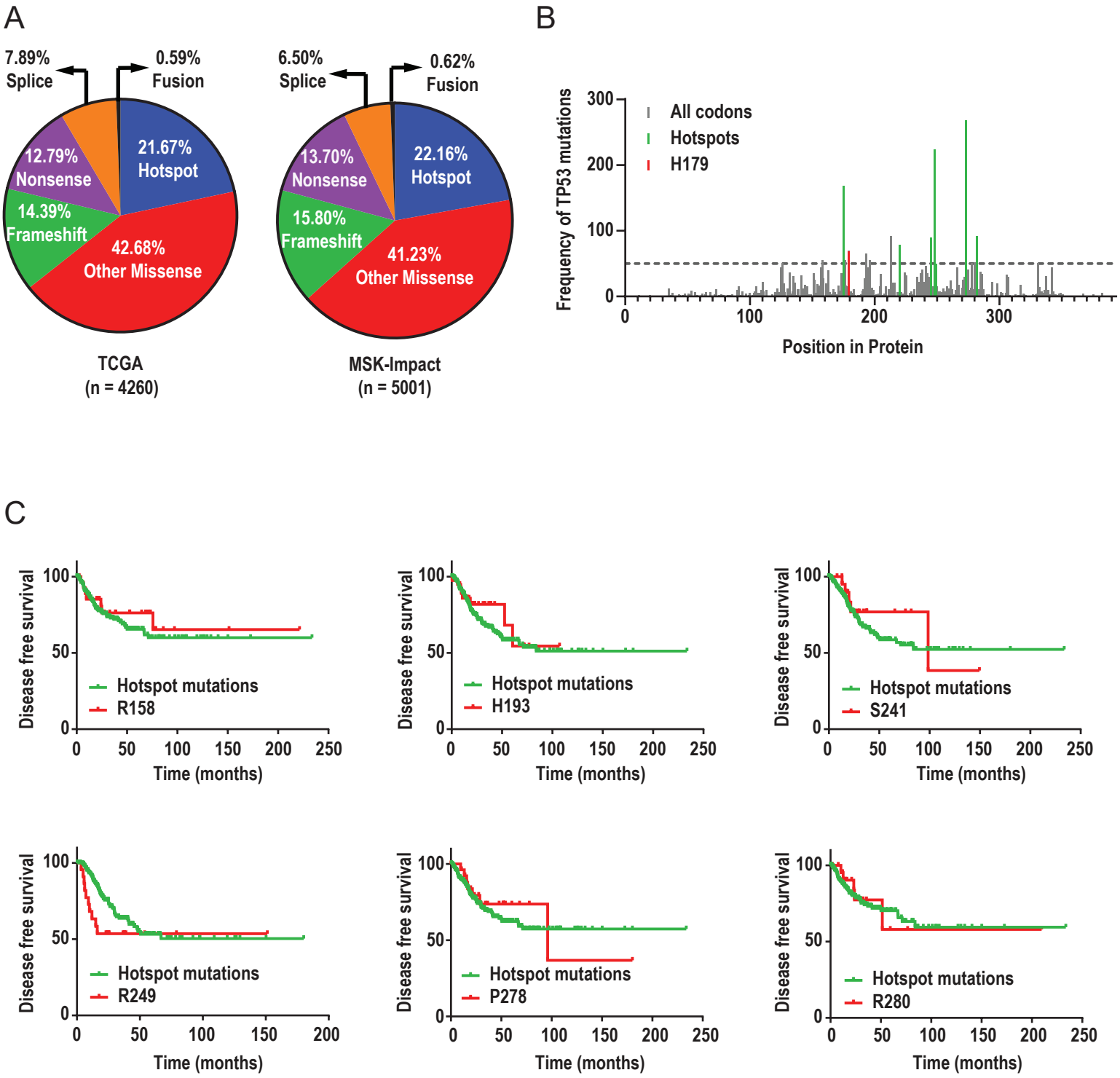
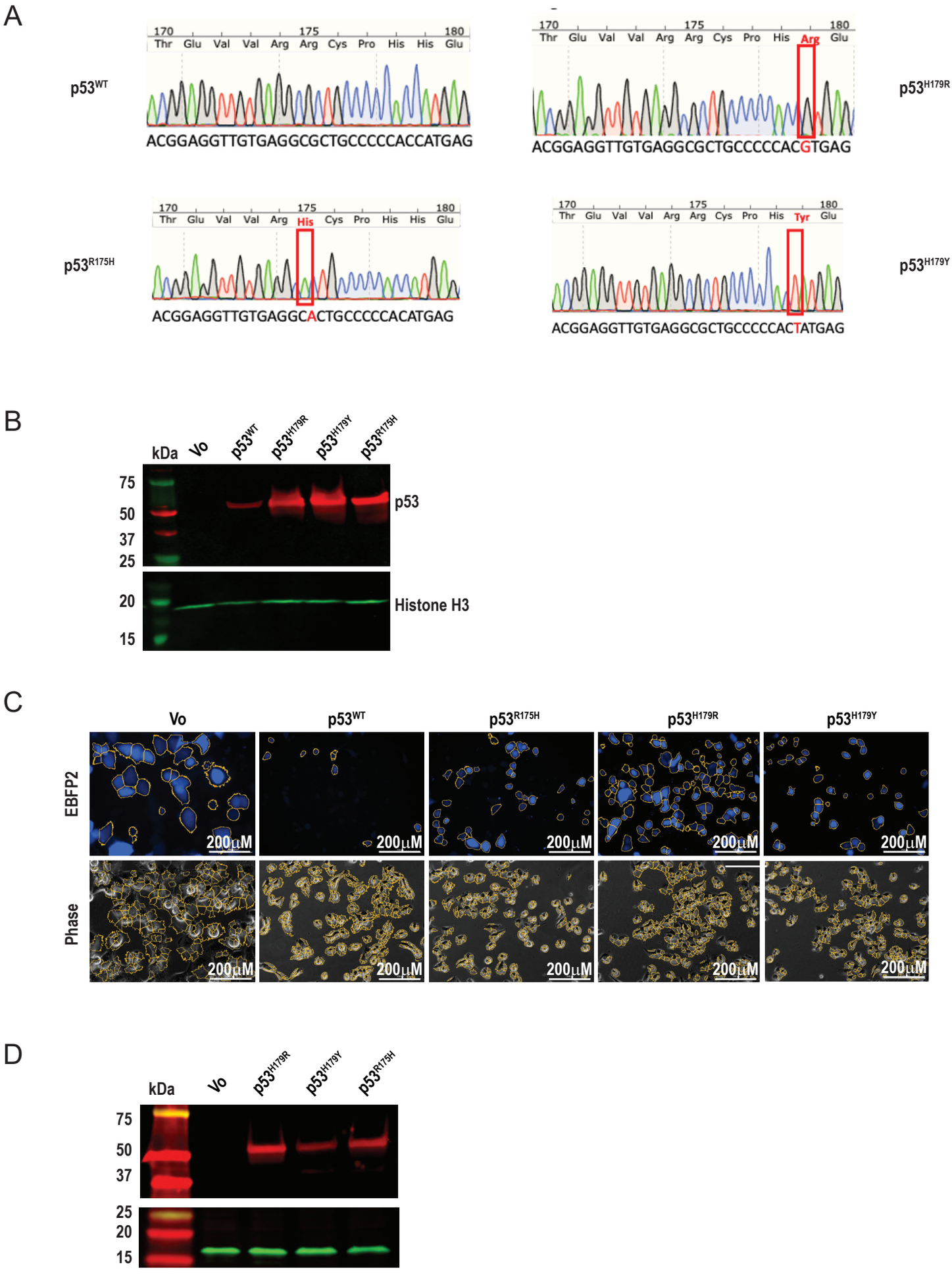
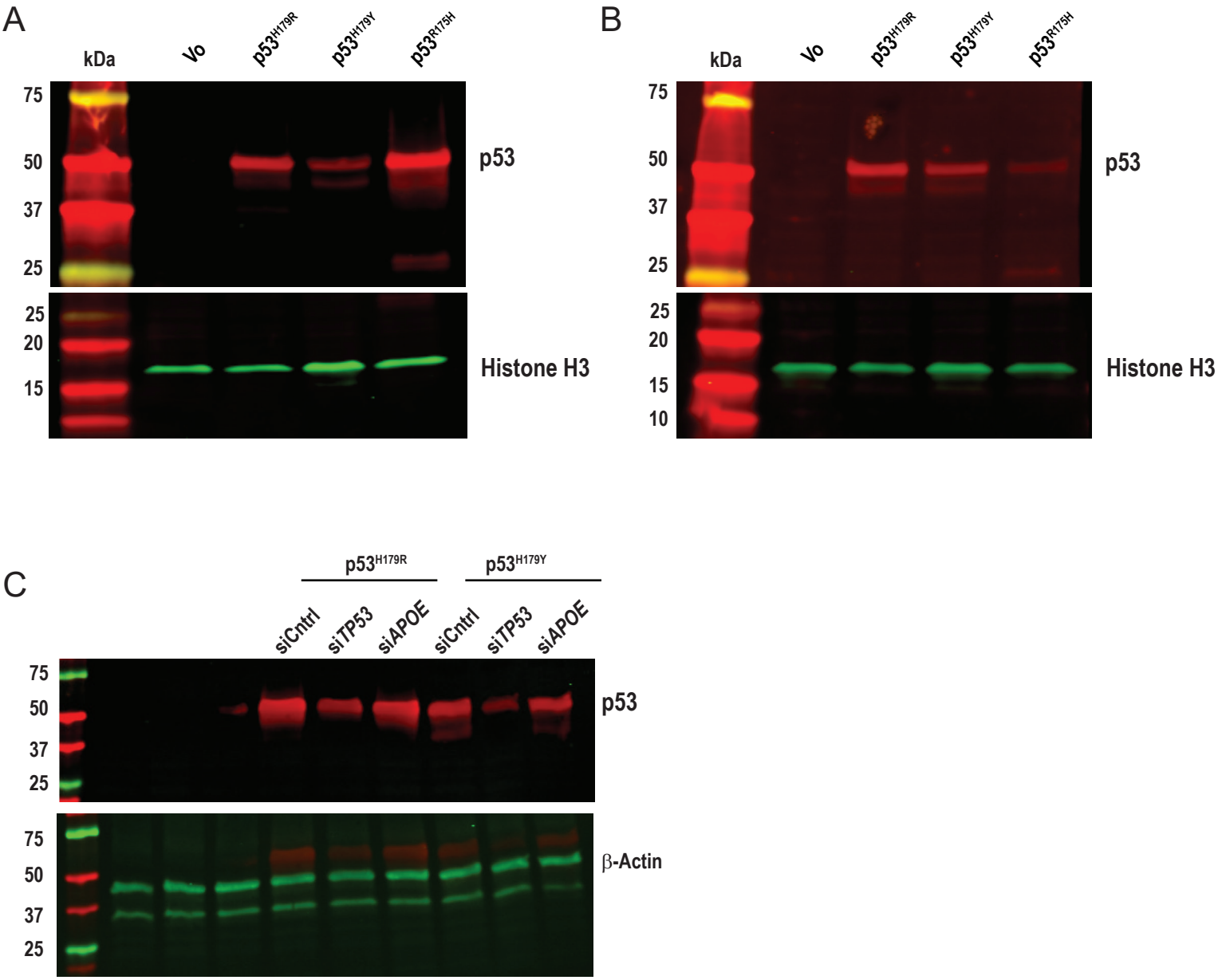


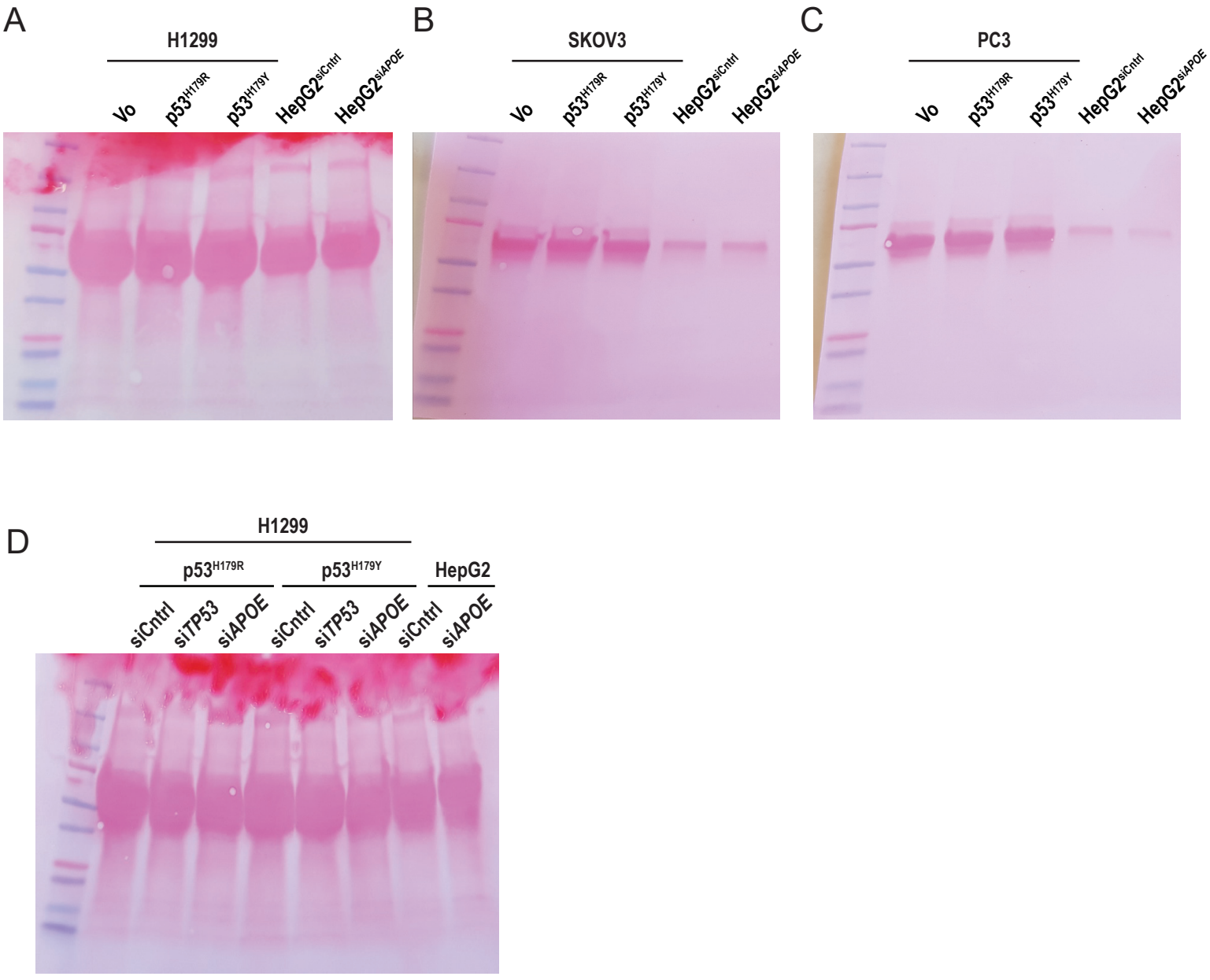
Supplementary Figure 1: A. Type of TP53 mutations reported in cancer. Data obtained from cBioPortal for the pan-cancer datasets from TCGA and MSK-IMPACT. **B.** Frequency of TP53 mutations by codons. Data obtained from pan-cancer TCGA from cBioPortal[53]. **C**. Kaplan-Meier plot for disease-free survival of patients from matched tumor types using the pan-cancer dataset from TCGA via cBioPortal, stratified by tumors that have R158, H193, S241, R249, P278 and R280 TP53 mutations versus hot-spot TP53 mutations at codons 175, 220, 245, 248, 273 and 282. Significance was determined using log-rank test.



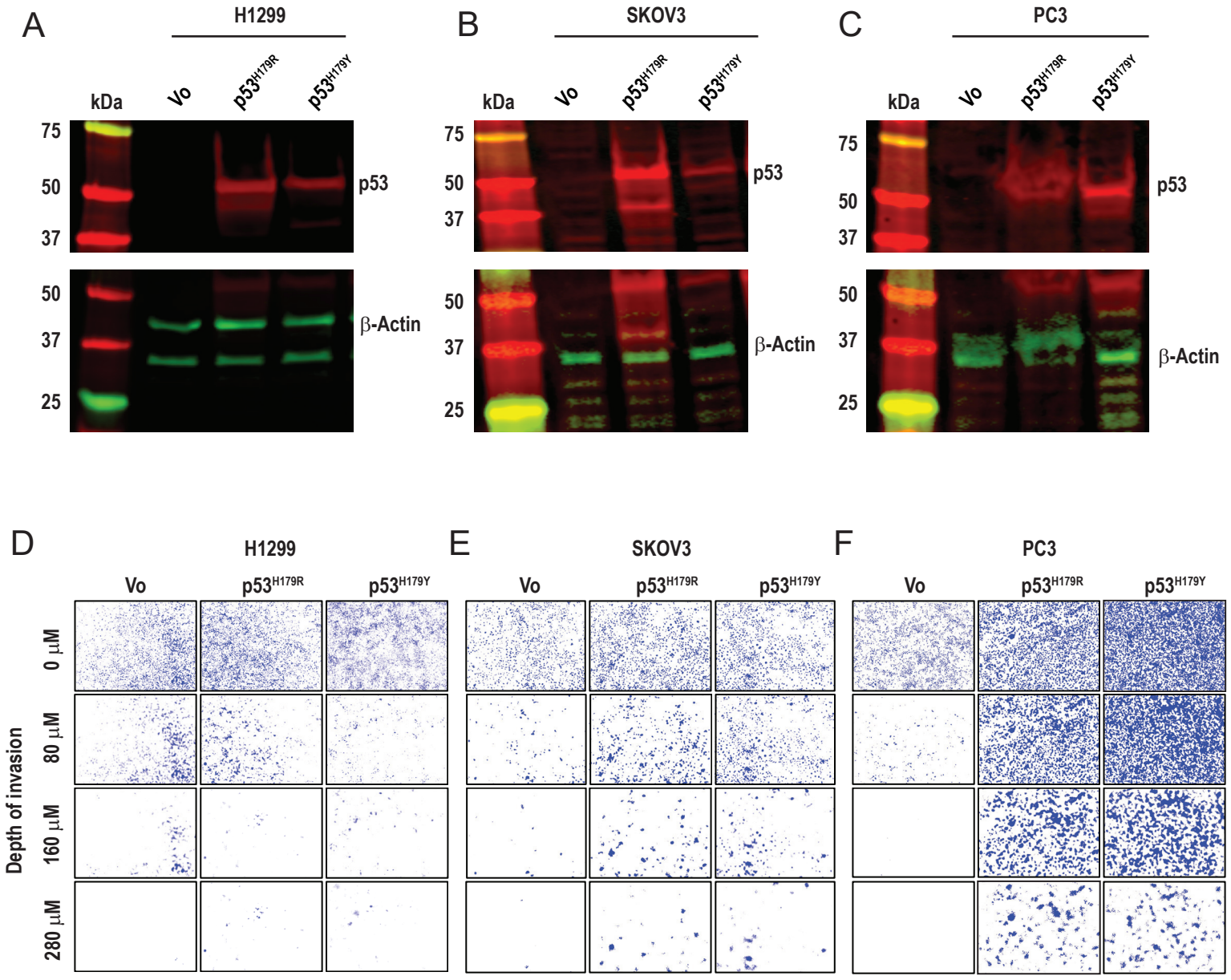
Supplementary Figure 2. **A**. Sanger sequencing confirming change in the base at codon 179 of the from C>G: H179R and C>T: H179Y and at codon 175 from G>A: R175H from the pCMV-TP53^{WT} plasmid. **B**. Western blot using anti-p53 antibody (DO-1) on protein lysates from H1299 cells transiently transfected with 600ng of Vo, p53^{WT}, p53^{R175H}, p53^{H179R} and p53^{H179Y}. Anti-histone H3 antibody was used to blot Histone-H3 as a loading control. **C**. Representative images and masking strategy used to quantitate the percentage of EBFP2 expressing H1299 cells 72 hours post transfection with 600ng of plasmid expressing either Vo, p53^{WT}, p53^{R175H}, p53^{H179R} and p53^{H179Y}. **D**. Western blot using anti-p53 antibody (DO-1) on protein lysate from isogenic H1299 cells stably expressing Vo, p53^{R175H}, p53^{H179R} and p53^{H179Y}. Anti-histone H3 antibody was used to blot Histone-H3 as a loading control.



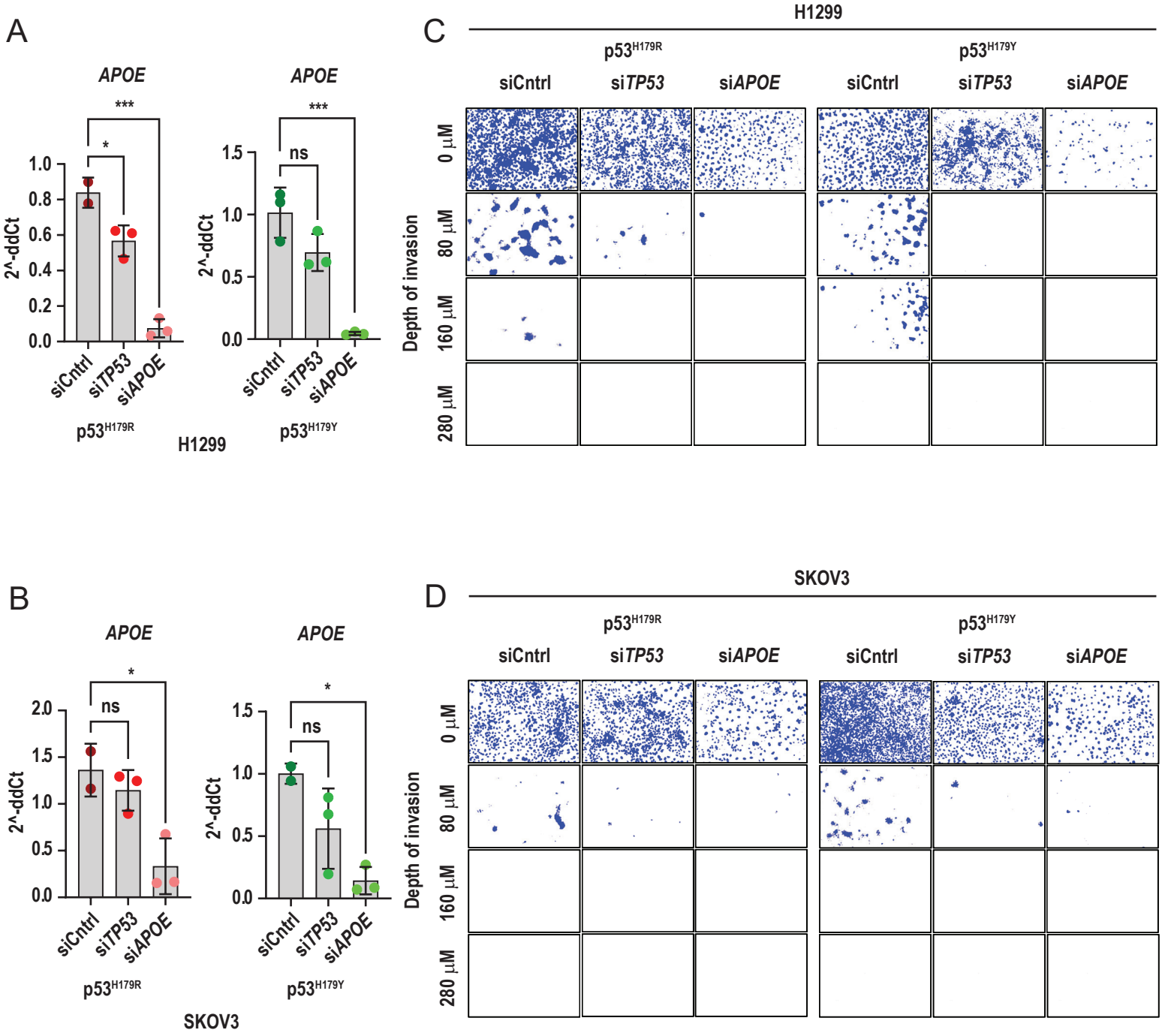
Supplementary Figure 3A-C. Western blot using anti-p53 antibody (DO-1) on protein lysates from either cells stably expressing Vo, p53^{H179R} and p53^{H179Y}, A. SKOV3, B. PC-3. C. H1299 p53^{H179R} and p53^{H179Y} cells treated for 96hours with 20nM of siCtrl and si*TP53*. **A-B.** Anti-histone H3 antibody (1:5000,) was used to blot Histone-H3 as a loading control. **C.** Anti-β Actin antibody (SP124) was used to blot β-Actin as a loading control.



Supplementary Figure 4. Nitrocellulose blots stained with Ponceau S containing concentrated media from samples of **A**. H1299, **B.** SKOV3 and **C.** PC-3 cells expressing Vo, $p53^{H179R}$ and $p53^{H179Y}$. **D.** H1299 cells expressing $p53^{H179R}$ and $p53^{H179Y}$ cells which were treated with control siRNA (siCtrl – 20nM) or those targeting either *TP53* (si-*TP53* – 20nM) or *APOE* (si-*APOE* – 5nM) for 96 hours to ensure equal loading of all samples.



Supplementary Figure 5: A-C. Western blot using anti-p53 antibody (DO-1) on protein lysate from either A. H1299, B. SKOV3 and C. PC-3 cells stably expressing Vo, $p53^{H179R}$ and $p53^{H179Y}$ mutant proteins. Anti β- Actin antibody (SP124) was used to blot β-Actin as a loading control. D-F. Representation of the z series showing one field at 20x within a dish from the bottom (Z = 0 μm) to the top (Z = 280 μm). 2% FBS was used as a chemoattractant. Nuclei of the cells are stained with 50ng/ml of Hoechst 33258 96 hours after seeding. D. H1299. E. SKOV3 and F. PC-3.



Supplementary Figure 6: A-B. RT-qPCR showing expression of APOE in **A.** H1299 and **B.** SKOV3 cells expressing $p53^{H179R}$ and $p53^{H179Y}$ mutant proteins treated with either control siRNA (siCtrl – 20nM) or those targeting either *TP53* (si-*TP53* – 20nM) or *APOE* (si-*APOE* – 5nM) 96 hrs post transfection. **C-D.** Representation of the z series showing one field at 20x within a dish from the bottom (Z = 0 µm) to the top (Z = 200 µm). 2% FBS was used a s chemoattractant. Nuclei were stained with 50ng/ml of Hoechst 33258 96 hours after seeding and 72 hours post knockdown of p53H179R and p53H179Y mutants. C. H1299 and D. SKOV3.