

Figure S1. Mutation status and protein expression levels of p53 in cancer cell lines. (A) Sequencing profiles of the affected exons of the p53 gene with missense mutations. (B) Protein expression of p53 in p53 mutant (H1975, H322 and H157), p53 WT (A549, HCT116) and p53 null (HCT116 p53^{-/-}) cell lines by western blot analysis. β -actin was used as a loading control. The HCT116 p53^{-/-} cells have no protein expression due to p53 deletion. In H157 cells the non-sense mutation (298stop) results in no expression of p53 protein. Wild-type, WT; c., codon.

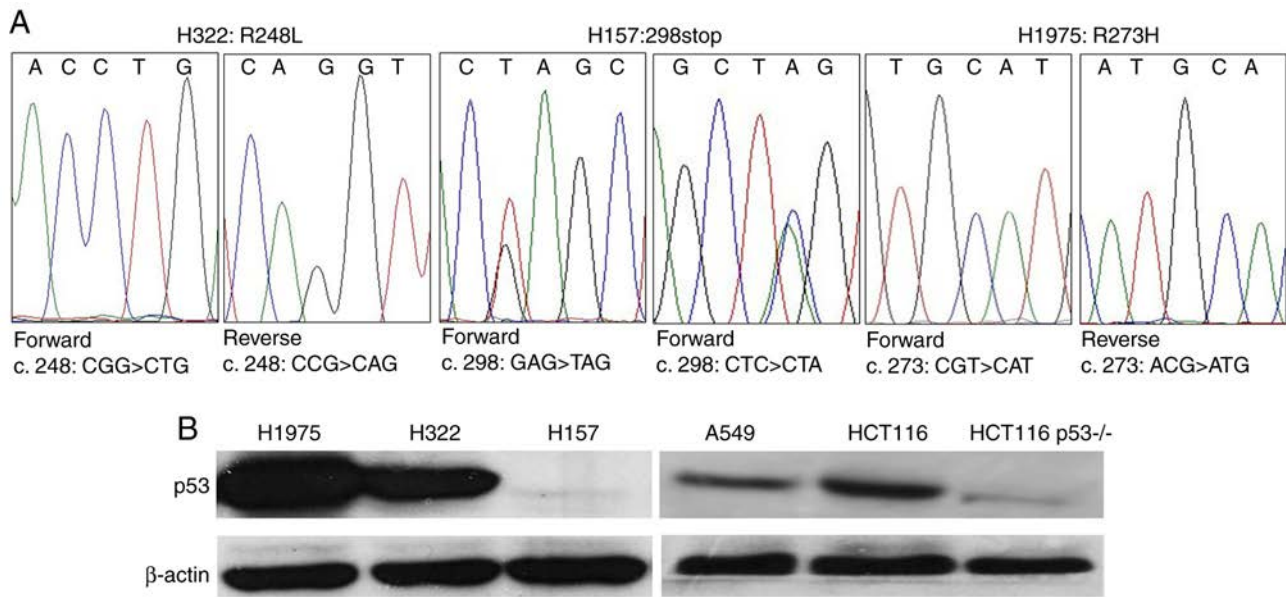


Figure S2. TP53 functionality assay. The protein expression levels of p53, p-p53 and p21 were analysed by western blot analysis, following cell treatment with the p53 inducer doxorubicin. β -actin was used as a loading control.

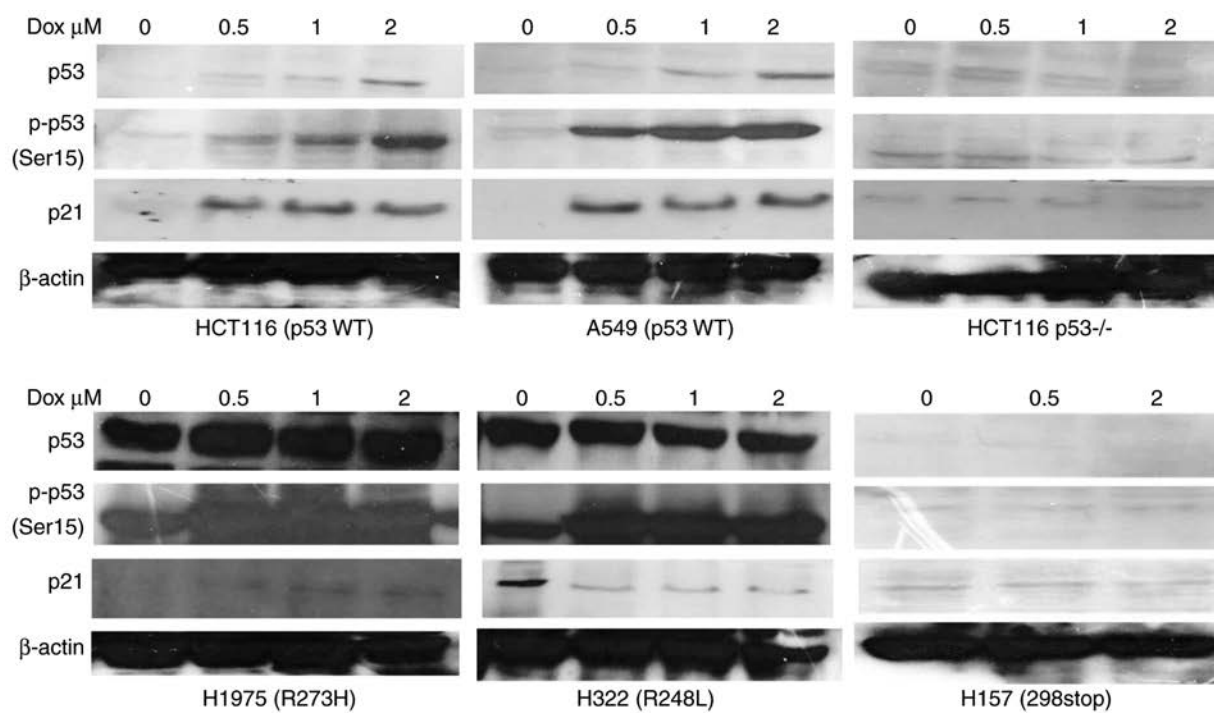


Figure S3. Quantification of western blot analysis of Figure 4C. *P<0.05, **P<0.01 and ***P<0.001 following analysis with the Student's t-test.

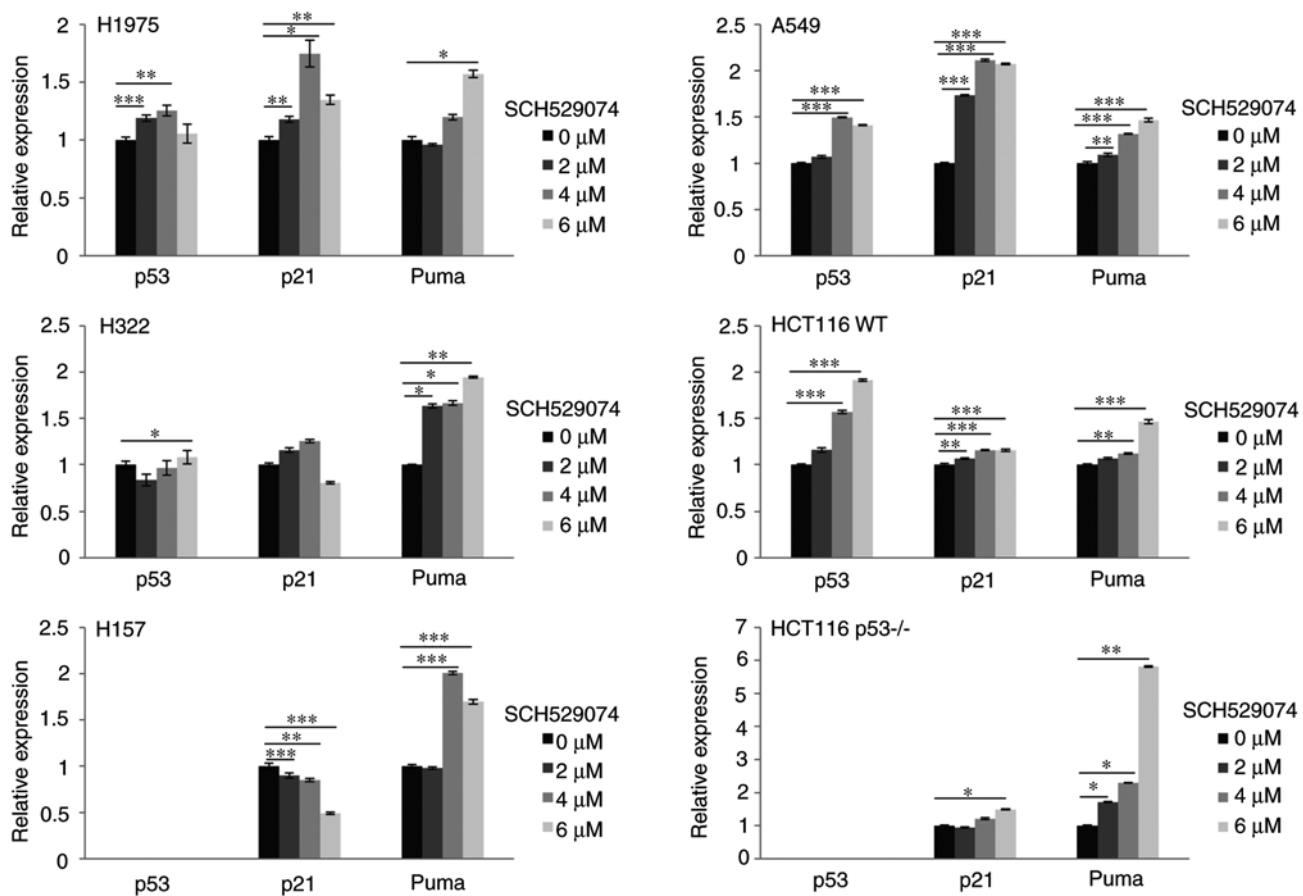


Table SI. Primer sequences.

Gene	Oligonucleotide sequence	T _m (°C)
<i>p21</i>	5'-AAGACCATGTGGACCTGT-3' (F) 5'-GGTAGAAATCTGTCATGCTG-3' (R)	57,8
<i>PUMA</i>	5'-GACCTCAACGCACAGTA-3' (F) 5'-CTAATTGGGCTCCATCT-3' (R)	62,8
<i>NOXA</i>	5'-GCTGGAAGTCGAGTGTGCTA-3' (F) 5'-CCTGAGCAGAAGAGTTTGGA-3' (R)	63,2
<i>BAX</i>	5'-CCCGAGAGGTCTTTTTCC-3' (F) 5'-GCCTTGAGCACCAGTTTG-3' (R)	62,1
<i>CCNG2</i>	5'-ACTGGAAATTCTCTTGCTAGTTA-3' (F) 5'-GATCCAAACCAACTTCTTAAGAT-3'(R)	61,1
<i>GAPDH</i>	5'-GTGAAGGTCGGAGTCAACG-3' (F) 5'-AGGAGGCATTGCTGATGAT-3' (R)	60
p53 mutation analysis		
Exon 5	5'-TGACTTTCAACTCTGTCTCC-3' (F) 5'-TCAGTGAGGAATCAGAGGCC-3' (R)	60
Exon 6	5'-CTGGAGAGACGACAGGGCTG-3' (F) 5'-CCAGAGACCCCAGTTGCAAAC-3' (R)	60
Exon 7	5'-CTCGCGCACTGGCCTCATCTT-3' (F) 5'-TCAGCGGCAAGCAGAGGCTG-3' (R)	60
Exon 8	5'-GGACAGGTAGGACCTGATTCCTTAC-3' (F) 5'-TGCACCCTTGGTCTCCTCCAC-3' (R)	60
Exon 9	5'-GGTGGAGGAGACCAAGGGTGCATT-3' (F) 5'-CTGGAAACTTTCCACTTGAT-3' (R)	60

T_m, annealing temperature. F, forward; R, reverse.

Table SII. Antibodies used for western blot analysis.

Primary and secondary antibodies	Host	Dilution	Cat. no.	Supplier
LC3A/B	Rabbit	1/1,000	4108	Cell Signaling Technology, Inc.
p21	Mouse	1/200	sc-6246	Santa Cruz Biotechnology, Inc.
PUMA	Rabbit	1/200	sc-28226	Santa Cruz Biotechnology, Inc.
p53	Rabbit	1/200	sc-6243	Santa Cruz Biotechnology, Inc.
p-p53	Rabbit	1/1,000	9284P	Cell Signaling Technology, Inc.
β -actin	Rabbit	1/4,000	A2066	Sigma Aldrich; Merck KGaA
anti-mouse IgG ^a	Rabbit	1/1,000	P0260	DAKO; Agilent Technologies, Inc.
anti-rabbit IgG ^a	Goat	1/1,000	sc-2030	Santa Cruz Biotechnology, Inc.

^aPeroxidase-conjugated.