

Fig. S1. **STK17A is induced with DNA damaging agents.** Real time PCR analysis of STK17A expression in NT2/D1 cells treated for 6 hours with indicated dosages of vinblastine, doxorubicin or etoposide and assessed for STK17A expression 24 hours later. Error bars are standard deviation. * = $p < 0.05$.

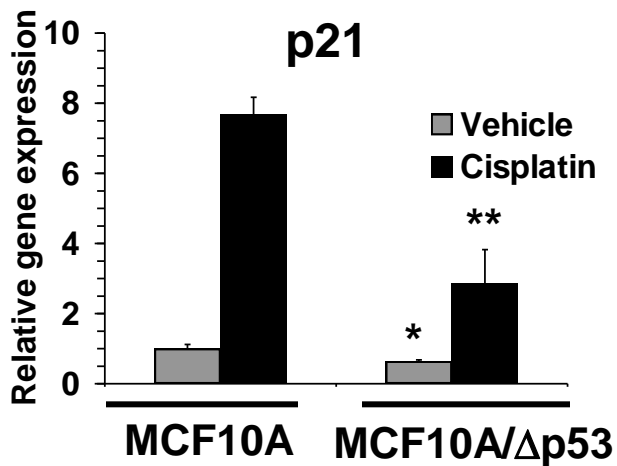
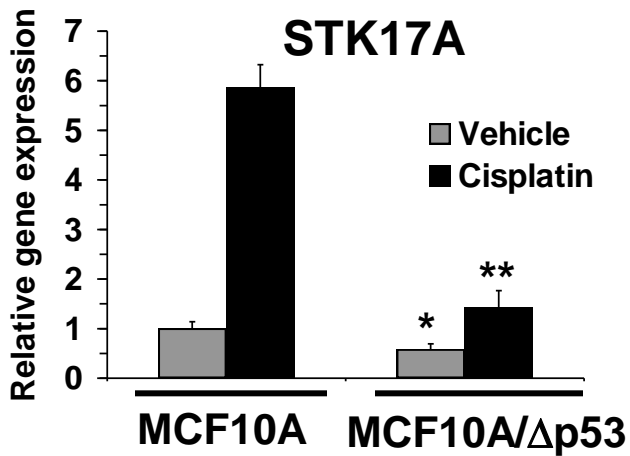
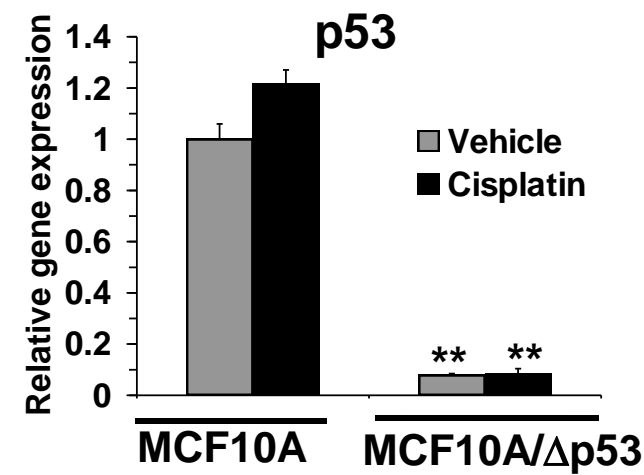


Fig. S2. **STK17A is induced with cisplatin in a p53-dependent manner in MCF10A cells.** Real time PCR analysis of p53 (top), STK17A (middle) and p21 (bottom) expression in MCF10A and MCF10A cells stably expressing an shRNA targeting p53. Error bars are standard deviation. * = $p < 0.05$; ** = $p < 0.005$.

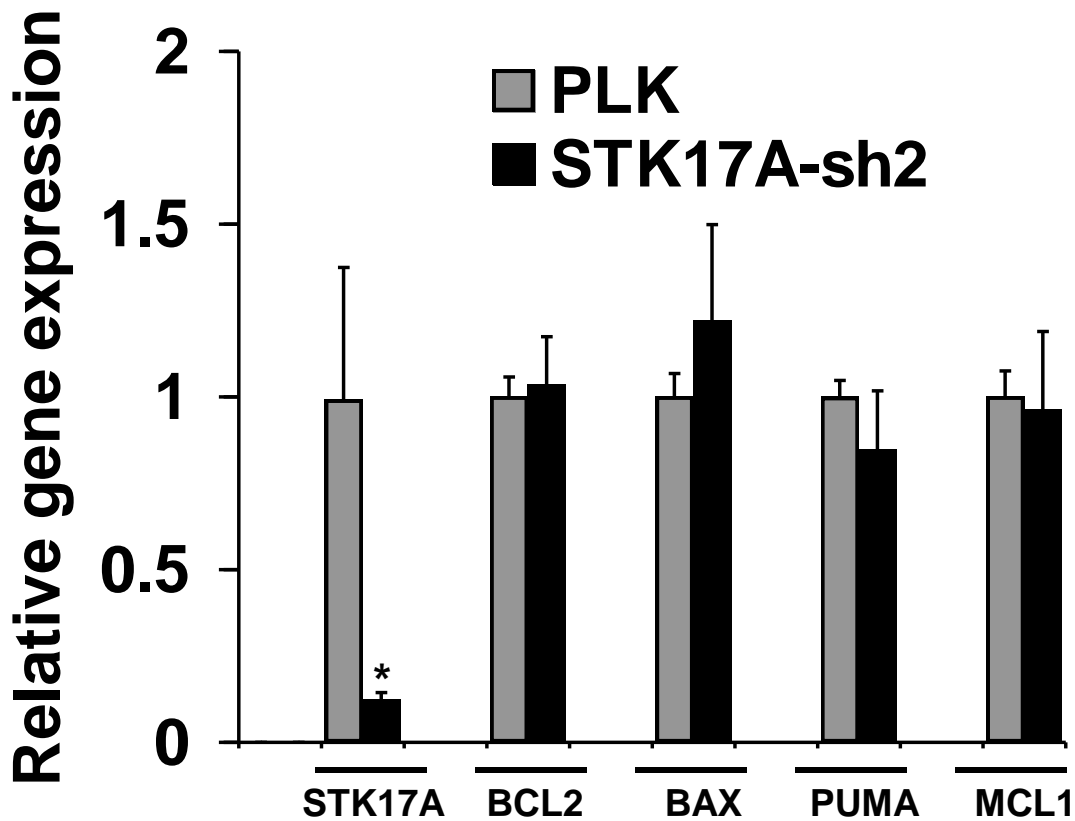


Fig. S3. **STK17A knockdown does not alter expression of BCL2 family members.** Real time PCR analysis of indicted genes in NT2/D1 cells stably transduced with empty (PLK) or STK17A shRNA encoding lentivirus (STK17A-sh2). Error bars are standard deviation. * = $p < 0.05$.

Supplementary Table 1: Primers for qPCR

Gene	Forward primer (5'-3')	Reverse primer (5'-3')
<u>Expression</u>		
human STK17A	GCTGGGGAGAGCGGGTGT	CTGGCCGCCTGTCACTCCG
human STK17B	AAAAATAGGGCATGCGTGTGA	CATAGTTCAGGATTTCTGGAGCTAAA
human p53	CGGGTCACTGCCATGGA	GGTCTGAAAATGTTTCTTGACTCA
human p21	TGGAGACTCTCAGGGTCGAAA	GGCGTTTGGAGTGGTAGAAATC
human GAPDH	GATTCCACCCATGGCAAATT	GATGGTGTGGGATTTCCATTG
human MT1H	TCCAGTCTCACCTCGGCTTGCA	CAGGAGCCACCAGCCTCGCA
human MT1M	TCCGGGTGGGCTAGCAGTC	AGCCGCGGTAAGGCTGGAGA
human MT1X	TCATCTGTCCCGTGC	GCGAGCAGGAGCAGTTGGGG
mouse STK17B	GCAAGTGAGCTTCGGGAAAT	GCTGTGGTAATGGGATCATAGTTG
mouse p53	CCATCTACAAGAAGTCACAGCACAT	ATCGGAGCAGCGCTCATG
mouse P21	GATTGCGATGCGCTCATG	TCTCCGTGACGAAGTCAAAGTTC
mouse GAPDH	AGGTCCGGTGTGAACGGATTG	TGTAGACCATGTAGTTGAGGTCA
<u>ChIP</u>		
STK17A-p53RE1	CCCTGCATAAGACACGAATTCC	AGTGA ACTGGAGGCCACAA
STK17A-p53RE2	GACTGGTTAAGGCTTGTTACCTTTCT	TGCCCCAGTAACGAAATCATT
STK17A-p53RE3	GCCAAGTCTGAGGCTCCATAGA	CCAGAAGCACTCAACCATGGAT
STK17A-p53RE4/5	TGAATCTCCTCCAACCAAAAATAGT	GGGTTTACCTAGATTTATGTCAACA
STK17A-30kb	GAGAAAAACAAGAAGGAGTACATCGA	GCCTCGGTCTGCTGTACCA
p21p53RE	CATGTTGAGCTCTGGCATAGAAGA	TCCCCTTCCTCACCTGAAAA
PLK2p53RE	GTGGTATCAACATTAATCGAACATTTACA	TGGCAATAAGCCTCTTTTCCA
GAPDHpromoter	ACAGGGCCGGGATTGTCT	GCACGGAAGGTCACGATGT
Desert1	ACGCCAGCTGCCTTCTTCT	GCCTCCGCTTGCTGAACT
Desert2	AAAGCTGGGAAGCCTACACTGA	CTTAACCCTTCCTTAGGACTTGTCA

Supplementary Table 2: Predicted p53 response elements in hSTK17A

Site	Position	Score	%max	Sequence
p53RE1	chr7:43,617,244	26.154	100.00	GGGCATGCTC-AGGCAAGTCC
p53RE2	chr7:43,626,078	22.999	87.93	AAGCTTGACT-GGTTA-AGGCTTGTTA
p53RE3	chr7:43,659,377	23.728	90.72	GGACTTGTC-ATG-TGGCATGACT
p53RE4	chr7:43,662,441	23.728	90.72	AGGCATGCAC-CATGACACT-CGGCTAGCTT
p53RE5	chr7:43,664,081	23.728	90.72	TAACATGTCT-TAACTGTA-AAACATGTAT