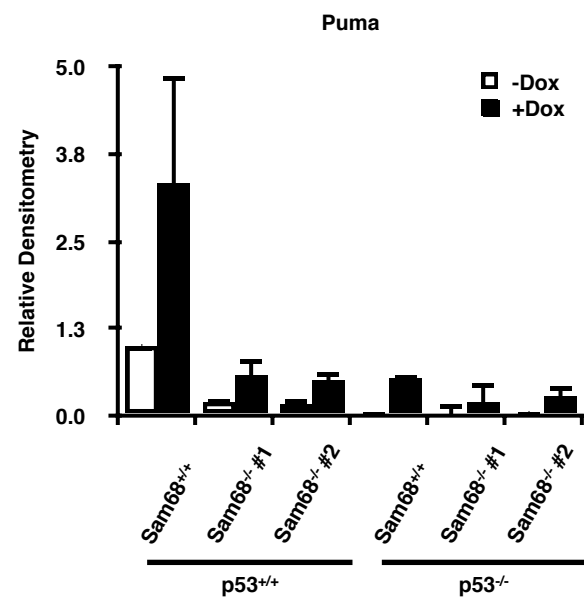
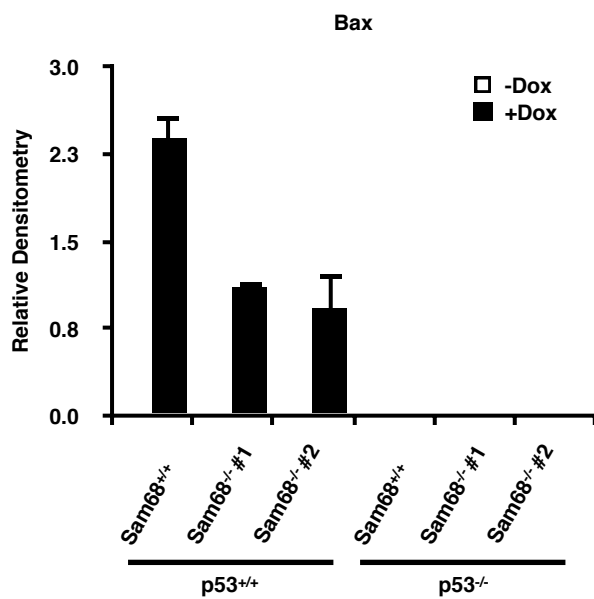
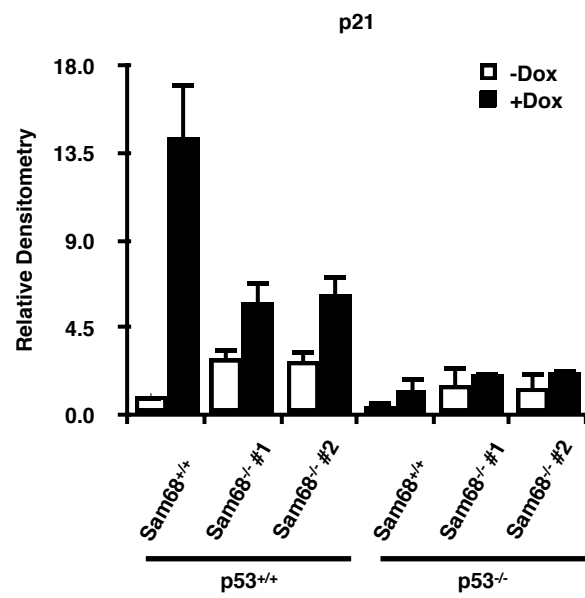
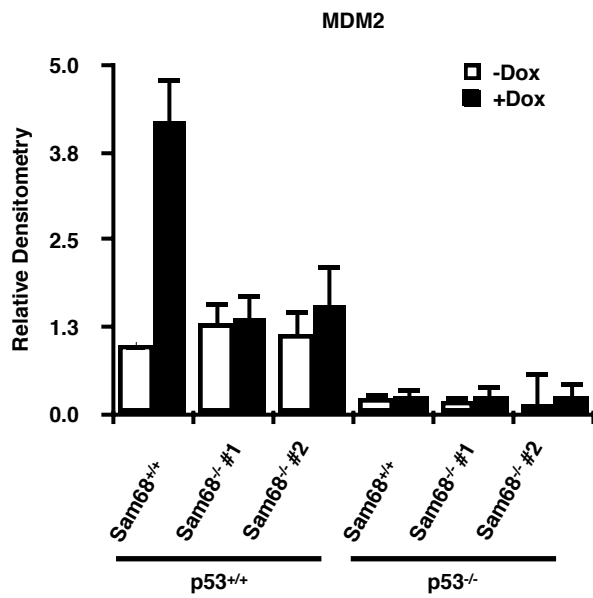
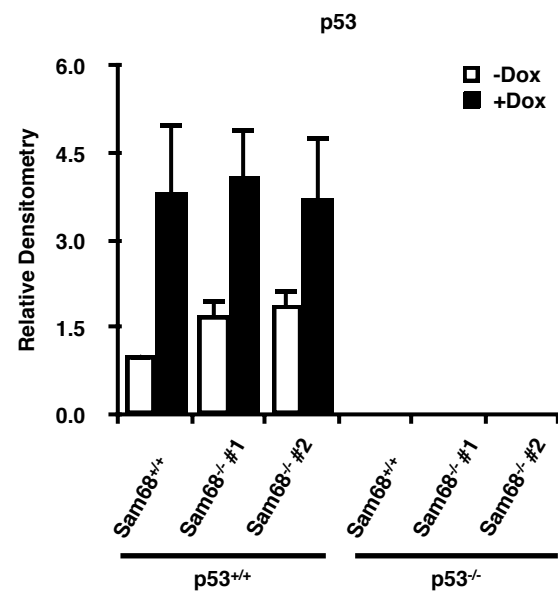
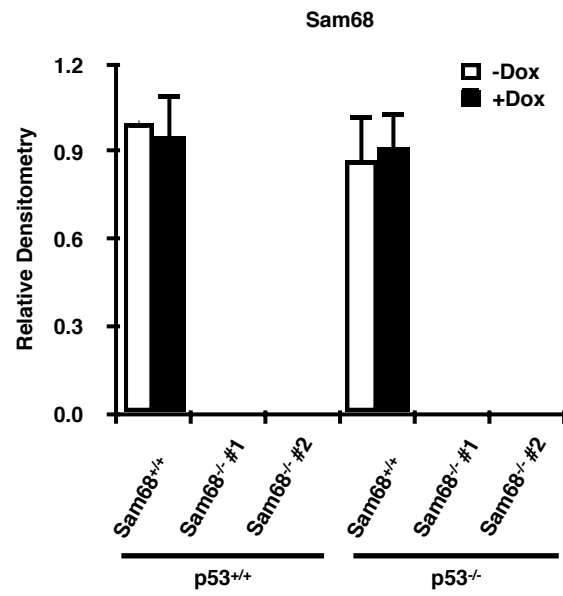
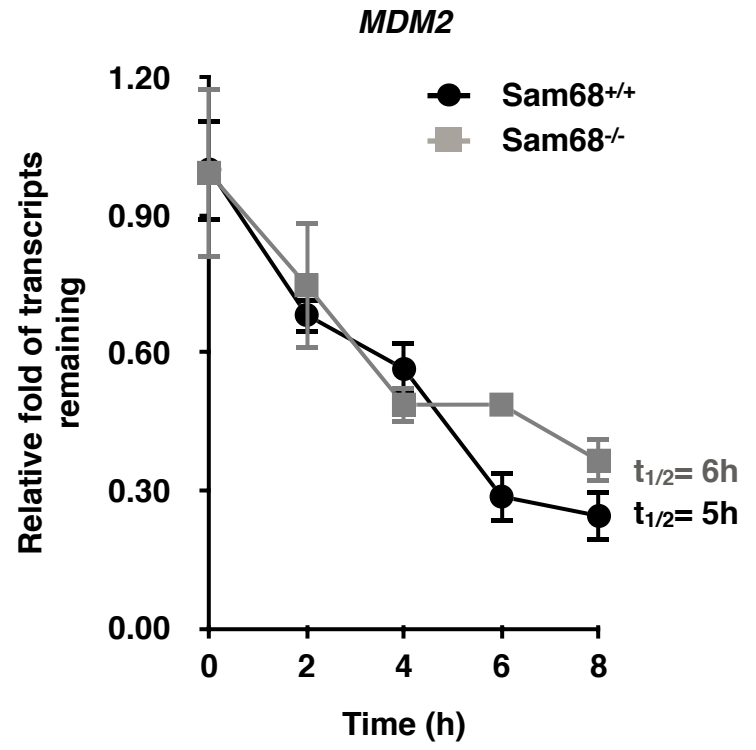
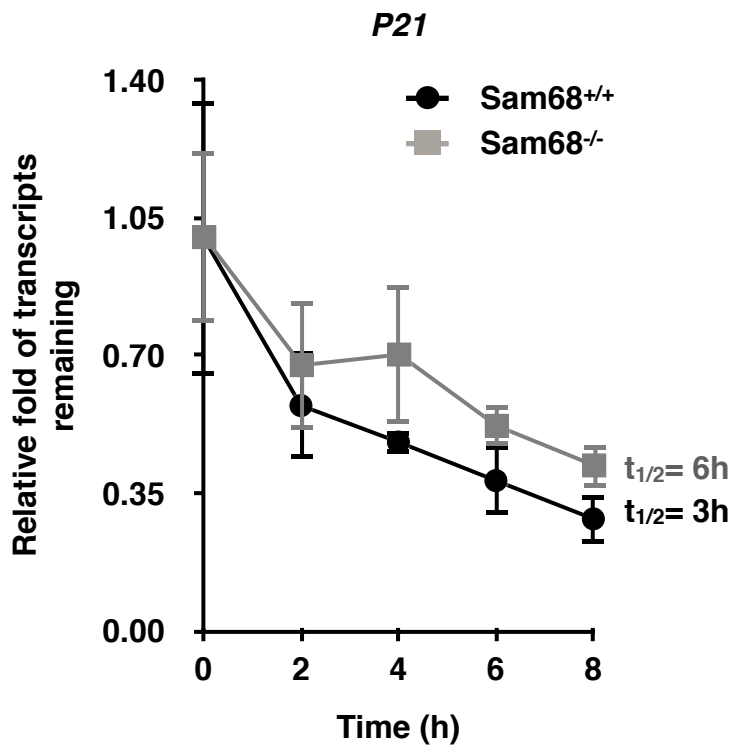
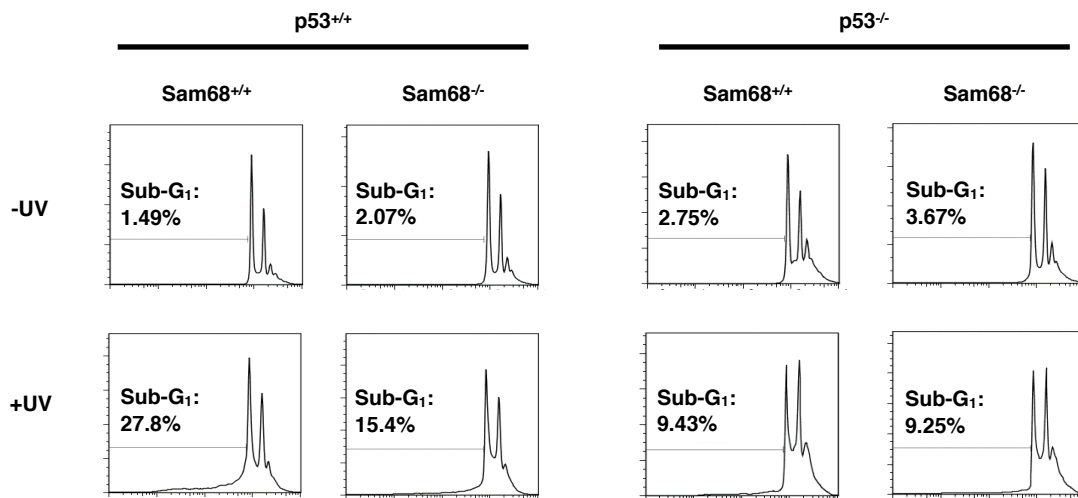


Li and Richard, Figure S2

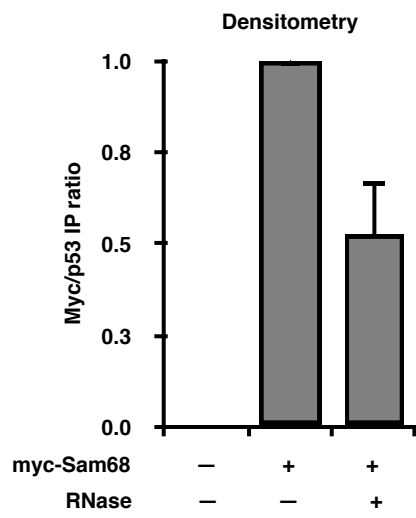
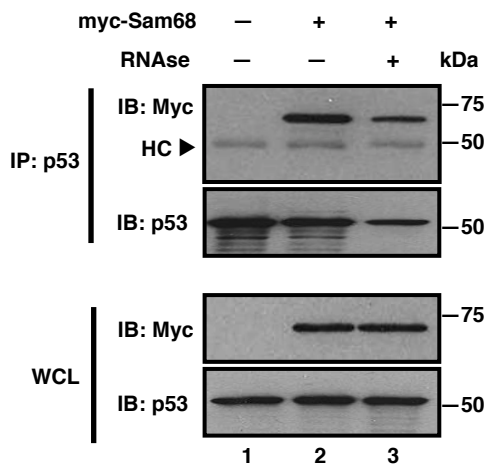




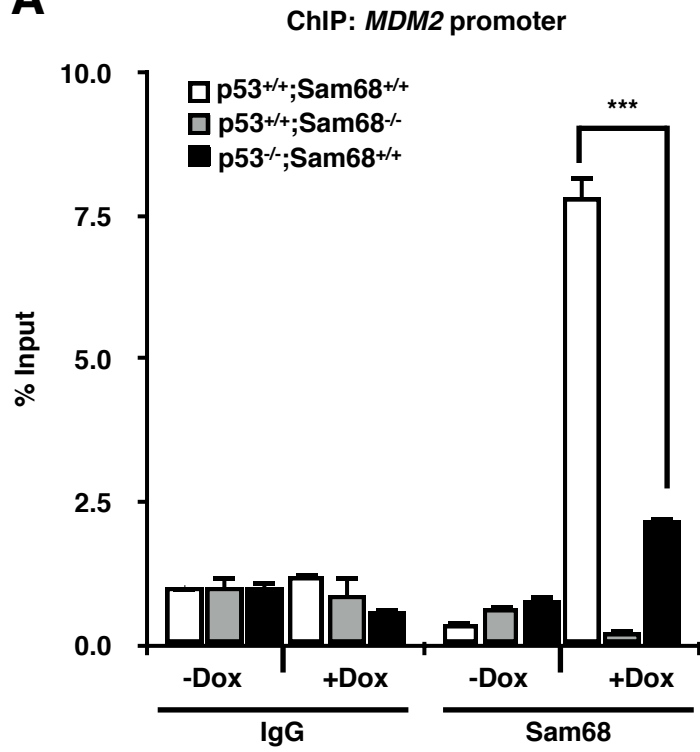
Li and Richard, Figure S4



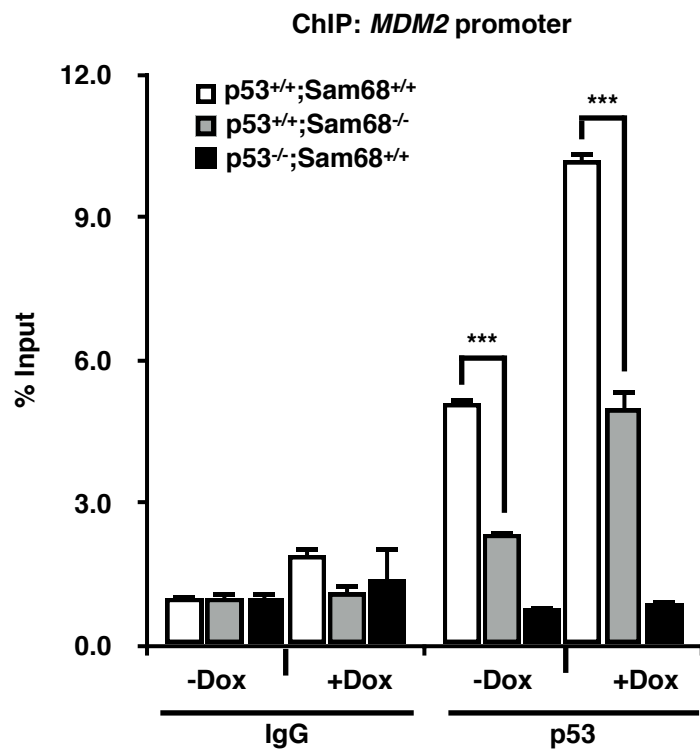
Li and Richard, Figure S5



A



B



Li and Richard, Table S1

Primers			
Gene	Application	Forward (5'-3')	Reverse (5'-3')
<i>P21</i>	qPCR	TGCCGAAGTCAGTTCCTTGT	GTTCTGACATGGCGCCTCC
	ChIP-qPCR	AGCAGGCTGTGGCTCTGATT	CAAATAGCCACCAGCCTCTTCT
<i>PUMA</i>	qPCR	GACCTCAACGCACAGTACGA	GAGATTGTACAGGACCCTCCA
	ChIP-qPCR	GGTTGACTCAGCTTTTCCTCTTG	GGAAAATGCATGGTTTAAATAGCC
<i>BAX</i>	qPCR	GGGTTGTCGCCCTTTTCTAC	GGAGGAAGTCCAATGTCCAG
<i>MDM2</i>	qPCR	AGGAGATTTGTTTGGCGTGC	TGAGTCCGATGATTCCTGCTG
	ChIP-qPCR	GGTTGACTCAGCTTTTCCTCTTG	GGAAAATGCATGGTTTAAATAGCC
<i>SAM68</i>	qPCR	CTCCTGCTAGGCCAGTGAA	TTGTGGGTAAAGCAACAGGA
	PCR	TG TTCAGTCTGGCTTGTGAGT	CACTGCAAGAGAAGAGGGCA
<i>PR-lincRNA-1</i>	qPCR	AAGTCACTTGCCTGAGTTTGG	CTGCTGGGGCTCAACTGT
<i>lincRNA-p21</i>	qPCR	GGGTGGCTCACTCTTCTGGC	TGGCCTTGCCCGGGCTTGTC
<i>GAPDH</i>	qPCR	GACAGTCAGCCGCATCTTCT	GCGCCCAATACGACCAAAT
<i>18S</i>	qPCR	GCAGGCGCGGGTAACC	AAGCTTATGACCCGCACTTACTG
<i>ACTB</i>	qPCR	ACCACACCTTCTACAATGAGC	GATAGCACAGCCTGGATAGC

Li and Richard, Table S2

	Sam68	Deletion (bp)
HCT116 p53	clone #1	899
	clone #2	757
HCT116 p53	clone #1	515
	clone #2	877

SUPPLEMENTARY DATA

SUPPLEMENTAL TABLE AND FIGURE LEGENDS

Figure S1. RNAi-depletion of Sam68 attenuates upregulation of p53 targets in response to DNA damage.

(A) RT-qPCR analysis of *SAM68* and direct p53 targets (*MDM2*, *P21*, *BAX*) in p53 wild type HCT116 or

(B) MCF-7 cells. Cells were either untreated or treated with 1 μ M of doxorubicin for 24 h before RNA extraction. Expression levels were normalized to *GAPDH*. Data are represented as mean \pm S.D. from 3 independent experiments done in biological triplicates. Statistical significance was calculated with student's *t*-test (* $p \leq 0.05$, ** $p \leq 0.005$, *** $p \leq 0.0005$).

Figure S2. Densitometry quantification.

Quantification of p53, Sam68, and p53 targets (*MDM2*, *p21*, *Bax*, *Puma*) in HCT116 cells untreated (-Dox) or treated with doxorubicin (+Dox). Densitometry analysis was performed using ImageJ. Expression levels were normalized to loading control. Data are represented as mean \pm S.D. from 3 independent experiments.

Figure S3. Sam68 selectively regulates *P21* mRNA stability.

Transcript stability was assessed in *Sam68*^{+/+} or *Sam68*^{-/-} HCT116 cells treated with actinomycin D (5 μ g/ mL). mRNA was extracted at the indicated time points and transcripts were quantified by qPCR using primers specific for *P21* and *MDM2* which were normalized to *GAPDH* expression levels. Transcript half-life ($t_{1/2}$) was calculated based on the relative fold of mRNA remaining compared to initial levels (0 h). Data, replicated in 3 independent experiments, are represented as mean \pm S.D. of technical triplicates. Statistical significance was calculated with student's *t*-test (* $p \leq 0.05$, ** $p \leq 0.005$, *** $p \leq 0.0005$).

Figure S4. Sam68-deficiency reduces p53-mediated apoptosis.

Cell death was analyzed by flow cytometry in untreated (-UV) and treated (+UV, 60 J/m²) isogenic HCT116 cells. Total apoptosis was assessed by measuring sub-G₁ cells after PI staining, and quantification was done using FlowJo software.

Figure S5. RNA enhances the interaction between Sam68 and p53.

p53 immunoprecipitation in doxorubicin-treated HCT116 cells transiently transfected with either empty vector (-) or myc-Sam68 (+). Lysates were untreated (-) or treated (+) with RNase A (1mg/ mL) at 37°C prior to immunoprecipitation. Densitometry analysis (bottom) was performed using ImageJ. Levels were calculated as the ratio of total immunoprecipitated myc-Sam68 over total immunoprecipitated p53, and then normalized to the positive control (myc-Sam68 -RNase). Data are represented as mean ± S.D. from 3 independent experiments. IP, immunoprecipitation; IB, immunoblot; WCL, whole cell lysate; HC, heavy chain.

Figure S6. Sam68 and p53 are recruited to the *MDM2* promoter in an interdependent manner.

(A and B) ChIP-qPCR analysis of HCT116 cells. Cell lysates from untreated and doxorubicin-treated cells were immunoprecipitated with either nonspecific IgG, p53- or Sam68-specific antibodies. Precipitated DNA was quantified by qPCR with primers specific for p53-response elements of the *MDM2* promoter. Data, replicated in 3 independent experiments, are represented as mean ± S.D. of technical triplicates. Statistical significance was calculated with student's *t*-test (* $p \leq 0.05$, ** $p \leq 0.005$, *** $p \leq 0.0005$).

Table S1. List of primers.

Table S2. HCT116 Sam68^{-/-} clones.