

Figure S1: Analysis of genomic TP53 BSs. (A) Relative affinities compared to the consensus TP53 BS (BS100) of genomic TP53 BSs as computed by the TP53 *No Read Left Behind* model (25). Displayed are 250 BSs with the highest predicted affinities. Affinities of BS014 and BS006 are indicated by red lines. (**B**) Number of genomic TP53 response elements with one, two, or three TP53 BSs. Only BSs with a relative affinity of > 0.0001 as defined by the TP53 *No Read Left Behind* model (25). BS-BS spacer length distribution of all genomic response elements with two TP53 BSs.

Name	Used for	Sequence (5'-3')
MT024	Oligo library amplification and	ACCTTGGAATTCCGGAGCGAACCGA
	addition EcoRI overhang	GTTAG
MT025	Oligo library amplification and	CGCTTAGCTAGCCTCTTGGATGCGA
	addition Nhel overhang	CGATG
MT165	Gene-specific primer for cDNA	CCTCTCCGCCGCCCACCAGCTCGAA
	synthesis	CTCCAC
MT164	cDNA amplification indexed primer	CAAGCAGAAGACGGCATACGAGATN
	including Illumina S1 and p7	NNNNNNGTGACTGGAGTTCAGACG
		TGTGCTCTTCCGATCTGGTGATGCG
		GCACTCGATCTTCATGGC
MT397	cDNA amplification indexed primer	AATGATACGGCGACCACCGAGATCT
	including Illumina S2 and p5	ACACNNNNNNNACACTCTTTCCCTA
		CACGACGCTCTTCCGATCT

Supplementary Table S1: Sequences of the primers used in the study.