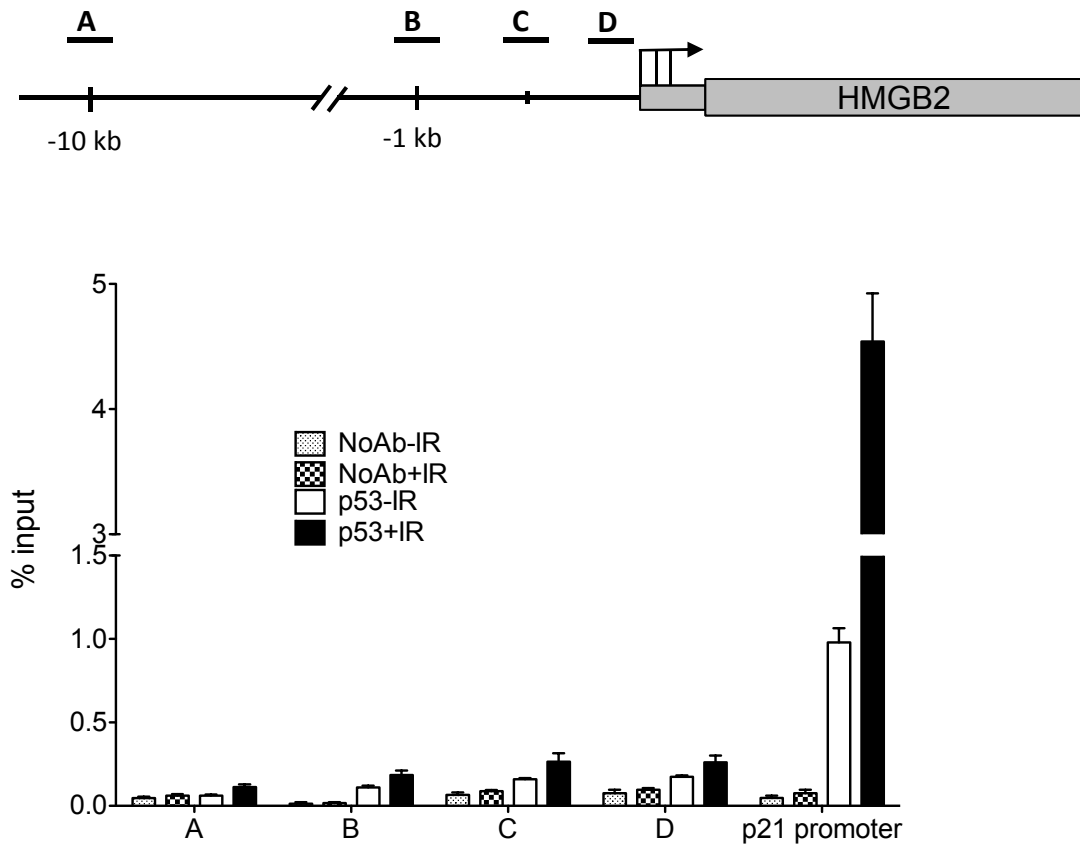


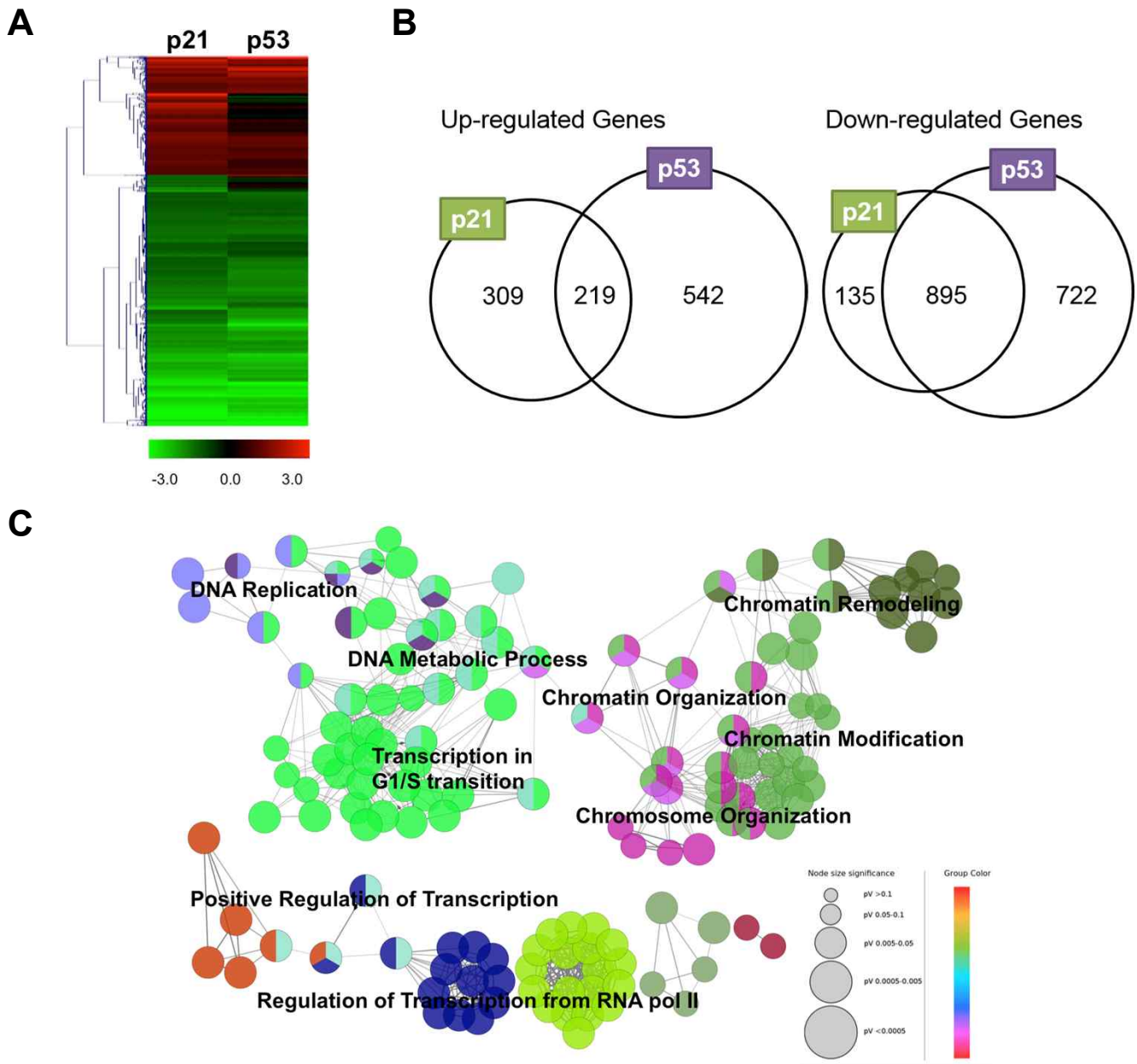
Supplementary Fig. 1



Supplementary Fig. S1. p53 does not bind to the HMGB2 promoter region.

The results are expressed as the relative enrichment of promoter DNA (regions B, C, and D) in chromatin immunoprecipitated with anti-p53 antibodies with respect to input DNA. The diagram shown indicates the location of the amplicon, the TSS (arrow), and the HMGB2 gene (shadow box). Amplicons containing p53-binding elements located in the CDKN1A (p21) promoter region were used as a positive control for the ChIP experiment.

Supplementary Fig. 2



Supplementary Fig. S2. Genome-wide analysis of p53- and p21-mediated gene expression.

(A) Microarray analysis was performed after induction of p21 and p53 using the Tet-On conditional expression system. (B) The number of genes regulated by p53 and p21 by more than two-fold are shown with a Venn diagram. (C) KEGG pathway analysis of p21-mediated downregulated genes.

Supplementary Table 1. Primer sequences used for qRT-PCR

Gene	Accession No.	Primer Sequences
PPIA/CYPA	NM_021130.3	5'-CCCACCGTGTTCTTCGACAT-3' 5'-CCAGTGCTCAGAGCACGAAA-3'
RPL13A	NM_012423.2	5'-CCTGGAGGAGAAGAGGAAAGAGA-3' 5'-TTGAGGACCTCTGTGTATTTGTCAA-3'
HMGB2	NM_002129.6	5'-CTTGGCACGATATGCAGCAA-3' 5'-CAGCCAAAGATAAACAACCATATGA-3'
CDKN1A/p21	NM_000389.4	5'-CTGCGCCAGCTGAGGTGTGAG-3' 5'-GCCGCATGGGTTCTGACGGA-3'
TP53	NM_000546	5'-CTGCCTCCGGGTCCTACTGCC-3' 5'-TTGGGACGGCAAGGGGGACA-3'
Rb	NM_000321.2	5'-GCTTGGTAACTTGGGAGAA-3' 5'-AGGTCAACTGCTGCAATAAA-3'
E2F1	NM_005225.2	5'-CCCAACTCCCTCTACCCTTGA-3' 5'-TCTGTCTCCCTCCCTCACTTTC-3'
NF-YB	NM_006166.3	5'-GCCGATTGGAGACGGGAGCC-3' 5'-ACCGTGTTGTCAGTGGTGCTGA-3'

Supplementary Table 2. Primer sequences used for ChIP-qPCR

Gene	Location from TSS/Ref	Primer Sequences
HMGB2-A	-10,000	5'-CTTGGCCTTCAGATGGGATA-3' 5'-TAAAGGGTGCGGTATCAAGC-3'
HMGB2-B	-980 ~ -1096	5'-GCTGTATGCCGTTTGGAGAA-3' 5'-GGCATTCACTGTCTCGTCCT-3'
HMGB2-C	-606 ~ -402	5'-TACGACAACCTCAGCGACAG-3' 5'-TTCCTCCGACCACCATTAG-3'
HMGB2-D	-244 ~ -24	5'-TTACCTTAGCGCCAGCAAAC-3' 5'-CCGGTCAGGAGAGGAATGTA-3'
CDKN1A/p21	(Lagger et al., 2003)	5'-AGCAGGCTGTGGCTCTGATT-3' 5'-CAAAATAGCCACCAGCCTCTTCT-3'

Supplementary Table 3. siRNAs used for gene knockdown

Gene	siRNA Sequence
CDKN1A/p21	CUGUACUGUUCUGUGUCUUdTdT
TP53	GCCAAGUCUGUGACUUGCACGUACU
Rb	GAUACCAGAUCAUGUCAGAdTdT
E2F1	UGGACCACCUGAUGAAUAUdTdT
NF-YB	GGCAUUUACUAACCAGUUAdTdT
Control	CCUACGCCACCAAUUUCGUdTdT