Figure S1. Fli-1 expression induces Mknk1 transcription in K562 cells. The K562-fli1 inducer cells were treated with or without doxycycline (dox) for 6 h (A) or 24 h (B) and the level of Mknk1 transcription was determined by RT-qPCR. **P<0.005. FLI1, friend leukemia integration 1; MKNK, mitogen-activated protein kinase (MAPK)-interacting serine/threonine kinase.

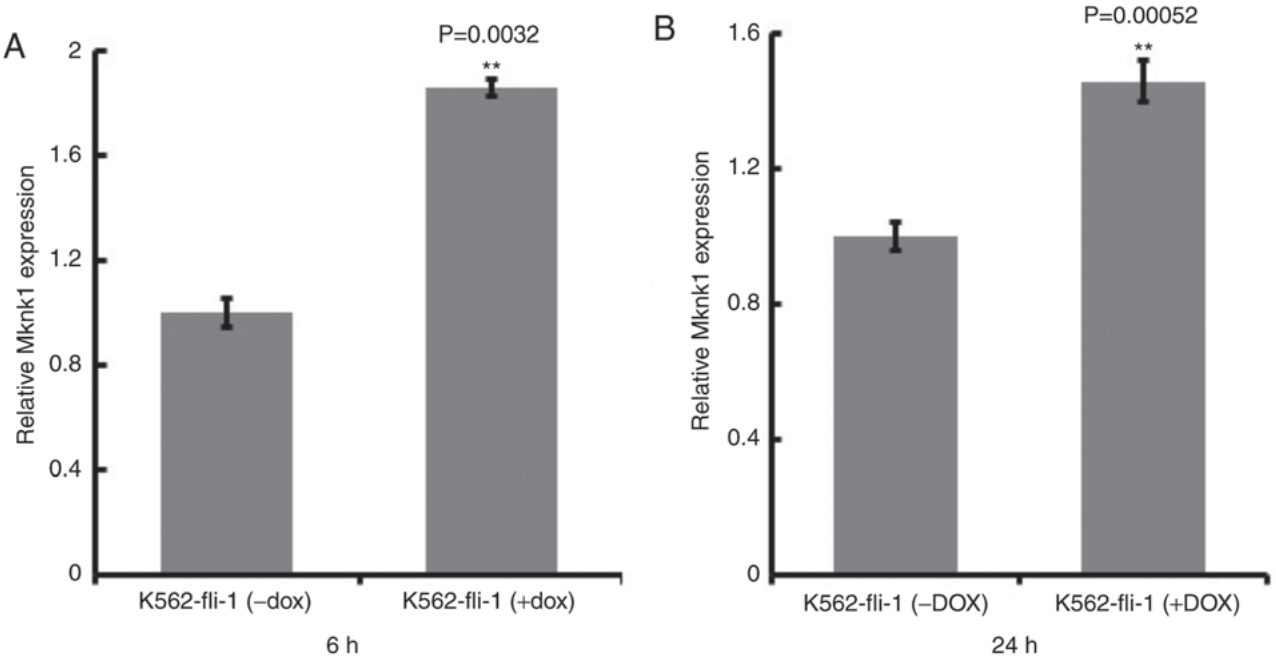

Figure S2. Fli-1 expression in 293T cells following plasmid transfection. 293T cells were transfected with MigR1 (1ug) and MigR1-FLI1 expression vectors for 48 h and subjected to western blot analysis for the expression of FLI1 and GAPDH. FLI1, friend leukemia integration 1.

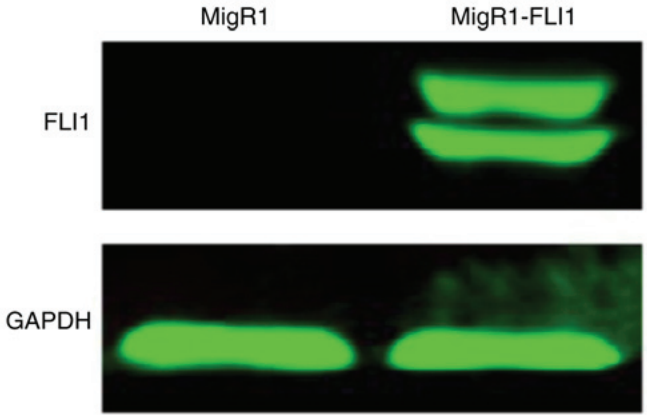

Figure S3. Chromatin immunoprecipitation (ChIP) assay for the binding of FLI1 to a region of the *Mknk1* promoter that lacks a Fli-1 binding site. FLI1, friend leukemia integration 1; MKNK, mitogen-activated protein kinase (MAPK)-interacting serine/threonine kinase.

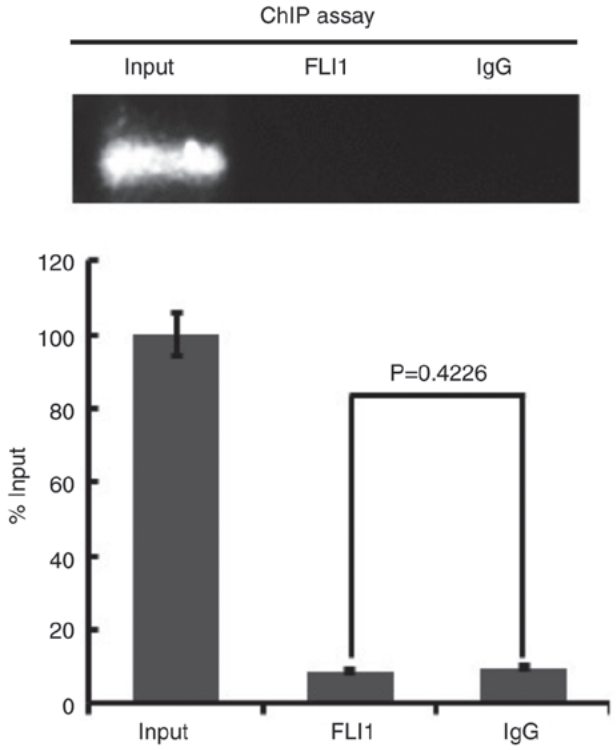

Figure S4. Expression of FLI1, MKNK1 and survivin in K562-fli1 cells after MKNK1 downregulation. K562-fli1 cells were treated with doxycycline for 24 h and then transfected with si1-siRNA for 48 h. Cells were then subjected to western blot analysis using the indicated antibodies. FLI1, friend leukemia integration 1; MKNK, mitogen-activated protein kinase (MAPK)-interacting serine/threonine kinase; Rd, relative density.

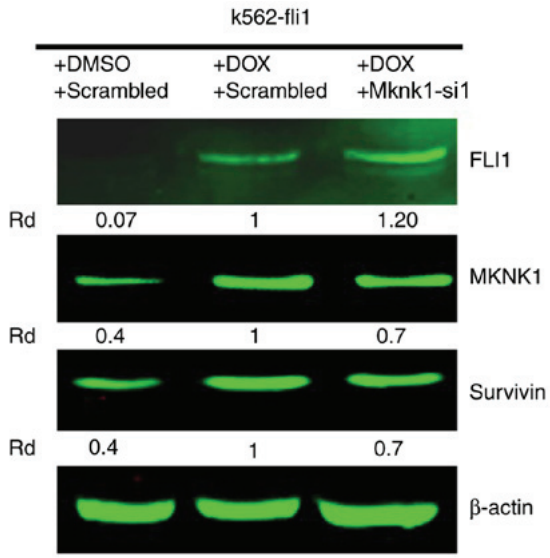

Table SI. Primer sequences for the *Mknk1*-A and -B promoters and Mknk1 siRNA.

Promoter cloning	Sequence (5'-3')
Mknk1-A promoter	TAAGTTTGAGGCCAGCCAGGGTTACATAGTGAGACTATTTAGAA AAACAACAATTTAAAAAATTTAATTACCGGAAGTAATGAACTTC TGTATACGCAGACCTTTATAGAAATTTTACAGTCATGCCCGGTGG TGTGCGTCTGTAATCAGAGAACTCTGGAGACTGAGTCAGAAGA AAAACGAGTTTGAAGTCAAGTCTGGAGTATACAAAAGGCCTTG TCTCAAAAATAAACTTTACTTAACAGAGCTGCCCTCAGGTTTAC AAGAACTCCGTTCTGGCTCGCAGAAGTAACTATTTGCACCTGC AGCGTCTTCCACTTTCCGCTTGTAAAAGAAACCCGCAACAACC AGAGGACGCTCTGATATGCCACGCCTGCGCAGTGAACTGGCCT TGCTTCTCGCCACGTGTGGCCCTCGGGGCGCAGGCGTGACTCC TCCCCCTCACGCCTCCTTCTGCTCGGGCCCTCCCCCTGAGTTTA GCTCCGCCTCTTCCGCGTTCTCGAC
Mknk1-B promoter	TAAGTTTGAGGCCAGCCAGGGTTACATAGTGAGACTATTTAGAA AAACAACAATTTAAAAAATTTAATTACCGGAAGTAATGAACTTC TGTATACGCAGACCTTTATAGAAATTTTACAGTCATGCCCGGTGG TGTGCGTCTGTAATCAGAGAACTCTGGAGACTGAGTCAGAAGA AAAACGAGTTTGAAGTCAAGTCTGGAGTATACAAAAGGCCTTG TCTCAAAAATAAACTTTACTTAACAGAGCTGCCCTCAGGTTTAC AAGAACTCCGTTCTGGCTCGCAGAAGTAACTATTTGCACCTGCA GCGTCTTCCACTTTCCGCTTGTAAAAGAAACCCGCAACAACCA GAGGACGCTCTGATATGCCACGCCTGCGCAGTGAACTGGCCTT GCTTCTCGCCACGTGTGGCCCTCGGGGCGCAGGCGTGACTCCT CCCCCTCACGCCTCCTTCTGCTCGGGCCCTCCCCCTGAGTTTAG CTCCGCCTCTTCCGCGTTCTCGAC
Mknk1 siRNA sequences [Mknk1- si(1-3)]	
Mknk1-si1	GCUGACCUCUGAAUUGCUUTTAAGCAAUUCAGAGGUCAGCTT
Mknk1-si2	GCAAGGAGGUUCCAUCUUATTUAAGAUGGAACCUCCUUGCTT
Mknk1-si3	GCGUGGUCCUCUACAUCAUTTAUGAUGUAGAGGACCACGCTT

Table SII. Sequences of primers used for the calculation of efficiencies of amplification for each primer pair and the analysis of gene expression.

Gene name	Sense (5'-3')	Antisense (5'-3')	Efficacy (%)[a]
Primers used for qPCR			
β-actin	CATGTACGTTGCTATCCAGGC	CTCCTTAATGTCACGCACGAT	97.91
GAPDH	AGAAGGCTGGGGCTCATTTG	AGGGGCCATCCACAGTCTTC	94.43
Mknk1	GAGATGGGCAGTAGCGAACCCC	GGCTCACGGCACCTTGAACTTT	94.58
Mknk2	TTTCCACCGTTCGTTCAAGG	TGCAGGCCAAAGTCAGAGTC	91.50
survivin	TTCTCAAGGACCACCGCATC	GCCTCCCAAAGTGCTGGTAT	97.87
FLI1	CCAACGAGAGGAGAGTCATCG	TTCCGTGTTGTAGAGGGTGGT	94.02
Primers used for cloning			
Mknk1-A	GGGGTACCAGAAGGCAGAGGCAGGTAGA	CCGCTCGAGGTCGAGAACGCGGAAGAGG	
Mknk1-B	GGGGTACCTAAGTTTGAGGCCAGCCAGG	CCGCTCGAGTACCTTAGTTGACCACCGCG	
Primers used for chromatin immunoprecipitation analysis			
FBS	GCTGTTGTTTTAGCTGCTGTAGTGG	TACAGACGCACACCACCGGGC	93.26
FBS-NC	ACTTCCACTTCCTTCCCTCA	CAGATGCCTGAGACGGGAAG	91.12

[a]Analysis was carried out using the $2^{-\Delta\Delta Cq}$ method (Livak and Schmittgen, 2001; https://www.ncbi.nlm.nih.gov/pubmed/11846609).