Supplementary

Table S1 The target sequences of siRNA-HMGB2

Term	Sequences
si-HMGB2-scramble	Forward: UUCUCCGAACGUGUCACGUdTdT
	Reverse: ACGUGACACGUUCGGAGAAdTdT
si-HMGB2-1	Forward: GCGUUAGCGAGAAACCAGUTT
	Reverse: ACUGGUUUCUCGCUAACGCTT
si-HMGB2-2	Forward: GAAAAUCGCCCAAAGAUCATT
	Reverse: UGAUCUUUGGGCGAUUUUCTT
si-HMGB2-3	Forward: GGAAAAGUCCAAGUUUGAATT
	Reverse: UUCAAACUUGGACUUUUCCTT

siRNA, small interfering RNA; HMGB2, high mobility group box 2.

Table S2 The information of primer sequences

Genes	Sequences
GAPDH	Forward: GTCTCCTCTGACTTCAACAGCG
	Reverse: ACCACCCTGTTGCTGTAGCCAA
HMGB2	Forward: TGACAAAGCTCGCTATGACAGG
	Reverse: GGAAGAAGGCAGATGGTGGC
ZEB1	Forward: ACCCTTGAAAGTGATCCAGC
	Reverse: CATTCCATTTTCTGTCTTCCGC
vimentin	Forward: AAATGGCTCGTCACCTTCGT
	Reverse: TTGCGCTCCTGAAAAACTGC
p53	Forward: CCTCAGCATCTTATCCGAGTGG
	Reverse: TGGATGGTGGTACAGTCAGAGC
LEF1	Forward: GACGAGATGATCCCCTTCAA
	Reverse: CGGGATGATTTCAGACTCGT

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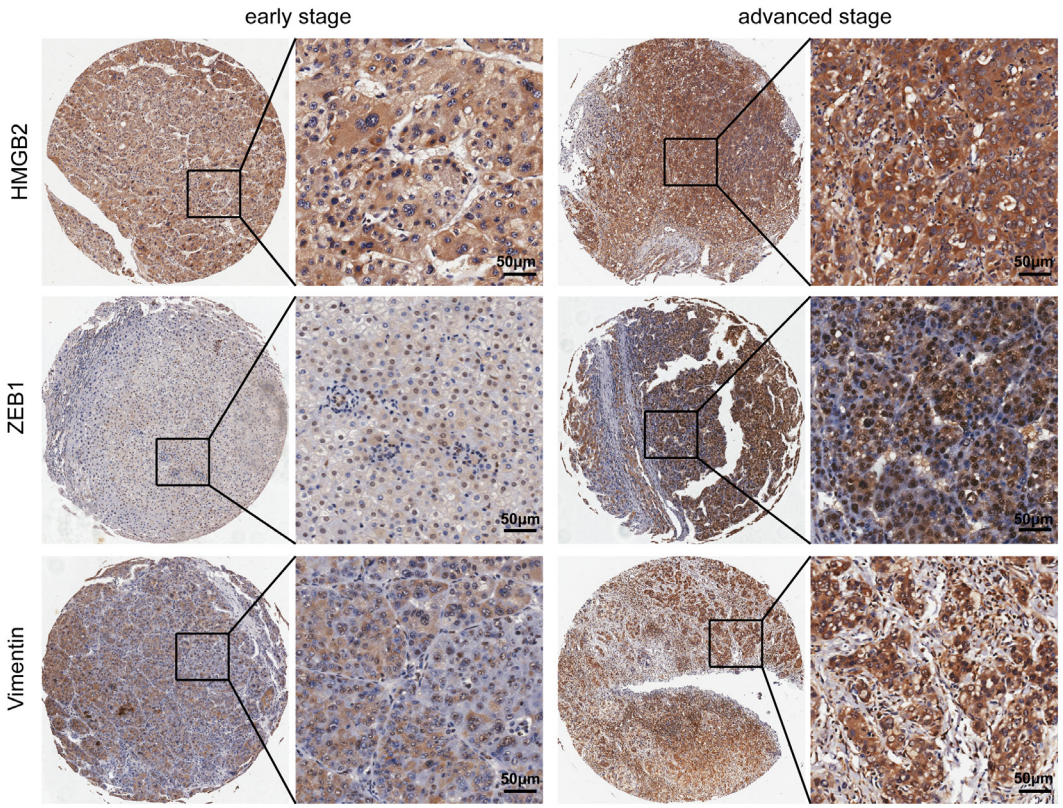

Figure S1 HMGB2 is highly expressed in advanced HCC tissues. Representative fields demonstrating HMGB2, ZEB1 and vimentin protein level in early stage and advanced HCC samples (scale bar =50 μm, n=5). DAB and hematoxylin staining methods were used to detect cytoplasmic and nuclear staining, respectively. HMGB2, high mobility group box 2; ZEB1, zinc finger E-box binding homeobox 1; HCC, hepatocellular carcinoma; DAB, 3,3'-diaminobenzidine.

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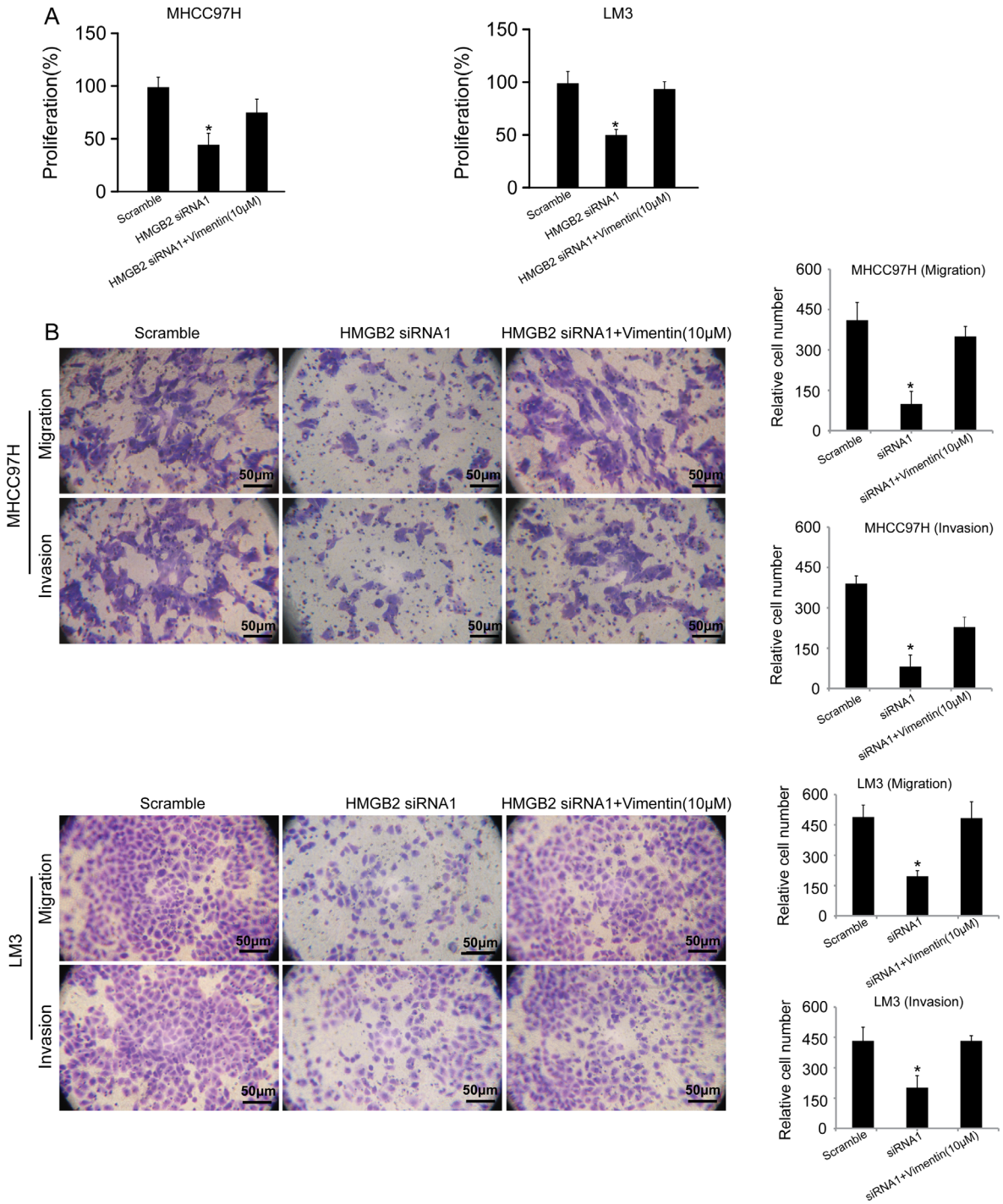

Figure S2 Recombinant human vimentin protein could partially restore the effect of HMGB2. (A) The effects of co-culture with HMGB2 siRNA and recombinant human vimentin protein on HCC cell proliferation were assessed by using CCK-8 assay. (B) The results of co-culture with HMGB2 siRNA and recombinant human vimentin protein on motility potential of HCC were evaluated by transwell. Scale bar =50 μm. 1% crystal violet stain solution was used to label cells. We repeated each experiment three times independently. Student *t*-test was employed for comparison between groups. *, P<0.05 *vs.* scramble group and co-culture group. HMGB2, high mobility group box 2; siRNA, small interfering RNA; HCC, hepatocellular carcinoma; CCK-8, cell counting kit-8.

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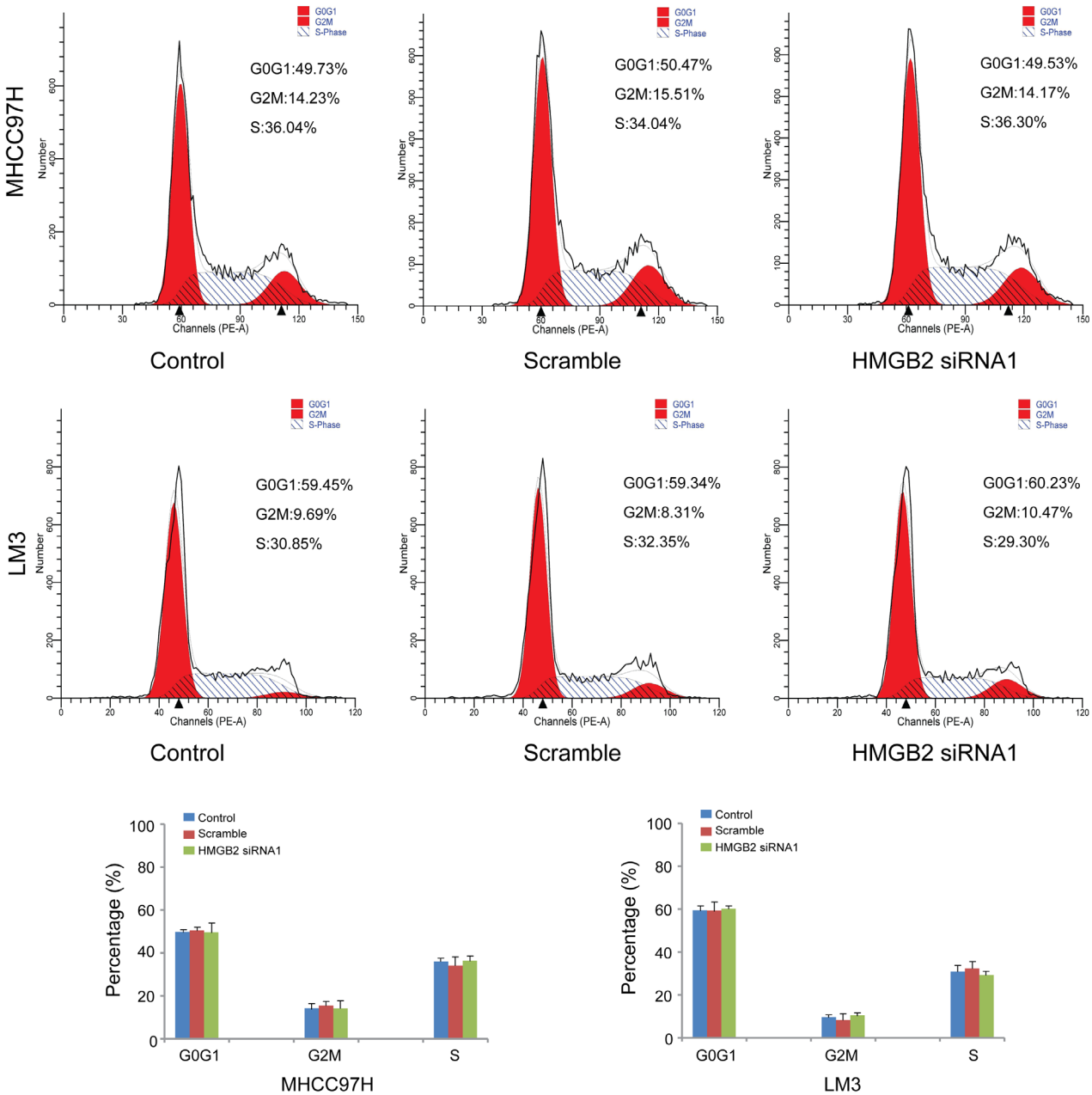

Figure S3 HMGB2 do not affect the cell cycle progression of HCC cells. Cells were collected after transfection with HMGB2 siRNA1 for 48 h. Cell cycle changes were detected by flow cytometry. G0, G0 phase, quiescent period of the cell cycle; G1, G1 phase, the first stage of the cell cycle; G2, G2 phase, mitotic preparation period of the cell cycle; M, M phase, mitotic period of the cell cycle; S, S phase, DNA synthesis stage of the cell cycle. We repeated each experiment three times independently. Student *t*-test was employed for comparison between groups. HMGB2, high mobility group box 2; siRNA, small interfering RNA; HCC, hepatocellular carcinoma.

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