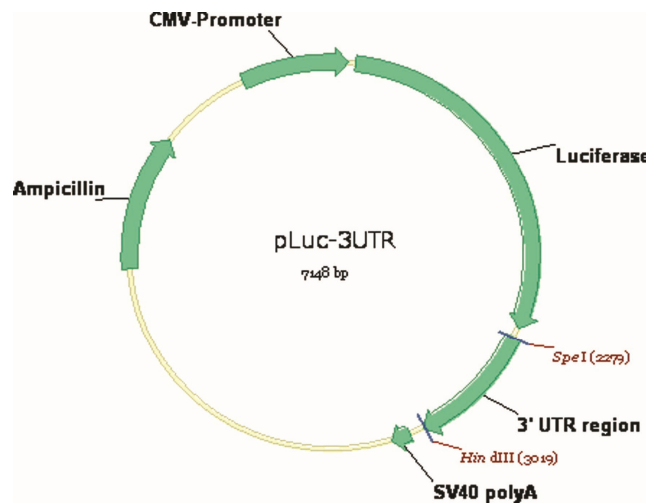


SUPPLEMENTARY TEXT

Ets-1 3'UTR insert was designed based on the sequence from database resources, MiRanda (<http://www.microrna.org/microrna/home.do>) and Ensemble (<http://uswest.ensembl.org/index.html>). The sequence indicated a portion of Ets-1 3'UTR cloned to miR target luciferase reporter plasmid (Starting from 500bp to 700bp). The binding sites for miR-200b (590-596 and 635-641) are underlined as shown below:

```
5'-TATCACTCTAGTTTTGAAGCAAAGATGGACTTCAGTGGGGAGGGGCCAAAACC  
GTTGTTGTGTAAAATTTATTTTATTTAAATTTTGTGCCCAGTATTTTTTTTCTTAAAAAT  
CGTCTTAAGCTCTAAGGTGGTCTCAGTATTGCAATATCATGTAAGTTTGTTTTTATTT  
GCCGGCTGAGGATTCTGTCACAATGAAAG-3'
```

Below showed a schematic diagram of plasmid map for miR target reporter luciferase assay (image obtained from Signosis).



SUPPLEMENTARY FIGURE LEGENDS

Fig. S1. Dose-dependent effects of miR-200b mimic on angiogenic response and Ets-1 expression (A) Real-time PCR analysis of miR-200b expression after transfection of various dose of miR-200b mimic; Results are mean \pm SEM. * indicates $p < 0.05$. (B) Matrigel® tube formation visualized by phase contrast microscopy at 8 h after various dose of miR-200b mimic delivery in HMECs. Representative image of at least 3 independent experiments. Quantification of length of tube formation (% of control) of miR-200b mimic -transfected cells; Results are mean \pm SEM. ** indicates $p < 0.01$ compared to control. (C) Western blot analysis of Ets-1 protein expression in HMECs after delivery of various dose of miR-200b mimic. β -actin serves a loading control. Representative blot from three independent experiments. Quantification of band intensity relative to control; Results are mean \pm SEM. * indicates $p < 0.01$ compared to control.

Fig. S2. miR-200b exhibited anti-angiogenic effects, decreased Ets-1 and depleted MMP-1 and VEGFR2 expression in primary adult human dermal microvascular endothelial cells. (A) Real-time PCR analysis of miR-200b expression after transfection of miR-200b mimic; Results are mean \pm SEM. ** indicates $p < 0.01$. (B) Matrigel® tube formation visualized by phase contrast microscopy at 8 h after miR-200b mimic delivery in primary endothelial cells. Representative image of at least 3 independent experiments. Quantification of length of tube formation (% of control) of miR-200b mimic -transfected cells; Results are mean \pm SEM. *** indicates $p < 0.001$ compared to control. (C) Western blot analysis of Ets-1 protein expression in miR-200b mimic delivered primary endothelial cells. β -actin serves a loading control. Representative blot from three independent experiments. Quantification of band intensity relative to control; Results are mean \pm SEM. *** indicates $p < 0.001$ compared to control. (D) Real-time PCR analysis of MMP-1 and VEGFR2 expression after transfection of miR-200b mimic in primary endothelial cells; Results are mean \pm SEM. *** indicates $p < 0.001$ compared to control mimic delivered cells.

Fig. S3. Specificity of Ets-1 antibody. Representative diagram showing Ets-1 immunoreactivity in the presence or absence of primary antibody from 3 independent experiments. Nuclear counterstain with DAPI and the corresponding merged image were shown in the lower panels.

Fig. S4. HIF transactivation was evidenced after hypoxia treatment and HIF-1 α stabilization. HIF-responsive element (HRE) reporter luciferase assay from hypoxia (1% O₂ for 24 h)-treated (A) or HIF-stabilized (B) HMECs; Results are mean \pm SEM. *** represent $p < 0.001$ compared to control treatment or control virus infected cells.

Figure S1

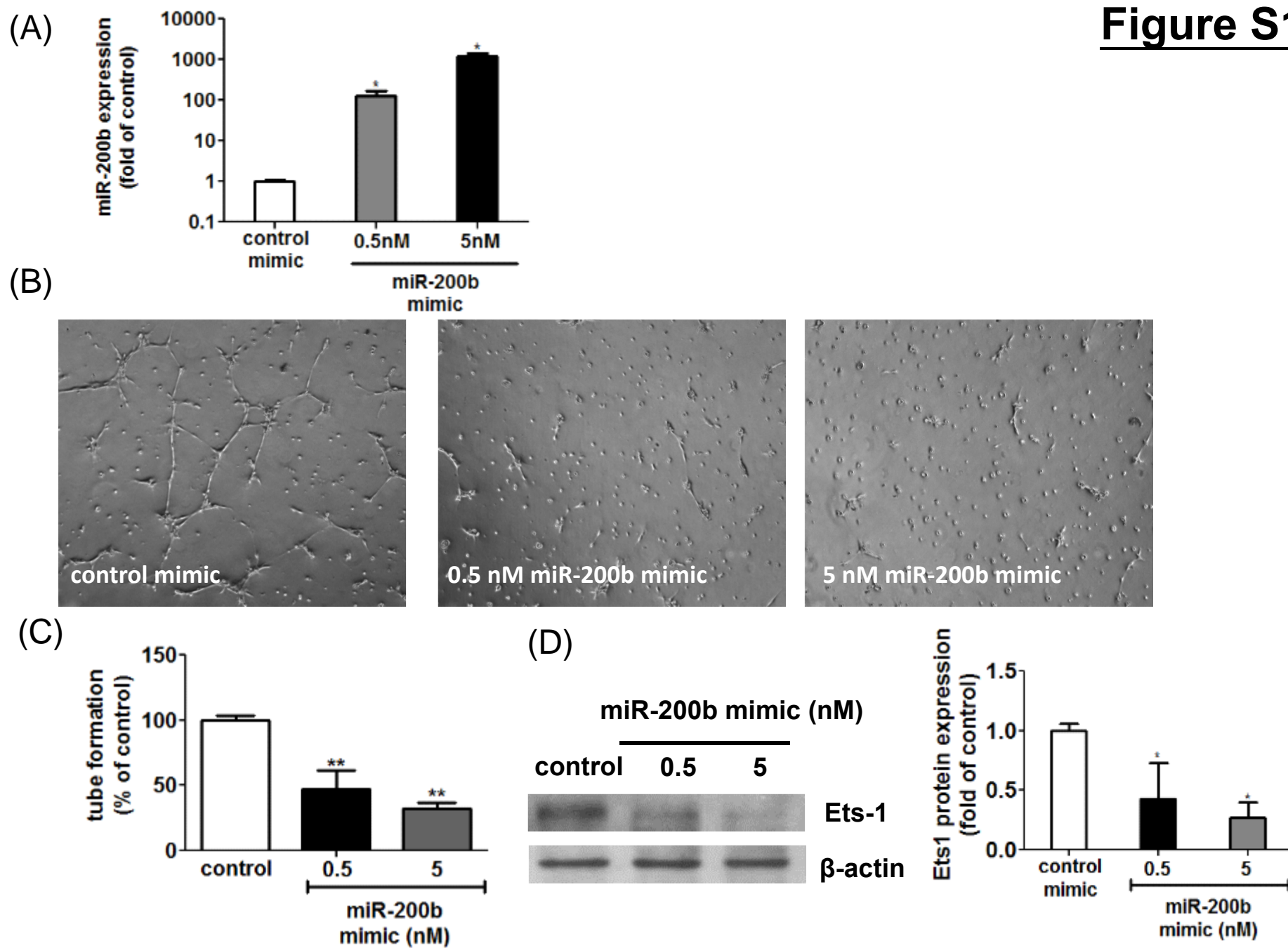


Figure S2

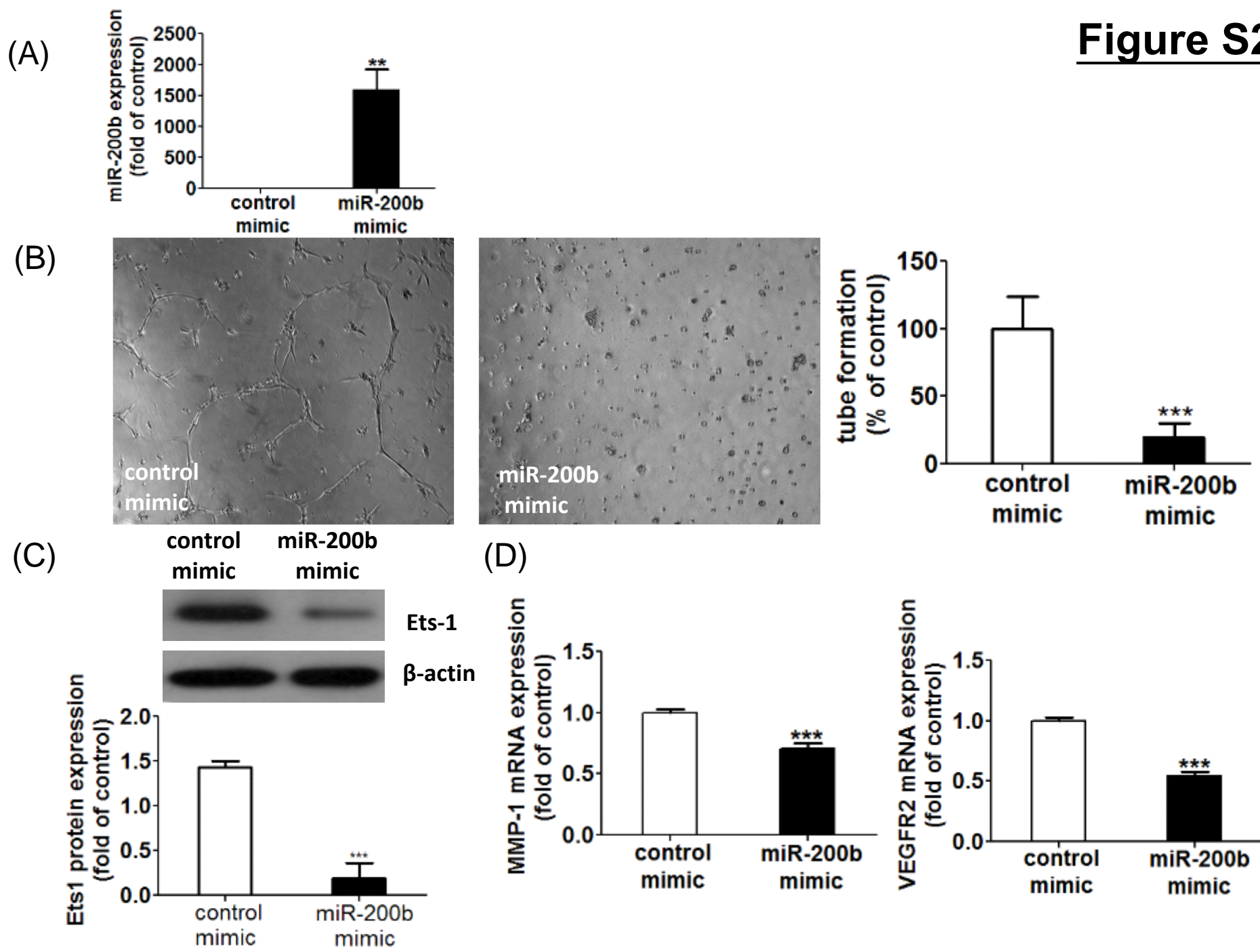


Figure S3

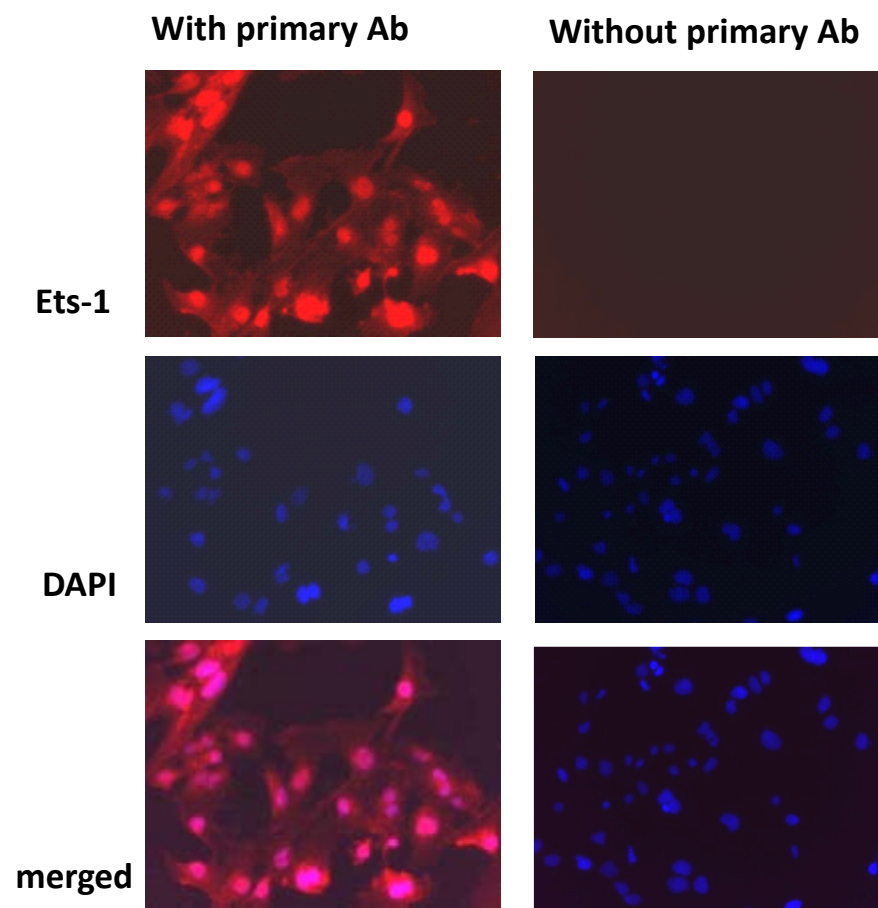
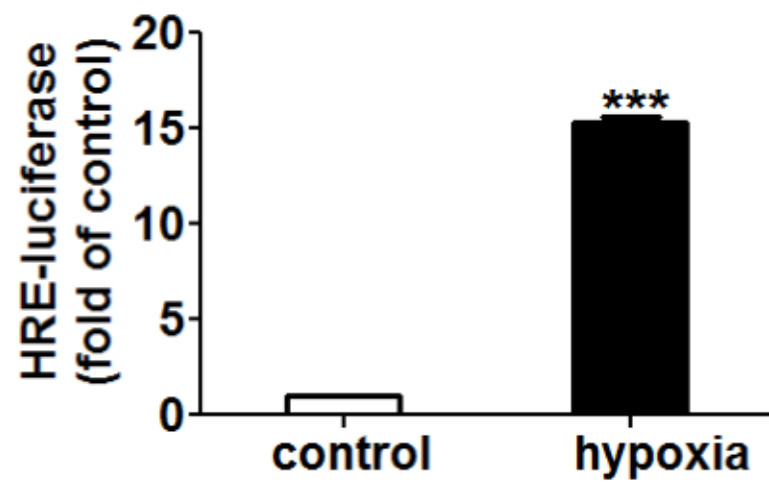


Figure S4

(A)



(B)

