SUPPLEMENTARY MATERIAL

FIGURE S1A. Basal activation of VEGFR-2 and its downstream signaling. 48h after siRNA transfection, HUVECs were lysed and western blotting performed.

FIGURE S1B. Cell apoptosis assay. 48h after siRNA treatment, cells were analyzed by FACS to measure quantity of apoptotic cells.
All bars represent means ± S.D. of three experiments. *, $p<0.05$.

FIGURE S1C. Positive control of lysosome inhibition. VEGF-A was added at 10 ng/mL with or without pepstatin at 10 μM for 24h. HUVECs were then lysed for western-blot.

FIGURE S1D. Alignment of human VEGFR-2, tie-2, and VE-cadherin intronic regions containing the FOX:ETS enhancer motif.

FIGURE. S1E. LPAR1 mRNA level. 48h after siRNA treatement, mRNA were extracted for real-time PCR.
All bars represent means ± S.D. of three experiments. *, $p<0.05$.

FIGURE. S1F. LPA dose response. LPA was added at different doses to siRNA treated HUVECs for 40h. Cells were lysed for western-blot.

FIGURE. S2. VE-cadherin presence on endothelial cell membranes affected. 48h after siRNA treatment, HUVECs were immunostained by anti-VE-cadherin antibody (green).

TABLE S1: Real-time PCR primer sequences for ChIP assay

	VEGFR-2 primer sequence
Forward	CTGGGAATTTACTTTTCACCATTCTC
Reverse	AAGACCTTGAAGTTGGCAATG

MOVIES

siRNA-transfected HUVECs were starved overnight, then seeded onto solidified Matrigel. VEGF-A^{165} was then added into the culture medium. Tube formation was followed for 8 h. Movie images were photographed every 15 minutes over 8 hours by an Axiovert 200M microscope with Apotome Module (Carl Zeiss) and analyzed by Axiovision 4.8 software.
MOVIE 1 shows endothelial cell tube formation in control siRNA-transfected (48 h) HUVECs in the absence of VEGF-A.

MOVIE 2 shows endothelial cell tube formation in VEGF-A siRNA-transfected HUVECs in the absence of VEGF-A.

MOVIE 3 shows endothelial cell tube formation in VEGF-A siRNA transfected into HUVECs in the presence of VEGF-A at 10 ng/mL.