## **Supplementary Materials**

Gene	Sequence (5'⇒3')	Accession #	Expected size (bp)
β-ACTIN	F: AGAAAATCTGGCACCACACC R: GGGGTGTTGAAGGTCTCAAA	NM_001101	126
Ang-1	F: GCAGAGAGATGCTCCACACG R: TATCTGGGCCATCTCCGACT	NM_001146	145
BAFF	F: GGGAGCAGTCACGCCTTAC R: GATCGGACAGAGGGGGCTTT	NM_0006573	103
CCL19	F: TACATCGTGAGGAACTTCCACT R: CTGGATGATGCGTTCTACCCA	NM_006265	132
GAPDH	F: AAGAAGGTGGTGAAGCAGGCG R: ACCAGGAAATGAGCTTGACAA	NM_023964	166
VEGF	F: CTACCTCCACCATGCCAAGT R: CACACAGGATGGCTTGAAGA	NM_001025366	281
ZFP91	F: CTCGCTATTTGCAGCACCAC R: GCCCGAGCACAATATTCACA	NM_053023	165
Pre-miR-640	F: TGGGCAAGTTCCTGAAGATCAGA R: AGAGGCAGGTTCCTGGATCAT	MIMAT0003310	)
Hsa-miR-640	GATCCAGGAACCTGCCTCT	MIMAT0003310	)
U6	ACTAAAATTGGAACGATACAGAGA	NR_004394	
5S	ATACCGGGTGCTGTAGGCTT	D14867	

Table S1. Primers used for quantitative real-time PCR experiments.

	Predicted consequential pairing of target region (top) and miRNA (bottom)	Site type	Context++ score
Position 125-131 of ZFP91 3' UTR hsa- <mark>miR-640</mark>	5'CUGCUCUUUCCAUUGUGGAUCAC         3' UCUCCGUCCÄAGGACCUAGUA	7mer- m8	-0.02
Position 349-355 of ZFP91 3' UTR hsa- <mark>miR-640</mark>	5'AACUCUGAUGUGCUCUGGAUCAG         3' UCUCCGUCCAAGGACCUAGUA	7mer- m8	-0.04
Position 3096-3103 of ZFP91 3' UTR hsa- <mark>miR-640</mark>	5'AUUGAACAAAUGUAA <mark>UGGAUCAA</mark>         3' UCUCCGUCCAAGG <mark>ACCUAGU</mark> A	8mer	-0.41

	Context++ score percentile	Weighted context++ score	Conserved branch length	Р <sub>ст</sub>
Position 125-131 of ZFP91 3' UTR hsa- <mark>miR-640</mark>	16	-0.02	0.054	N/A
Position 349-355 of ZFP91 3' UTR hsa- <mark>miR-640</mark>	44	-0.04	0.054	N/A
Position 3096-3103 of ZFP91 3' UTR hsa-miR-640	98	-0.41	0.054	N/A

**Figure S1.** Predicted miR-640 binding regions located in human ZFP91 3'UTR (derived from TargetScan Release 7.1).

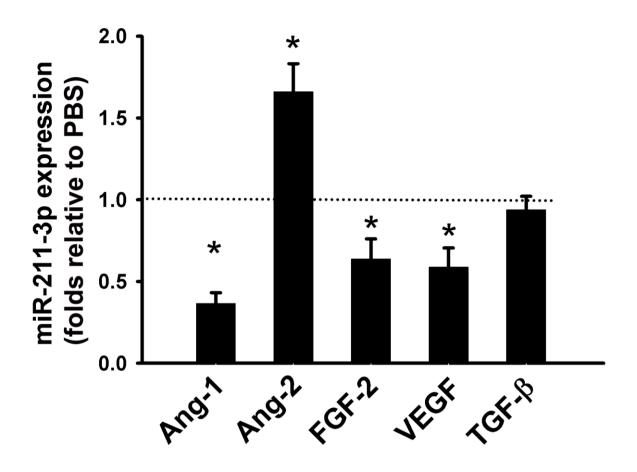
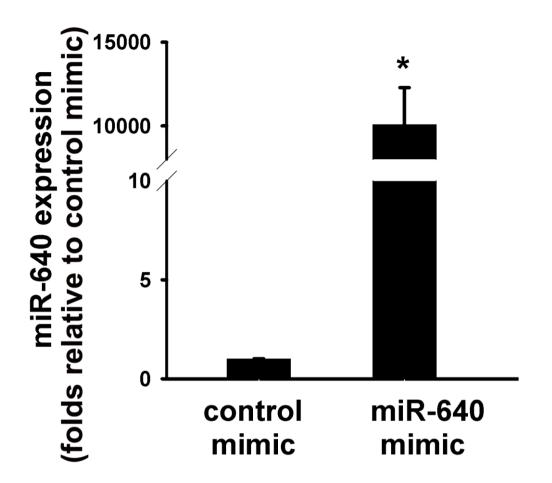
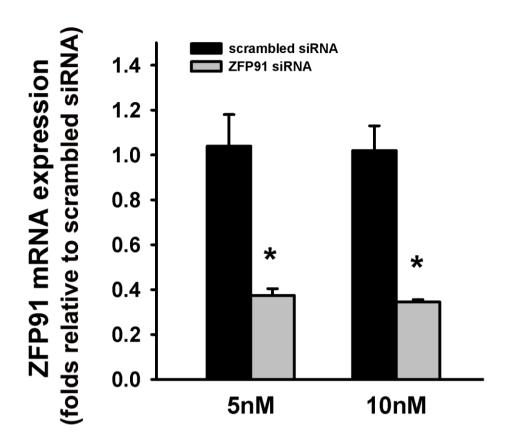


Figure S2. Regulation of of miR-211-3p expression in ECs by angiogenesis factors. Mature miR-211-3p expression measured in HUVECs exposed to PBS, Ang-2 (300ng/ml), FGF-2 (10ug/ml), VEGF (40ng/ml), or TGF- $\beta$  (2ng/ml) for 24 h. Values are means± SEM and are expressed as folds relative to PBS. \*P < 0.05, compared with PBS.



**Figure S3. Transfection efficiency of miR-640 mimic in HUVECs.** miR-640 levels in HUVECs transfected with control or miR640 mimic. Mean ±SEM, \*p<0.05, compared to control mimic.



**Figure S4. Verification of ZFP91 knockdown by siRNA oligos.** ZFP91 mRNA expression measured in HUVECs transfected with scrambled or ZFP91 siRNA oligos. Values were measured 48 h post-transfection. \*P<0.05, compared to scrambled siRNA.