

Supplemental Table S-I: Major resource table

**Zebrafish strains used in this study**

Strain name	Affected promoter/protein	Cell type/structure	Fluorophore	Ref.
Tg( <i>fli1a</i> :EGFP) <sup>y1</sup>	<i>fli1a</i>	Endothelial	Green	54
Tg( <i>kdrl</i> :EGFP) <sup>s843</sup>	<i>kdrl</i>	Endothelial	Green	55
Tg( <i>kdrl</i> :DsRed2) <sup>pd27</sup>	<i>kdrl</i>	Endothelial	Red	56
Tg( <i>acta2</i> :EGFP) <sup>ca7</sup>	<i>acta2</i>	Smooth muscle	Green	57
Tg( <i>tagln</i> :EGFP) <sup>p151</sup>	<i>tagln</i>	Smooth muscle	Green	58
Tg( <i>gata1a</i> :DsRed2)	<i>gata1a</i>	Erythroblast	Red	59
Tg( <i>fli1ep</i> :Gal4FF) <sup>ubs3</sup>	<i>fli1a</i>	Endothelial	No colour	60
Tg(UAS:RFP)	UAS	All (ubiquitous)	Red	61
Tg(UAS:VE-Cadherin-EGFP) <sup>ubs17</sup>	VE-Cadherin ( <i>cdh5</i> )	Tight junctions	Green	61
Tg(UAS:EGFP-ZO.1) <sup>ubs5</sup>	ZO.1	Tight junctions	Green	62
Tg(UAS:EGFP-ECHD) <sup>ubs19</sup>	fActin	Cytoskeleton	Green	63
Tg( <i>pdgfrb</i> :mCitrine)	<i>pdgfrb</i>	Pericytes	Green	64
<i>hif1aa</i> <sup>-/-</sup> ; <i>hif1ab</i> <sup>-/-</sup>	<i>hif1aa</i> , <i>hif1ab</i>	All (ubiquitous)	Null-mut.	65
<i>hsp70</i> :VEGFAa-DN	VEGF-Aa	All (ubiquitous)	Dominant negative isoform	66

**Primers used in this study**

Primer name	Sequence (5' -> 3')
<i>hVegfa</i> -forward	AGGGCAGAATCATCACGAAGT
<i>hVegfa</i> -reverse	AGGGTCTCGATTGGATGGCA
<i>hPlgf</i> -forward	GAACGGCTCGTCAGAGGTG
<i>hPlgf</i> -reverse	ACAGTGCAGATTCTCATCGCC
<i>hVegfr1</i> -forward	GAAAACGCATAATCTGGGACAGT
<i>hVegfr1</i> -reverse	GCGTGGTGTGCTTATTTGGA
<i>hVegfr2</i> -forward	AACGTGTCACTTTGTGCAAGA
<i>hVegfr2</i> -reverse	TTCCATGAGACGGACTCAGAA
<i>hTbp</i> -forward	CCACTCACAGACTCTACAAC
<i>hTbp</i> -reverse	CTGCGGTACAATCCCAGAACT

**Antibodies used in this study**

Target antigen	Brand	Catalog #	Dilution
ZO-1	Invitrogen	61-7300	1:250
GFAP	Sigma	SAB2702474	1:50
VE-Cadherin	Ref: 49	Ref: 49	1:200
Col-I	Abcam	GR3211489	1:200

HIF1a	Novus	NB100-134	1:600
HIF2a	Novus	NB100-122	1:300
pVEGFR2	Abcam	Ab5473	1:50
$\beta$ Actin	Invitrogen	PA1-21167	1:2000
GFP	Invitrogen	A-11122	1:2000
PECAM/CD31	R&D Biosciences	AF3628	1:200
VEGFR1	Imclone	MF1	1:200
VEGFR2	Imclone	DC101	1:200
Goat-anti-rabbit Alexa-555	Life technologies	A21428	1:200
Goat-anti-rabbit Alexa-647	Invitrogen	A21345	1:2000
Donkey-anti-rabbit Alexa-555	Invitrogen	A31572	1:400
Donkey-anti-goat Alexa-647	Invitrogen	A21447	1:200
Goat-anti-rat Alexa-555	Invitrogen	A21434	1:400