

## Purified anti-human VEGFR1 Antibody

<b>Catalog# / Size</b>	394902 / 100 µg
<b>Clone</b>	A16083C
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Fms-related tyrosine kinase 1, oncogene FLT, FLT, FLT-1, VEGFR1, VEGFR-1, VEGFR
<b>Isotype</b>	Mouse IgG2b, κ
<b>Description</b>	VEGF-R1, also known as Fms-related tyrosine kinase 1 (FLT-1), is type I transmembrane glycoprotein in the class III subfamily of receptor tyrosine kinases. Human VEGF-R1 is mainly expressed by endothelial cells, which plays central role in vasculogenesis, angiogenesis and lymphangiogenesis. VEGFR-1 is the only VEGFR present on the surface of monocytes, and it mediates a chemotactic response to VEGF-A and tissue factor induction. It also reported on placental trophoblast cells, osteoblasts, placental trophoblasts, renal mesangial cells, and some hematopoietic stem cells. VEGFR1 is regulated by PEDF, which effects its intracellular proteolysis rate. sVEGFR1 regulates the availability of VEGFA and is produced in the placenta under hypoxic conditions. The ligands of VEGF-R1 include VEGF-A, VEGF-B, and PlGF splice isoforms.

### Product Details

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<b>Verified Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Recombinant human VEGFR1
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
<b>Preparation</b>	The antibody was purified by affinity chromatography.
<b>Concentration</b>	0.5 mg/mL
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C.
<b>Application</b>	<a href="#">IHC-P - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by formalin-fixed paraffin-embedded immunohistochemical staining. For immunohistochemistry, a concentration range of 5 - 10 µg/mL is suggested. It is recommended that the reagent be titrated for optimal performance for each application.
<b>RRID</b>	AB_2890833 (BioLegend Cat. No. 394902)

### Antigen Details

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<b>Structure</b>	Cytokine receptor
<b>Distribution</b>	Endothelial cells, placental trophoblast cells, peripheral blood monocytes and macrophages
<b>Function</b>	Angiogenesis and vasculogenesis
<b>Ligand/Receptor</b>	VEGFR-A, VEGFR-B, and PlGF
<b>Antigen References</b>	<ol style="list-style-type: none"><li>1. Kendall RL, <i>et al.</i> 1996. <i>Biochem. Biophys. Res. Commun.</i> 226:324.</li><li>2. Cai J, <i>et al.</i> 2006. <i>J. Biol. Chem.</i> 281:3604.</li><li>3. Ambati BK, <i>et al.</i> 2006. <i>Nature</i> 443:993.</li><li>4. Heydarian M, <i>et al.</i> 2009. <i>Placenta</i> 30:250.</li><li>5. Thomas CP, <i>et al.</i> 2009. <i>J. Clin. Endocrinol. Metab.</i> 94:2524.</li></ol>

6. Wu, *et al.* 2010. *J. Cell Mol. Med.* 14:528.  
7. Cai J, *et al.* 2011. *PLoS One* 6:e18076.

Gene ID [2321](#)

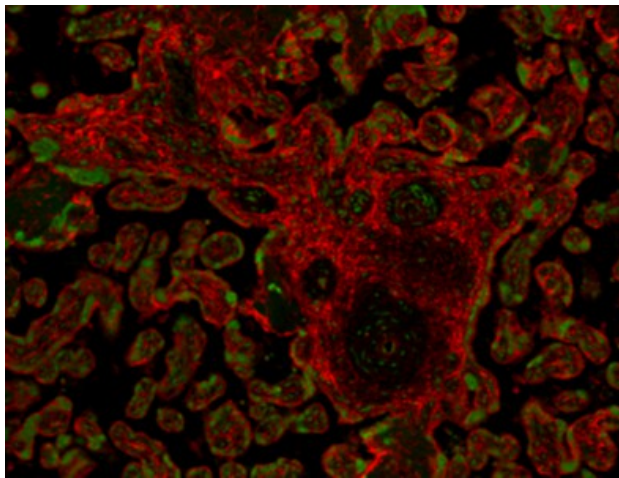
## Related Protocols

[Immunohistochemistry Protocol for Paraffin-Embedded Sections](#)

## Other Formats

Purified anti-human VEGFR1 Antibody, Alexa Fluor® 594 anti-human VEGFR1

## Product Data



Human paraffin-embedded placenta tissue slices were prepared with a standard protocol of deparaffinization and rehydration. Antigen retrieval was done Sodium Citrate H.I.E.R. 1X at 95°C for 40 minutes. Tissue was washed with PBS/0.05% Tween 20 twice for five minutes and blocked with 5% FBS and 0.2% gelatin for 30 minutes. Then, the tissue was stained with 10 µg/mL of purified anti-human VEGFR1 (clone A16083C) at 4°C overnight, followed by 2.5 µg/mL of anti-mouse IgG (clone Poly4053) Alexa Fluor® 594 (red) for two hours at room temperature. Nuclei were counterstained with DAPI (green). The image was captured with a 10X objective.

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