

Alexa Fluor[®] 594 anti-human VEGFR1 Antibody

Catalog# / Size	394903 / 25 µg 394904 / 100 µg
Clone	A16083C
Regulatory Status	RUO
Other Names	Fms-related tyrosine kinase 1, oncogene FLT, FLT, FLT-1, VEGFR1, VEGFR-1, VEGFR
Isotype	Mouse IgG2b, κ
Description	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 PIGF splice isoforms.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Recombinant Human VEGFR1
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor [®] 594 under optimal conditions.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	IHC-P - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by formalin-fixed paraffin-embedded immunohistochemical staining. For immunohistochemistry, a concentration range of 5.0 - 10 µg/ml is suggested. It is recommended that the reagent be titrated for optimal performance for each application. * Alexa Fluor [®] 594 has an excitation maximum of 590 nm, and a maximum emission of 617 nm. Alexa Fluor [®] and Pacific Blue™ are trademarks of Life Technologies Corporation. View full statement regarding label licenses
RRID	AB_2783307 (BioLegend Cat. No. 394903) AB_2783308 (BioLegend Cat. No. 394904)

Antigen Details

Structure	Cytokine receptor
Distribution	Endothelial cells, placental trophoblast cells, peripheral blood monocytes and macrophages

Function Angiogenesis and vasculogenesis
Cell Type Endothelial cells, Macrophages, Monocytes

Antigen References

1. Kendall RL, *et al.* 1996. *Biochem Biophys Res Commun.* 226:324.
2. Cai J, *et al.* 2006. *J Biol Chem.* 281:3604.
3. Ambati BK, *et al.* 2006. *Nature.* 443:993.
4. Heydarian M, *et al.* 2009. *Placenta.* 30:250.
5. Thomas CP, *et al.* 2009. *J Clin Endocrinol Metab.* 94:2524.
6. Wu, *et al.* 2010. *J Cell Mol Med.* 14:528.
7. Cai J, *et al.* 2011. *PLoS One.* 6:e18076.

Gene ID [2321](#)

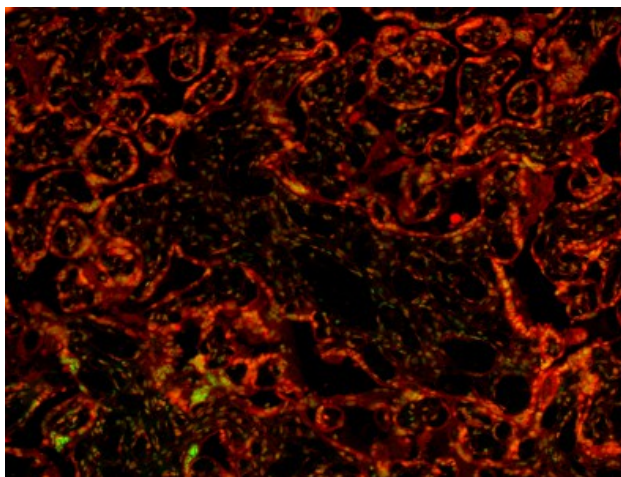
Related Protocols

[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 with 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 anti-human VEGFR1 (clone A16083C) Alexa Fluor® 594 (red) at 4°C overnight. Nuclei were counterstained with DAPI (green). The image was captured with a 10X objective.

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BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587