

VEGF Receptor 3 Monoclonal Antibody (AFL4), Biotin, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse, Human
Host/Isotope	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Biotin, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	AFL4
Conjugate	Biotin
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin
Contains	0.09% sodium azide
Storage Conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_466851

Applications	Tested	Dilution	Published
Flow Cytometry (Flow)	✓	0.5 µg/test	4 Publications
Immunohistochemistry (IHC)	-		2 Publications
Immunofluorescence (IF)	-		1 Publication
Western Blot (WB)	-		2 Publications

Product Specific Information

Description: The AFL4 monoclonal antibody reacts with the mouse VEGF receptor-3, also known as Flt-4. This 195 kDa molecule was identified as an endothelial-specific member of the receptor tyrosine kinase (RTK) family. During early embryogenesis all endothelial cells express VEGFR-3, while in the adult tissues, VEGFR-3 expression disappears from the vascular endothelial cells and is observed only on the lymphatic endothelium. However, VEGFR-3 expression is induced in the adult tissue upon tumor implementation suggesting an important role for this receptor in the tumor angiogenesis. VEGF-C and VEGF-D bind to and activate VEGFR-3. AFL4 is an antagonist mAb.

Applications Reported: The AFL4 antibody has been reported for use in flow cytometric analysis.

Applications Tested: The AFL4 antibody has been tested by flow cytometric analysis of in vitro differentiated mouse endothelial cells. In brief, mouse ES cells were incubated on collagen IV matrix for 4 days and subsequently stimulated with VEGF under serum free conditions to induce further differentiation. This can be used at less than or equal to 0.5 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically.

but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Filtration: 0.2 µm post-manufacturing filtered.

9 References

Flow Cytometry (4)

Annals of surgery

Lymphatic Contribution to the Cellular Niche in Heterotopic Ossification.

"Published figure using VEGF Receptor 3 monoclonal antibody (Product # 13-5988-82) in Flow Cytometry"

Authors: Loder S, Agarwal S, Sorkin M, Breuler C, Li J, Peterson J, Gardenier J, Hsieh HH, Wang SC, Mehra B, Levi B

Species

Mouse
Not Applicable

Dilution

Not Cited
Not Cited

Year

2016

Microvascular research

ID3 contributes to the acquisition of molecular stem cell-like signature in microvascular endothelial cells: its implication for understanding microvascular diseases.

"13-5988 was used in Flow cytometry/Cell sorting to show that ID3 overexpressing cells supported the formation of a 3-D microvascular lesion co-cultured with smooth muscle cells."

Authors: Das JK, Voelkel NF, Felty Q

Species

Human

Dilution

Not Cited

Year

2015

[View more Flow references on thermofisher.com](#)

Immunohistochemistry (2)

Pharmaceuticals (Basel, Switzerland)

A Selenium Containing Inhibitor for the Treatment of Hepatocellular Cancer.

"Published figure using VEGF Receptor 3 monoclonal antibody (Product # 13-5988-82) in Immunohistochemistry"

Authors: Tagaram HR, Desai D, Li G, Liu D, Rountree CB, Gowda K, Berg A, Amin S, Staveley-O'Carroll KF, Kimchi ET

Species

Not Applicable

Dilution

Not Cited

Year

2016

BMC developmental biology

Embryonic vascular endothelial cells are malleable to reprogramming via Prox1 to a lymphatic gene signature.

"Published figure using VEGF Receptor 3 monoclonal antibody (Product # 13-5988-82) in Immunohistochemistry"

Authors: Kim H, Nguyen VP, Petrova TV, Cruz M, Alitalo K, Dumont DJ

Species

Not Applicable

Dilution

Not Cited

Year

2010

More applications with references on thermofisher.com

IF (1) WB (2)

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