

Product Information

Contents: Affinity Purified anti-mouse VEGFR3

Catalog Number: 14-5988

Sizes: 50 ug, 100 ug, 500 ug

Formulation: Phosphate buffer pH 7.2,
150 mM NaCl, 0.09% NaN₃

Storage Conditions: Store at 4°C.

Avoid repeated freeze/thaw cycles.

Clone: AFL4

Isotype: Rat IgG2a, κ

Available Formats of This Product

Cat. No.	Format	Excite (nm)	Emit (nm)	Reported Applications
13-5988	Biotin anti-mouse VEGFR3	N/A	N/A	FC
14-5988	Affinity Purified anti-mouse VEGFR3	N/A	N/A	FA FC IH/F IP WB
16-5988	Functional Grade* Purified anti-mouse VEGFR3	N/A	N/A	FC

*Functional Grade™ (FG™): Azide-free, sterile-filtered, and endotoxin < 0.001 ng/μg.
Purified: Contains azide, not sterile-filtered, and not endotoxin tested.

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.

Usage

For research use only, not for diagnostic or therapeutic use. The AFL4 antibody has been reported for use in flow cytometric analysis, immunoprecipitation, immunoblotting (WB), and immunohistochemical staining of frozen tissue sections. It has also been reported in blocking of ligand binding. (Please use Functional Grade purified AFL4, cat. 16-5988, in functional assays.)

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. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Related Products

- Cat. 11-4317 Streptavidin-FITC (Fluorescein isothiocyanate)
- Cat. 12-4317 Streptavidin-PE (Phycoerythrin)
- Cat. 17-4317 Streptavidin Allophycocyanin (SA-APC)
- Cat. 14-4321 Affinity Purified Rat IgG2a Isotype Control
- Cat. 11-4811 FITC Anti-Rat IgG
- Cat. 13-4813 Biotin Anti-Rat IgG (clone Polyclonal)
- Cat. 13-5988 Biotin anti-mouse VEGFR3 (clone AFL4)
- Cat. 16-5988 Functional Grade Purified anti-mouse VEGFR3 (clone AFL4)

References

Kubo, H., T. Fujiwara, et al. (2000). "Involvement of vascular endothelial growth factor receptor-3 in maintenance of integrity of endothelial cell lining during tumor angiogenesis." Blood 96(2): 546-53.

Saaristo, A., T. A. Partanen, et al. (2000). "Vascular endothelial growth factor-C and its receptor VEGFR-3 in the nasal mucosa and in nasopharyngeal tumors." Am J Pathol 157(1): 7-14.

Paavonen, K., P. Puolakkainen, et al. (2000). "Vascular endothelial growth factor receptor-3 in lymphangiogenesis in wound healing." Am J Pathol 156(5): 1499-504.

Larrivee, B. and A. Karsan (2000). "Signaling pathways induced by vascular endothelial growth factor (review)." Int J Mol Med 5(5): 447-56.

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