

Anti-Mouse VEGF Receptor 3 Purified

Catalog Number: 14-5988

Also Known As: VEGFR3, VEGF R3, VEGF receptor 3, Flt-4, Flt4, vascular endothelial growth factor receptor 3

RUO: For Research Use Only

Product Information

Contents: Anti-Mouse VEGF Receptor 3 Purified

REF Catalog Number: 14-5988

Clone: AFL4

Concentration: 0.5 mg/ml Host/Isotype: Rat IgG2a, κ $Formulation: aqueous \ buffer, 0.09\% \ sodium \ azide, \ may \ contain$

carrier protein/stabilizer

Temperature Limitation: Store at 2-8°C.

LOT Batch Code: Refer to Vial
Use By: Refer to Vial

Caution, contains Azide

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, 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.

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." <u>Blood</u> 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." <u>Am J Pathol</u> 157(1): 7-14.

Paavonen, K., P. Puolakkainen, et al. (2000). "Vascular endothelial growth factor receptor-3 in lymphangiogenesis in wound healing." <u>Am J Pathol</u> 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.

Related Products

11-4317 Streptavidin FITC

11-4811 Anti-Rat IgG FITC

12-4317 Streptavidin PE

13-4813 Anti-Rat IgG Biotin (Polyclonal)

14-4321 Rat IgG2a K Isotype Control Purified

17-4317 Streptavidin APC

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