

# Anti-Human VEGF Receptor 1 (Flt1) Purified

Catalog Number: 14-5936

Also Known As: VEGF-R1, Flt-1, FMS-like tyrosine kinase 1, vascular endothelial growth factor receptor

RUO: For Research Use Only

188— 98— 62— 49— 38— 28— 17— 14—

Immunoblot analysis of non-boiled NP-40 lysates from Human Umbilical Vein Endothelial Cells (HUVEC) run on SDS-PAGE under non-reducing conditions. The membrane was probed with 2  $\mu$ g/ml of Anti-Human VEGF Receptor 1 (Flt1) Purified followed by Anti-Rat IgG HRP.

### **Product Information**

Contents: Anti-Human VEGF Receptor 1 (Flt1) Purified

REF Catalog Number: 14-5936

Clone: 7A6

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

carrier protein/stabilizer

Temperature Limitation: Store at 2-8°C.

Batch Code: Refer to Vial

Use By: Refer to Vial

#### Description

This 7A6 monoclonal antibody recognizes human VEGFR1 (vascular endothelial growth factor receptor 1, fms-like tyrosine kinase 1, FLT1). It is directed against the extracellular domain and can recognize both membrane-bound and soluble forms of VEGFR1, with approximate molecular weights of 180 kDa and 90 kDa, respectively. Mice lacking expression of VEGFR1 have disorganized vasculature and die in utero, however angiogenesis does not require the tyrosine kinase activity of VEGFR1 as expression of a membrane-bound form lacking the tyrosine kinase domain allows normal development. Although fertile and viable, mice lacking the tyrosine kinase domain of VEGFR1 do have a defect in the migration of macrophages. The soluble form of VEGFR1 can be detected in the serum of normal patients, and elevated levels of soluble VEGFR1 in pregnant women is associated with preeclampsia. Several tumor cell lines have been reported to express membrane-bound VEGFR1, including malignancies of hematopoietic origin.

# **Applications Reported**

This 7A6 antibody has been reported for use in immunoblotting (WB).

# **Applications Tested**

This 7A6 antibody has been tested by immunoblot analysis of HUVEC. It can be used at 1-5 µg/ml. This antibody only recognizes non-reduced epitopes. It is highly recommended to include protease inhibitors in the lysing buffer and to not boil lysates prior to separation by non-reducing SDS-PAGE.

#### References

Spiekermann K, Faber F, Voswinckel R, Hiddemann W. The protein tyrosine kinase inhibitor SU5614 inhibits VEGF-induced endothelial cell sprouting and induces growth arrest and apoptosis by inhibition of c-kit in AML cells. Exp Hematol. 2002 Jul;30(7):767-73.

Shibuya M. Structure and dual function of vascular endothelial growth factor receptor-1 (Flt-1). Int J Biochem Cell Biol. 2001 Apr;33(4):409-20.

Barleon B, Reusch P, Totzke F, Herzog C, Keck C, Martiny-Baron G, Marmé D. Soluble VEGFR-1 secreted by endothelial cells and monocytes is present in human serum and plasma from healthy donors. Angiogenesis. 2001;4(2):143-54. (7A6, WB, Pubmed)

Bellamy WT, Richter L, Frutiger Y, Grogan TM. Expression of vascular endothelial growth factor and its receptors in hematopoietic malignancies. Cancer Res. 1999 Feb 1;59(3):728-33.

## **Related Products**

14-4321 Rat IgG2a K Isotype Control Purified

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