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Product datasheet for DM3507

VEGF Receptor 1 (FLT1) Mouse Monoclonal Antibody [Clone ID: FLTEWI (EWI)]

Product data:

Product Type:	Primary Antibodies
Clone Name:	FLTEWI (EWI)
Applications:	ELISA, IF, IP, WB
Recommended Dilution:	**ELISA:** 1-10 µg/ml. **Western blotting:** 1-10 µg/ml. **Immunoprecipitation:** 1-5 µg/ml lysate or reaction volume. **Immunofluorescence.** **FACS:** 2-10 µg/ml.
Reactivity:	Human, Mouse
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Recombinant Human soluble extracellular Flt-1 protein (D5) (*Cat.-No* DA3539)
Specificity:	The monoclonal antibody will recognize recombinant and naturally occurring form of Human VEGFR-1/Flt-1. It cross reacts with Mouse Flt-1 (*e.g.* natural occurring soluble Mouse Flt-1) in Western blot analysis (*See* **Figure 1**).
Formulation:	PBS State: Purified State: Lyophilized purified IgG fraction from Cell Culture Supernatant
Reconstitution Method:	Restore in sterile water to a concentration of 0.1-1.0 mg/ml
Purification:	Protein G Chromatography
Conjugation:	Unconjugated
Storage:	Store lyophilized at 2-8°C for 6 months or at -20°C long term. After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.

View online »

Gene Name: fms related tyrosine kinase 1

Database Link: Entrez Gene 2321 Human
P17948

Background: VEGF Receptor 1 (also known as FLT) belongs to the src gene family and shows tyrosine protein kinase activity that is important for the control of cell proliferation and differentiation. The protein acts as a receptor for VEGF, VEGFB and PGF. An alternatively spliced form of the gene produces a soluble protein (sFlt1) which binds vascular endothelial growth factor (VEGF) with high affinity. sFlt1 has a higher affinity for VEGF indicating that it may function as an inhibitor in the VEGF response. VEGF Receptor 1 is specifically expressed in most vascular endothelial cells and peripheral blood monocytes. VEGF and its high-affinity binding receptors, the tyrosine kinases FLK1 and FLT1, are thought to be important for the development of embryonic vasculature. It has been shown that an alternately spliced form of FLT1 produces a soluble protein, termed sFLT1, which binds vascular endothelial growth factor with high affinity. Because sFLT1 has a higher affinity for VEGF than does FLK1, it may function as an inhibitor of VEGF response.

Synonyms: VEGFR1, FLT1, FLT, FRT, VEGF Receptor 1

Product images:

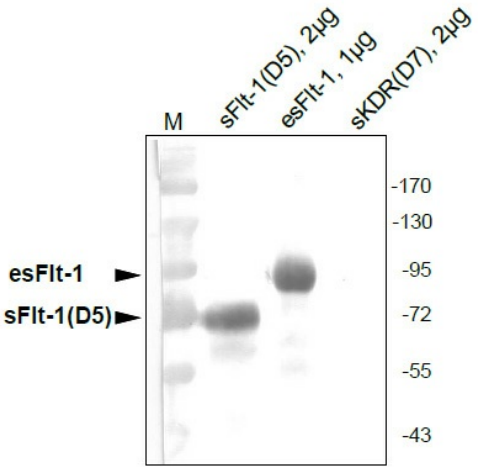

Figure 2. Western Blot analysis showing cross reactivity of VEGFR-1/Flt-1 antibody with recombinant Human endogenous sFlt-1 (esFlt-1) and sFlt-1 (D5). There is no cross reactivity with recombinant Human sKDR.

Figure 1. Western Blot analysis showing cross reactivity of VEGFR-1/Flt-1 antibody with recombinant Murine sFlt-1

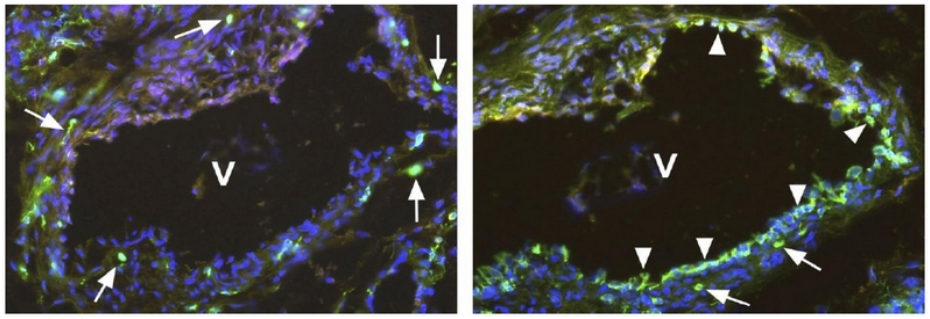

Figure 3. Immunofluorescence staining (green) using Polyclonal antibody directed against the C-terminal end of native soluble VEGFR-1/Flt-1 [DP3522] (Left panel) and Monoclonal antibody directed against the extracellular domain of the membrane-bound VEGFR-1/Flt-1 (Right panel). You see two neighboring sections of a Human Vein (V), located near a hemangioma. The antibody against the soluble VEGFR-1/Flt-1 marked single cells (arrows) within the media and adventitia of the vein. The antibody against the membrane-bound VEGFR-1/Flt-1 marked single cells (arrows) and the endothelium (arrowhead) of the vein. Cell nuclei are stained with Dapi (blue). The experiment was performed by K. Butler and J. Wilting, University GÃ¶ttingen, Germany.