



### Anti-human VEGFR-3/FLT-4-Biotin (#1 (9D9))

20140414BB



**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>101-MBi36</b>
Size:	50 µg
Lot. No.:	According to product label
Country of origin:	Germany

**Preparation:** This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified recombinant human Vascular Endothelial Growth Factor Receptor 3 (recombinant human VEGFR-3/FLT-4) extracellular domain.

### Target Background

<b>Synonyms:</b>	Fms-like tyrosine kinase 1, Vascular permeability factor receptor
------------------	---

The recombinant mature sVEGFR-3/FLT-4 is a glycosylated monomeric protein. The sVEGFR-3/FLT-4 monomers have a mass of approximately 120 kDa. The soluble receptor protein consists of all 7 extracellular domains (Met1-Glu774). All three VEGF receptors belong to the class III subfamily of receptor tyrosine kinases (RTKs) characterized by the seven immunoglobulin-like loops in the extracellular domain. The expression of VEGFR-1 to -3 is almost exclusively restricted to hematopoietic precursor cells, vascular and lymphatic endothelial cells and to the monocyte/macrophage lineage. They play key roles in vasculogenesis, hematopoiesis, angiogenesis and lymphangiogenesis. The FLT-4 cDNA encodes a 1298 amino acid (aa) residue precursor protein with a 23 aa residue signal peptide. Mature VEGFR-3/FLT-4 is composed of a 751 aa residue extracellular domain, a 22 aa transmembrane domain and a 482aa residue cytoplasmic domain. Both VEGF family members VEGF-C and VEGF-D have been shown to bind and activate VEGFR-3/FLT-4. The Flt-4 gene is widely expressed in the early embryo but becomes restricted to the lymphatic endothelial a latter stages of development. It is important for lymphangiogenesis.

### References

1. Joukov et al., EMBO J 15 :290, 1996
2. Kukk et al., Development 122 :3829, 1996

### Database References Antigen

<b>Protein RefSeq:</b>	NP_002011
<b>Uniprot ID:</b>	P35916
<b>mRNA RefSeq:</b>	NM_002020

### Product Specifications

<b>Species reactivity</b>	human
<b>Clone/Ab feature</b>	IgG <sub>1</sub> ; #1 (9D9)
<b>Host</b>	mouse
<b>Clonality</b>	monoclonal
<b>Purification</b>	Protein G purified
<b>Immunogen</b>	recombinant human soluble FLT-4
<b>Formulation</b>	lyophilized
<b>Buffer/Stabilizer</b>	PBS; 50X BSA
<b>Preservative</b>	0,02% sodium azide
<b>Conjugation</b>	Biotin

**Warnings:** Reagents contain sodium azide. Under acidic conditions sodium azide yields hydrazoic acid, this is extremely toxic. Azide compounds should be diluted with running water before discarding. These precautions are recommended to avoid deposits in plumbing where explosive condition may develop.

**Stability:** The lyophilized antibody is stable at room temperature for up to 1 month. The reconstituted antibody is stable for at least two weeks at 2-8°C. Frozen aliquots are stable for at least 6 months when stored at -20°C.

**Reconstitution:** Centrifuge vial prior to opening. Reconstitute in sterile water to a concentration of 0.1-1.0 mg/ml.



**AVOID REPEATED FREEZE AND THAW CYCLES!**

**Specificity:** The unconjugated antibody will detect native human VEGFR-3/FLT-4 in ELISA experiments.

### Applications

**ELISA:** Use at 2-5 µg/ml

**NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!**