

## DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse VEGFR3 in ELISAs and Western blots. In sandwich ELISAs, less than 7% cross-reactivity with recombinant human VEGFR3 is observed and 0.2% cross-reactivity with recombinant mouse (rm) VEGFR1 and rmVEGFR2 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant mouse VEGFR3/Flt-4 Tyr25-Asp770 Accession # P35917
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
<b>Western Blot</b>	0.1 µg/mL	Recombinant Mouse VEGFR3/Flt-4 Fc Chimera (Catalog # 743-R3)
<b>Flow Cytometry</b>	2.5 µg/10 <sup>6</sup> cells	MS-1 mouse pancreatic islet endothelial cell line
<b>Mouse VEGFR3/Flt-4 Sandwich Immunoassay</b>		<b>Reagent</b>
<b>ELISA Capture</b>	2-8 µg/mL	Mouse VEGFR3/Flt-4 Antibody (Catalog # MAB7431)
<b>ELISA Detection</b>	0.1-0.4 µg/mL	Mouse VEGFR3/Flt-4 Biotinylated Antibody (Catalog # BAF743)
<b>Standard</b>		Recombinant Mouse VEGFR3/Flt-4 Fc Chimera (Catalog # 743-R3)

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

VEGFR3 (Flt-4), together with VEGFR1 (Flt-1) and VEGFR2 (KDR/Flk-1), belong to the class III subfamily of receptor tyrosine kinases (RTKs). All three receptors contain seven immunoglobulin-like repeats in their extracellular domains and kinase insert domains in their intracellular regions. The expression of these receptors is almost exclusively restricted to the endothelial cells. These receptors are likely to play essential roles in vasculogenesis and angiogenesis.

In adults, VEGFR3 expression is restricted to the endothelial cells of the lymphatic vessels. Mouse VEGFR3 cDNA encodes a 1363 amino acid (aa) residue precursor protein with a 24 aa residue signal peptide. Mature VEGFR3 has a 751 aa residue extracellular domain, a 22 aa residue hydrophobic transmembrane domain, and a 565 aa residue cytoplasmic domain. The polypeptide sequences of murine Flt-4 is 88% identical to the human homologue. VEGFR3 has been reported to serve as the receptors for VEGF-C and VEGF-D.

### References:

1. Finnerty, H. *et al.* (1993) *Oncogene* **8**:2293.
2. Joukov, V. *et al.* (1996) *EMBO J.* **15**:290.
3. Achen, M. *et al.* (1998) *Proc. Natl. Acad. Sci. USA* **95**:548.