

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse VEGF R3/Flt-4 in ELISAs and Western blots. In Western blots, this antibody does not cross-react with recombinant mouse (rm) VEGF R1 or rmVEGF R2.
Source	Monoclonal Rat IgG _{2A} Clone # 102804
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant mouse VEGF R3/Flt-4 Tyr25-Asp770 Accession # Q5SU94
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

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.

Mouse VEGF R3/Flt-4 Sandwich Immunoassay		Reagent
ELISA Capture	2-8 µg/mL	Mouse VEGF R3/Flt-4 Antibody (Catalog # MAB7431)
ELISA Detection	0.1-0.4 µg/mL	Mouse VEGF R3/Flt-4 Biotinylated Antibody (Catalog # BAF743)
Standard		Recombinant Mouse VEGF R3/Flt-4 Fc Chimera (Catalog # 743-R3)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

VEGF R3 (Flt-4), together with VEGF R1 (Flt-1) and VEGF R2 (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, VEGF R3 expression is restricted to the endothelial cells of the lymphatic vessels. Mouse VEGF R3 cDNA encodes a 1363 amino acid (aa) residue precursor protein with a 24 aa residue signal peptide. Mature VEGF R3 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. VEGF R3 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.