

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse VEGFR3/Flt-4 in direct ELISAs and Western blots. In direct ELISAs, approximately 30% cross-reactivity with recombinant human (rh) VEGFR3 is observed and less than 5% cross-reactivity with recombinant mouse VEGFR2 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant mouse VEGFR3/Flt-4 Tyr25-Asp770 Accession # P35917
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 either lyophilized or as a 0.2 µm filtered solution in PBS.

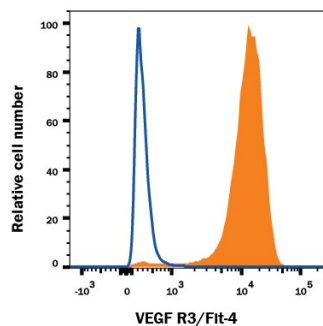
APPLICATIONS

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.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Mouse VEGFR3/Flt-4 Fc Chimera (Catalog # 743-R3)
Flow Cytometry	0.25 µg/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

Flow Cytometry



Detection of VEGFR3/Flt-4 in bEnd.3 Mouse Cell Line by Flow Cytometry. bEnd.3 cells, a mouse endothelioma cell line, was stained with Goat Anti-Mouse VEGFR3/Flt-4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF743, filled histogram) or isotype control antibody (Catalog # AB-108-C, open histogram), followed by PE-conjugated Anti-Goat IgG Secondary Antibody (Catalog # F0107).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 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

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.