Human VEGF R3/Flt-4 Antibody

Monoclonal Mouse IgG_1 Clone # 54716

Catalog Number: MAB349

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human VEGF R3 in ELISAs. In ELISAs, shows 25% cross-reactivity with recombinant mouse (rm) VEGF R3 and no cross-reactivity with rhVEGF R1 or rhVEGF R2.
Source	Monoclonal Mouse IgG_1 Clone # 54716
Purification	Protein A or G purified from ascites
Immunogen	Mouse myeloma cell line NS0-derived recombinant human VEGF R3 Tyr25-Ile776 Accession # P35916
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.*

Human VEGF R3/Flt-4 Sandwich Immunoassay		**Reagent**
ELISA Capture	2-8 µg/mL	Human VEGF R3/Flt-4 Antibody (Catalog # MAB349)
ELISA Detection	0.5-2.0 µg/mL	Human VEGF R3/Flt-4 Biotinylated Antibody (Catalog # BAM3492)
Standard		Recombinant Human VEGF R3/Flt-4 Fc Chimera (Catalog # 349-F4)

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.** ● 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 R2 (KDR/Flk-1), VEGF R1 (Flt-1) and VEGF R3 (Flt-4) 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 VEGF R1, 2, and 3 is almost exclusively restricted to the endothelial cells. These receptors are likely to play essential roles in vasculogenesis and angiogenesis.VEGF R3 cDNA encodes a 1298 amino acid (aa) residue precursor protein with a 24 aa residue signal peptide. Mature VEGF R3 is composed of a 751 aa residue extracellular domain, a 22 aa residue transmembrane domain and a 482 aa residue cytoplasmic domain. Both VEGF-C and VEGF-D have been shown to bind and activate VEGF R3 (Flt-4). VEGF R3 is widely expressed in the early embryo but becomes restricted to lymphatic endothelia at later stages of development. It is likely that VEGF R3 may be important for lymph angiogenesis.

References:

1. Ferra, N. and R. Davis-Smyth (1997) Endocrine Reviews **18**:4.