11 Park Drive, Suite 12
Boston, MA 02215

Human soluble VEGFR-3 recombinant protein

ORDERING INFORMATION

Catalog No: rAP-0283
Size: 2 µg; 10µg
Storage: <- 20° C

Synonyms:
Tyrosine-protein kinase receptor FLT4, PCL, FLT41, FMS-LIKE TYROSINE KINASE 4, VEGFR-3.

Introduction: All three VEGF receptors belong to the class III subfamily of receptor tyrosine kinases (RTKs) characterised 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 482 aa 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.

Description: Soluble VEGFR-3 Human Recombinant fused with a carboxy-terminal 6X histidine-tag produced in baculovirus is a monomeric, glycosylated, polypeptide containing 774 amino acids and having a total molecular mass of 240 kDa. The soluble receptor protein contains only the first 7 extracellular domains, which contain all the information necessary for ligand binding. The VEGFR3 is purified by proprietary chromatographic techniques.

Source: *Insect Cells*

Physical Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:
FLT-4 was lyophilized from a concentrated (1 mg/ml) sterile solution containing no additives.

Solubility:
It is recommended to reconstitute the lyophilized FLT4 in sterile water not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized sVEGFR3 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution VEGFR-3 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). **Please prevent freeze-thaw cycles**.

Purity: Greater than 90.0% as determined by:
(a)Analysis by RP-HPLC.
(b)Analysis by SDS-PAGE.

Biological Activity: Measured by its ability to bind recombinant rat VEGF-C in a functional solid phase binding assay. Immobilised recombinant human VEGFR-3/FLT-4 at 5 µg/ml can bind recombinant rat VEGF-C in a linear range of 8-500 ng/ml.

Usage: Angio-Proteomie's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

Contact & Ordering Information: Angio-Proteomie, 11 Park Drive, Suite 12, Boston, MA 02215, USA. Fax: (480) 247-4337, angioproteomie@gmail.com