

DA3535S**Human VEGFR-3 / Flt-4 (His-tagged) - Purified****Alternate names:**

FLT4, Tyrosine-protein kinase receptor FLT4, VEGF Receptor 3, VEGFR3, Vascular endothelial growth factor receptor 3

Quantity:

5 µg

Background:

Recombinant human soluble Vascular Endothelial Growth Factor Receptor-3 (sVEGFR-3/FLT-4) was fused with a carboxy-terminal 6X histidine-tag. 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.

Uniprot ID:

[P35916](#)

NCBI:

[NP_002011.2](#)

GeneID:

[2324](#)

Species:

Human

Source:

Insect cells

Format:

State: Lyophilized without buffer and stabilizer.

Purity: >90% by SDS-PAGE and visualised by silver stain

Endotoxin Level: < 0.1 ng per µg of sVEGFR-3

Reconstitution: Restore in PBS or medium to a concentration not lower than 100 µg/ml.

Description:

The recombinant mature sVEGFR-3/FLT-4 is a glycosylated monomeric protein with a mass of approximately 120 kDa. The soluble receptor protein consists of all 7 extracellular domains (Met1-Glu774).

Biological Activity: Measured by its ability to bind recombinant rat VEGF-C in a functional solid phase binding assay.

Immobilised recombinant human sVEGFR-3/FLT-4 at 5 µg/ml can bind recombinant rat VEGF-C in a linear range of 8-500 ng/ml.

Molecular weight: 120 kDa

Add. Information:

Centrifuge vials before opening!

Storage: Prior to and following reconstitution store the antibody at -20°C.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings:

1. Joukov et al., EMBO J 15:290, 1996.
2. Kukk et al., Development 122:3829, 1996.