



Product Datasheet

Product Name	Vascular Endothelial Growth Factor Receptor-3 Human Recombinant
Cata No	CB500850
Source	<i>Insect Cells</i>
Synonyms	Tyrosine-protein kinase receptor FLT4, PCL, FLT41, FMS-LIKE TYROSINE KINASE 4, VEGFR-3.

Description

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.

Soluble FLT4 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 120 kDa. The soluble receptor protein contains only the first 7 extracellular domains, which contain all the information necessary for ligand binding.

The FLT4 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

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.

Purity

Greater than 90.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Formulation

FLT4 was lyophilized from a concentrated (1 mg/ml) sterile solution containing 1x PBS.

Reconstitution

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 FLT4 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution FLT4 should be stored at 4°C between 2-7 days and for

*** For Non-Clinical Research Use Only ***



California Bioscience

83103 Avenue 48, Ste.1B #204
Coachella, CA 92236 USA
Phone : +1.6268339877
Email : info@cali-bio.com

future use below
-18°C.

For long term storage it is recommended to add a

carrier protein (0.1% HSA) **Product Datasheet**
Please prevent freeze-thaw cycles.

*** For Non-Clinical Research Use Only ***