



## Product Datasheet

<b>Product Name</b>	Vascular Endothelial Growth Factor Receptor-3 Fc Chimera Human Recombinant
<b>Cata No</b>	CB500851
<b>Source</b>	<i>Insect Cells</i>
<b>Synonyms</b>	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 the Fc part of human IgG<sub>1</sub> produced in baculovirus is a monomeric, glycosylated, polypeptide containing 774 amino acids and having a molecular mass of 260 kDa. The soluble receptor protein contains only the first 7 extracellular domains, which contain all the information necessary for ligand binding.

The FLT4 Fc Chimera 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 Fc Chimera was lyophilized from a concentrated (1 mg/ml) sterile solution containing no additives.

### Reconstitution

It is recommended to reconstitute the lyophilized FLT4 Fc Chimera 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 future use below

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# California Bioscience

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

-18°C.

For long term storage it is recommended to add a

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

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