Recombinant Human Fms-Related Tyrosine Kinase 4, Fc Chimera

Cat. No. FLT4-583H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human soluble Vascular Endothelial Growth Factor Receptor-3 (sVEGFR-3) was fused with the Fc part of human IgG1. The recombinant mature sVEGFR-3/Fc is a disulfide-linked homodimeric protein. The sVEGFR-3/Fc monomers have a mass of approximately 130 kDa. The soluble receptor protein consists of all 7 extracellular domains (Met1-Glu774). It is produced in*Insect cells*.
Species	Human
Source	Insect Cells
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 VEGFR-3/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.
Endotoxin Level	< 0.1 ng per mg of soluble sVEGFR-3/Fc.

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Purity	> 90%, by SDS-PAGE and visualised by silver stain.
Reconstitution	The lyophilised sVEGFR-3/Fc is soluble in water and most aqueous buffers. The lyophilized sVEGFR-3/Fc should be reconstituted in PBS or medium to a concentration not lower than 100 g/ml.
Specific Activity	Measured by its ability to bind recombinant rat VEGF-C in a functional solid phase binding assay. Immobilised recombinant human sVEGFR-3/Fc at 5 g/ml can bind recombinant rat VEGF-C in a linear range of 8-500 ng/ml.
Stability	Lyophilised samples are stable for greater than six months at -20℃to -70℃. Reconstituted sVEGFR-3/Fc should be stored in working aliquots at -20℃. Avoid repeated freeze-thaw cycles.

GENE INFORMATION

Gene Name	FLT4 fms-related tyrosine kinase 4 [Homo sapiens]
Synonyms	FLT4; fms-related tyrosine kinase 4; PCL; FLT41; LMPH1A; VEGFR3; soluble VEGFR3 variant 1; soluble VEGFR3 variant 2; soluble VEGFR3 variant 3; vascular endothelial growth factor receptor 3; EC 2.7.10.1
Gene ID	2324
mRNA Refseq	NM_002020
Protein Refseq	NP_002011
MIM	136352
UniProt ID	P35916

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Chromosome Location	5q34-q35
Pathway	Cytokine-cytokine receptor interaction; Focal adhesion; Signaling by VEGF
Function	ATP binding; growth factor binding; receptor activity; transferase activity; nucleotide binding; vascular endothelial growth factor receptor activity

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