
Product Data Sheet

Product Name: FLT4 Human
Cat. No.: GP22515
Batch No.: 1

Product Data

Purity	>98%	Source	Insect Cells.
Physical Appearance	solid	Shipping Condition	Shipped at Room temp.
Synonyms	Tyrosine-protein kinase receptor FLT4; PCL; FLT41; FMS-LIKE TYROSINE KINASE 4; VEGFR-3; VEGFR3.		
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.		
Formulation	FLT4 was lyophilized from a concentrated (1mg/ml) sterile solution containing 1xPBS.		

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.

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

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

recombinant rat VEGF-C in a linear range of 8-500 ng/ml.

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 -18°C . For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Background

Soluble FLT4 Human Recombinant fused with a carboxy-terminal 6X histidine-tag produced in baculovirus is a monomeric, glycosylated, polypeptide containing the extracellular part, 25-774 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.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA