ACTIVE BIOSCIENCE
PROTEINS · CELLS · ANTIBODIES

Human Flt-4 / sVEGFR-3, soluble (InCs)

Synonyms: soluble vascular endothelial growth factor receptor-3, FLT4, PCL, LMPH1A, fms-related tyrosine kinase 4

PLEASE NOTE: ALWAYS CENTRIFUGE VIAL BEFORE OPENING

Size	Order #	Lot #	Expiry Date
5 µg	1402.952.005		
10 µg	1402.952.010		
50 µg	1402.952.050		

Please enquire for bulk quantities and other vial sizes

Description

Recombinant human soluble Vascular Endothelial Growth Factor Receptor-3 (sVEGFR-3/FLT-4) was fused with a carboxy-terminal 6X histidine-tag. The recombinant mature sVEGFR-3/FLT-4 is a glycosylated monomeric protein. The sVEGFR-3/FLT-4 monomers have a mass of approximately 120 kDa. The soluble receptor protein consists of all 7 extracellular domains (Met1-Glu774). 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 23aa residue signal peptide. Mature VEGFR-3/FLT-4 is composed of a 751aa residue extracellular domain, a 22aa transmembrane domain and a 482aa 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.

- **Source** Insect cells
- **Purity** ≥ 90 % (SDS-PAGE, silver stained)

Biological Activity

Measured by its ability to bind recombinant rat VEGF-C in a functional solid phase binding assay. Immobilized recombinant human sVEGFR-3/FLT-4 at 5µg/ml can bind recombinant rat VEGF-C in a linear range of 8-500ng/ml

Reconstitution

The lyophilized sVEGFR-3/FLT-4 is soluble in water and most aqueous buffers and should be reconstituted in PBS or medium to a concentration not lower than100 µg/ml.

Amino Acid Sequence

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DPSGYSMTPP TLNITEESHV IDTGDSLSIS CRGQHPLEWA WPGAQEAPAT GDKDSEDTGV VRDCEGTDAR
PYCKVLLLHE VHANDTGSYV CYYKYIKARI EGTTAASSYV FVRDFEQPFI NKPDTLLVNR KDAMWVPCLV
SIPGLNVTLR SQSSVLWPDG QEVVWDDRRG MLVSTPLLHD ALYLQCETTW GDQDFLSNPF LVHITGNELY
DIQLLPRKSL ELLVGEKLVL NCTVWAEFNS GVTFDWDYPG KQAERGKWVP ERRSQQTHTE LSSILTIHNV
SQHDLGSYVC KANNGIQRFR ESTEVIVHEN PFISVEWLKG PILEATAGDE LVKLPVKLAA YPPPEFQWYK
DGKALSGRHS PHALVLKEVT EASTGTYTLA LWNSAAGLRR NISLELVVNV PPQIHEKEAS SPSIYSRHSR
QALTCTAYGV PLPLSIQWHW RPWTPCKMFA QRSLRRRQQQ DLMPQCRDWR AVTTQDAVNP IESLDTWTEF
VEGKNKTVSK LVIQNANVSA MYKCVVSNKV GQDERLIYFY VTTIPDGFTI ESKPSEELLE GQPVLLSCQA
DSYKYEHLRW YRLNLSTLHD AHGNPLLLDC KNVHLFATPL AASLEEVAPG ARHATLSLSI PRVAPEHEGH
YVCEVQDRRS HDKHCHKKYL SVQALEAPRL TQNLTDLLVN VSDSLEMQCL VAGAHAPSIV WYKDERLLEE
KSGVDLADSN QKLSIQRVRE EDAGRYLCSV CNAKGCVNSS ASVAVEGSED KGSMEHHHHH H
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Usage: For research use only. Not for use in diagnostic or therapeutic procedures. Not for human use.

*The Buffer may vary depending on the Lot #. Please contact our technical support if you have specific requirements.

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