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## FLT1

## Recombinant Human VEGFR-1 / Fc Chimera, soluble

Catalog No.CRF105AQuantity:10 μg

CRF105B 50 μg

Alternate Names: Vascular Endothelial Growth Factor Receptor-1, Fms-like tyrosine kinase 1, FLT-1

**Description:** Recombinant human soluble Vascular Endothelial Growth Factor Receptor-1 was fused

with the Fc part of human IgG<sub>1</sub>. The recombinant mature sVEGFR-1<sub>D1-7</sub>/Fc is a disulfidelinked homodimeric protein. The soluble receptor protein consists of all 7 extracellular domains (Met1-Thr751), which contain all the information necessary for high affinity

ligand binding.

Endothelial cells express three different vascular endothelial growth factor (VEGF) receptors, belonging to the family of receptor tyrosine kinases (RTKs). They are named VEGFR-1 (Flt-1), VEGFR-2 (KDR/Flk-1), and VEGFR-3 (Flt-4). Their expression is almost exclusively restricted to endothelial cells, but VEGFR-1 can also be found on monocytes. All VEGF-receptors have seven immunoglobulin-like extracellular domains, a single transmembrane region and an intracellular split tyrosine kinase domain. VEGFR-2 has a lower affinity for VEGF than the Flt -1 receptor, but a higher signaling activity. Mitogenic activity in endothelial cells is mainly mediated by VEGFR-2 leading to their proliferation. Differential splicing of the flt-1 gene leads to the formation of a secreted, soluble variant of VEGFR-1 (sVEGFR-1). No naturally occurring, secreted forms of VEGFR-2 have so far been reported. The binding of VEGF<sub>165</sub> to VEGFR-2 is dependent

on heparin.

UniProt ID: P17948

**Gene ID:** 2321

Source: Insect cells

**Molecular Weight:** 130 kDa, (954 aa) monomer

**Formulation:** Lyophilized from PBS, pH 7.4.

**Purity:** > 90%, by SDS-PAGE and visualized by silver stain

**Endotoxin Level:** < 0.1 EU/μg

**Biological Activity:** The activity of sVEGFR-1/Fc was determined by its ability to inhibit the VEGF-dependent

proliferation of human umbilical vein endothelial cells.

**Reconstitution:** Centrifuge vial prior to opening. The lyophilized sVEGFR-1/Fc is soluble in water and

most aqueous buffers. The lyophilized sVEGFR-1/Fc should be reconstituted in PBS or

medium to a concentration  $\geq$  50 µg/ml.

**Storage & Stability:** Lyophilized samples are stable for greater than six months at -20°C to -80°C.

Toll Free: 888-769-1246

Phone: 978-572-1070

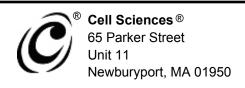
Fax: 978-992-0298

Reconstituted sVEGFR-1/Fc should be stored in working aliquots at -20°C to -80°C.

E-mail: info@cellsciences.com

Website: www.cellsciences.com

Avoid repeated freeze-thaw cycles.



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**Amino Acid Sequence:** 

SKLKDPELSL KGTQHIMQAG QTLHLQCRGE AAHKWSLPEM VSKESERLSI TKSACGRNGK QFCSTLTLNT AQANHTGFYS CKYLAVPTSK KKETESAIYI FISDTGRPFV EMYSEIPEII HMTEGRELVI PCRVTSPNIT VTLKKFPLDT LIPDGKRIIW DSRKGFIISN ATYKEIGLLT CEATVNGHLY KTNYLTHRQT NTIIDVQIST PRPVKLLRGH TLVLNCTATT PLNTRVQMTW SYPDEKNKRA SVRRRIDQSN SHANIFYSVL TIDKMONKDK GLYTCRVRSG PSFKSVNTSV HIYDKAFITV KHRKQQVLET VAGKRSYRLS MKVKAFPSPE VVWLKDGLPA TEKSARYLTR GYSLIIKDVT EEDAGNYTIL LSIKQSNVFK NLTATLIVNV KPQIYEKAVS SFPDPALYPL GSRQILTCTA YGIPQPTIKW FWHPCNHNHS EARCDFCSNN EESFILDADS NMGNRIESIT QRMAIIEGKN KMASTLVVAD SRISGIYICI ASNKVGTVGR NISFYITDVP NGFHVNLEKM PTEGEDLKLS CTVNKFLYRD VTWILLRTVN NRTMHYSISK QKMAITKEHS ITLNLTIMNV SLQDSGTYAC RARNVYTGEE ILQKKEITIR DQEAPYLLRN LSDHTVAISS STTLDCHANG VPEPQITWFK NNHKIQQEPG IILGPGSSTL FIERVTEEDE GVYHCKATNQ KGSVESSAYL TVQGTRSDKT HTCPPCPAPE LLGGPSVFLF PPKPKDTLMI SRTPEVTCVV VDVSHEDPEV KFNWYVDGVE VHNAKTKPRE EQYNSTYRVV SVLTVLHQDW LNGKEYKCKV

SCSVMHEALH NHYTQKSLSL SPGK

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