

32-3018: mFLT1 D7 Recombinant Protein

Alternative Name : FLT-1,FLT1,Tyrosine-protein kinase receptor FLT,Flt-1,Tyrosine-protein kinase FRT,Fms-like tyrosine kinase 1,VEGFR-1.

Description

Source : Insect Cells. Soluble FLT1 Mouse Recombinant fused with the Fc part of human IgG1 produced in baculovirus is disulfide-linked homodimeric , polypeptide containing 965 amino acids. The monomers have a molecular mass of 130 kDa. The soluble receptor protein contains all 7 extracellular domains (Tyr23-Asn757), 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 signalling 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 VEGF165 to VEGFR-2 is dependent on heparin.

Product Info

Amount :	10 µg
Purification :	Greater than 95.0% as determined by SDS-PAGE.
Content :	FLT1 D1-7 was lyophilized from a concentrated (1 mg/ml) sterile solution containing PBS Buffer.
Storage condition :	Lyophilized FLT-1 although stable at room temperature for 3 weeks, should be stored desiccated below -18C. Upon reconstitution FLT1 should be stored at 4C between 2-7 days and for future use below -18C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.
Amino Acid :	YGSGLKVP ELSLKGTHQV MQAGQTLFLK CRGEAAHSWS LPTTVSQEDK RLSITPPSAC GRDNRQFCST LTLDTAQANH TGLYTCRYLP TSTSKKKKAE SSIYIFVSDA GSPFIEMHTD IPKLVMHTEG RQLIIPCRVT SPNVTVTLLK FPFDTLTDPG QRITWDSRRG FIANATYKE IGLLNCEATV NGHLYQTNLY THRQNTNILD VQIRPPSPVR LLHGQTLVLN CTATTELNTR VQMSWNYPGK ATKRASIRQR IDRSHTSHNNV FHSVLIKINN ESRDKGLYTC RVKSGSSFQS FNTSVHVEYK GFISVKHRKQ PVQETTAGRR SYRLSMKVKA FPSPEIVWLK DGSPATLKSA RYLHVGYSLI IKDVTTEDAG DYTILLGIKQ SRLFKNLTAT LIVNVKPKIY EKSVSLLPSP PLYPLGSRQV LTCTVYGIPR PTITWLWHPH HHNHSKERYD FCTENEESFI LDPSSNLGNR IESISQRMV IEGTNKTVST LVVADSQTPG IYSCRAFNI GTVERNIFY VTDVPNGFHV SLEKMPAEGE DLKLSGVVVK FLYRDITWIL LRTVNNRTMH HSISKQKMAT TQDYSITLNL VIKNVSLDS GTYACRARNI YTGEDILRKT EVLVRDSEAP HLLQNLSDYE VSISGSTTLD CQARGVPAPQ ITWFKNNHKI QQEPGILGP GNSTLFIERV TEEDEGVYRC RATNQKGAVE SAAYLTVQGT SDKSNAASDK THTCPAPCAP ELLGGPSVFL FPPKPKDTLM ISRTPEVTCV VVDVSHEDPE VKFNWYVDGV EVHNAKTKPR EEQYNSTYRV VSVLTVLHQD WLNQKEYKCK VSNKALPAPI EKTISKAKGQ PREPQVYTL PSREEMTKNQ VSLTCLVKGF YPSDIAVEWE SNGQPENNYK TTPMMLDSGD SFFLYSKLTV DKSRRWQQGNV FSCSVMEAL HNHYTQKSLS LSPGK

Application Note

It is recommended to reconstitute the lyophilized FLT1 Fc/Chimera in PBS not less than 50 µg/ml, which can then be further diluted to other aqueous solutions. The activity of sVEGFR-1/Fc was determined by its ability to inhibit the VEGF-dependent proliferation of human umbilical vein endothelial cells.

