

Recombinant Human FLT1

CATALOG #:	4951-10 4951-100	10 µg 100 µg
LOT #:	_____	
SYNONYMS:	FLT-1, FLT1, Tyrosine-protein kinase receptor FLT, Flt-1, Tyrosine-protein kinase FRT, Fms-like tyrosine kinase 1, VEGFR-1	
SOURCE:	Insect cells	
PURITY:	> 90 % by SDS-PAGE analyses and RP-HPLC Endotoxin level is < 0.1 ng per µg.	
MOL. WEIGHT:	96 kDa	
FORM:	Lyophilized from sterile-filtered solution containing PBS	
STORAGE CONDITIONS:	The lyophilized protein is best-stored desiccated at -20 °C.	

RECONSTITUTION:

Centrifuge the vial prior to opening. Reconstitute in water to a concentration not less than 0.1 mg/ml. This solution can then be stored at 4°C for 2-7 days. For future use for future use; For long term storage it is recommended to add a carrier protein (0.1 % HSA or BSA) then store at -20°C. Avoid freeze-thaw cycles.

DESCRIPTION: The flt-1 gene was first described in 1990. The receptor contains seven immunoglobulin-like extracellular domains, a single transmembrane region and an intracellular split tyrosine kinase domain. Compared to VEGFR-2 the Flt-1 receptor has a higher affinity for VEGF but a weaker signaling activity. VEGFR-1 thus leads not to proliferation of endothelial cells, but mediates signals for differentiation. Soluble FLT1 Human Recombinant produced in baculovirus is monomeric, glycosylated, polypeptide containing 688 amino acids and having a molecular mass of 96 kDa. The soluble receptor protein contains only the first 6 extracellular domains, which contain all the information necessary for binding of VEGF. The FLT1 is purified by proprietary chromatographic techniques.

AMINO ACID SEQUENCE:

MVSYWDTGVL	LCALLSCLLL	TGSSSGSKLK	DPELSLKGTO	HIMQAGQTLH	LQCRGEAAHK	WSLPEMVSKE
SERLSITKSA	CGRNGKQFCS	TLTLNTAQAN	HTGFYSCKYL	AVPTSKKKET	ESAIYIFISD	TGRPFVEMYS
EIPEIIHMTE	GRELVIPCRV	TSPNITVTLK	KFPLDTLIPD	GKRIIWDSRK	GFIISNATYK	EIGLLTCEAT
VNGHLYKTNV	LTHRQTNTII	DVQISTPRPV	KLLRGHTLVL	NCTATTPLNT	RVQMTWSYPD	EKNKRASVRR
RIDQSNSHAN	IFYSVLTIDK	MQNKDKGLYT	CRVRSGPSFK	SVNTSVHIYD	KAFITVKHRK	QQVLETVAGK
RSYRLSMKVK	AFPSPPEVWV	KDGLPATEKS	ARYLTRGYSL	IIKDVTEEDA	GNYTILLSIK	QSNVFNKLT
TLIVNVKPI	YEKAVSSFDP	PALYPLGSRQ	ILTCTAYGIP	QPTIKWFHP	CNNHSEARC	DFCSNNEESF
ILDADSNMGN	RIESITQRMA	IEGKNKMAS	TLVVDARSIS	GIYICIASNK	VGTVGRNISF	YITDVPNGFH
VNLEKMPTEG	EDLKLSCVTN	KFLYRDVTWI	LLRTVNNRTM	HYSISKQKMA	ITKEHSITLN	LTIMNVSLQD
SGTYACRARN	VYTGEELQK	KEITIRGEHC	NKKAVFSRIS	KFKSTRNDCT	TQSNVKH	

BIOLOGICAL ACTIVITY: The activity of FLT1 was determined by its ability to abolish the binding of iodinated VEGF to solid surfaces or cell surface receptors. The ED₅₀ for this effect is typically 10 ng/ml, corresponding to a specific activity of 100,000 IU/mg.

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- Senescence Detection Kit
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- Bioluminescence Cytotoxicity Assay Kit
- Live/Dead Cell Staining Kit

Signal Transduction

- cAMP & cGMP Assay Kits
- Akt & JNK Activity Assay Kits
- Beta-Secretase Activity Assay Kit

Molecular Biology & Reporter Assays

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- Cloning Insert Quick Screening Kit
- Mitochondrial & Genomic DNA Isolation Kits
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