

Vascular Endothelial Growth Factor receptor-1 Active Protein | FLT1 active protein

Recombinant Human Vascular Endothelial Growth Factor receptor-1

CATALOG #
AAA38398

HOST
Insect Cells

PRODUCT SYNONYMS

Vascular Endothelial Growth Factor receptor-1; Recombinant Human Vascular Endothelial Growth Factor receptor-1; FLT1 Human; Vascular Endothelial Growth Factor Receptor-1 Human Recombinant; FLT-1; FLT1; Tyrosine-protein kinase receptor FLT; Flt-1; Tyrosine-protein kinase FRT; Fms-like tyrosine kinase 1; VEGFR-1; FLT1 active protein

PRODUCT SPECIFICATIONS

Host	Insect Cells
Purity/Purification	Greater than 90.0% as determined by(a)Analysis by RP-HPLC. (b)Analysis by SDS-PAGE.
Form/Format	FLT1 was lyophilized from a concentrated (1 mg/ml) sterile solution containing 1x PBS. Sterile Filtered White lyophilized (freeze-dried) powder.
Sequence	MVSYWDT GVLLCALLSC LLLTGSSSGSKLDPE LSLKGTQHIM QAGQTLHLQC RGEAAHKWSL PEMVSKESER LSITKSACGR NGKQFCSTLT LNTAQANHTG FYCKYLAVP TSKKKETESA IYIFISDTGR PFVEMYSEIP EIIHMTGRE LVIPCRVTSP NITVTLKKFP LDTLIPDGKR IIWDSRKGFI ISNATYKEIG LLTCEATVNG HLYKTNYLTH RQNTIIDVQ ISTPRPVKLL RGHTLVLNCT ATTPLNTRVQ MTWSYPDEKN KRASVRRRID QSNSHANIFY SVLTIDKMQN KDKGLYTCRV RSGPSFKSVN TSVHIYDKAF ITVKHRKQV LETVAGKRSY RLSMKVKAFF SPEVVWLKDG LPATEKSARY LTRGYSIIK DVTEEDAGNY TILLSIKQSN VFKNLTATLI VNVKPQIEK AVSSFPDPAL YPLGSRQILT CTAYGIPQPT IKWFWHPCNH NHSEARCDFC SNNEESFILD ADSNMGNRIE SITQRMALIE GKNKMASTLV VADSRISGIY ICIASNKVGTVGRNISFYIT DVPNGFHVNL EKMPTEGEDL KLSCTVNKFL YRDVTWILLR TVNNRTMHYS ISKQKMAITK EHSITLNLTI MNVSLQDSGT YACRARNVYT GEEILQKKEI TIRGEHCNKK AVFSRISKFK STRNDCTTQS NVKH
Sequence Length	687
Solubility	It is recommended to reconstitute the lyophilized FLT1 in sterile water not less than 100 ug/ml, which can then be further diluted to other aqueous solutions.
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 100,000IU/mg.
Preparation and Storage	Lyophilized FLT-1 although stable at room temperature for 3 weeks, should be stored desiccated below -18 degree C. Upon reconstitution FLT1 should be stored at 4 degree C between 2-7 days and for future use below -18 degree C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Please prevent freeze-thaw cycles.

ADDITIONAL INFORMATION

Related Product Information for FLT1 active protein	Description: 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. Introduction: 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), VEGFR-3 (Flt-4). Their expression is almost exclusively restricted to endothelial cells, but VEGFR-1 can also be found on monocytes, dendritic cells and on trophoblast cells. 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. Interestingly a naturally occurring soluble variant of VEGFR-1 (sVEGFR-1) was found in HUVE supernatants in 1996, which is generated by alternative splicing of the flt-1 mRNA. The biological functions of sVEGFR-1 still are not clear, but it seems to be an endogenous regulator of angiogenesis, binding VEGF with the same affinity as the full-length receptor.
Product Categories/Family for FLT1 active protein	Protein Kinases; Enzymes; VEGF Receptors

NCBI AND UNIPROT INFORMATION

NCBI GI #	229892220
NCBI GeneID	2321
NCBI Accession #	NP_001153392.1
NCBI GenBank Nucleotide #	NM_001159920.1
UniProt Accession #	P17948; O60722; A3E342; A3E344; A8KA71; B0LPF1; B2BF46; B2BF47; B2BF48; B3FR89; B5A923; F5H5L6
Molecular Weight	41,175 Da
NCBI Official Full Name	vascular endothelial growth factor receptor 1 isoform 2
NCBI Official Synonym Full Names	fms-related tyrosine kinase 1
NCBI Official Symbol	FLT1
NCBI Official Synonym Symbols	FLT; FLT-1; VEGFR1; VEGFR-1
NCBI Protein Information	vascular endothelial growth factor receptor 1; fms-like tyrosine kinase 1; fms-related tyrosine kinase 1 (vascular endothelial growth factor/vascular permeability factor receptor); tyrosine-protein kinase FRT; tyrosine-protein kinase receptor FLT
UniProt Protein Name	Vascular endothelial growth factor receptor 1
UniProt Gene Name	FLT1
UniProt Synonym Gene Names	FLT; FRT; VEGFR1; VEGFR-1; FLT-1; FLT
UniProt Entry Name	VGFR1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/insect-cells-flt1-active-protein/vascular-endothelial-growth-factor-receptor-1/38398>