

VEGFR1/Flt-1 active protein

Recombinant mouse VEGFR1/Flt-1 protein

CATALOG # AAA49007	HOST HEK293	APPLICATIONS SDS-Page
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PRODUCT SYNONYMS

VEGFR1/Flt-1; Recombinant mouse VEGFR1/Flt-1 protein; VEGFR1; VEGF R1; VEGFR-1; FLT-1; FLT1; FLT; sFlt1; Emrk2; FRT; Vascular endothelial growth factor receptor 1 isoform 1; Embryonic receptor kinase 2; Fms-like tyrosine kinase 1; Tyrosine-protein kinase FRT; Tyrosine-protein kinase receptor FLT; Vascular permeability factor receptor; fms-related tyrosine kinase 1; VEGFR1/Flt-1 active protein

PRODUCT SPECIFICATIONS

Host	HEK293
Purity/Purification	> 85% by SDS-PAGE
Form/Format	Liquid in. Phosphate-Buffered Saline (pH7.4) containing 10% glycerol
Concentration	1mg/ml (determined by Absorbance at 280nm) (varies by lot)
Sequence Positions	23-759aa
Sequence	Tyr23 Y GSGSKLVPE LSLKGTQHVM QAGQTLFLKC RGEAAHSWSL PTTVSQEDKR LSITPPSACG RDNRFQFCSTL TLDTAQANHT GLYTCRYLPT STSKKKKAES SIYIFVSDAG SPFIEMHTDI PKLVHMTEGR QLIIPCRVTS PNVTVTLLKKF PFDLTLPDQG RITWDSRRGF IANATYKEI GLLNCEATVN GHLYQTNLYT HRQTNTILDV QIRPPSPVRL LHGQTLVLNC TATTELNTRV QMSWNYPGKA TKRASIRQRI DRSHSHNNVF HSVLKINNVE SRDKGLYTCR VKSGSSFQSF NTSVHVYEKG FISVKHRKQP VQETTAGRRS YRLSMKVKAF PSPEIVWLKD GSPATLKSAR YLVHGYSLLI KDVTTEDAGD YTILLGIKQS RLFKNLTATL IVNVKPQIYE KSVSSLPSPP LYPLGSRQVL TCTVYGIPRP TITWLWHPCH HNHSKERYDF CTENEESFIL DPSSNLGNRI ESISQRMTVI EGTNKTVSTL VVADSQTPGI YSCRAFNGIG TVERNIKFYV TDVPNGFHVS LEKMPAEGED LKLSCVNNKF LYRDITWILL RTVNNRTMHH SISKQKMATT QDYSITLNLV IKNVSLSDSG TYACRARNIY TGEDILRKTE VLVRDSEAPH LLQNLSDEYV SISGSTTLDG QARGVPAPQI TWFKNNHGIQ QEPGIILGPG NSTLFIERTV EEDEGVYRCR ATNQKGAVES AAYLTVQGTS DKSNNLE
Applicable Applications for VEGFR1/Flt-1 active protein	Bioactivity, SDS-PAGE
Species	Mouse
Endotoxin	< 1 EU per 1ug of protein (determined by LAL method)
Tag	hIgG-Tag
Preparation and Storage	Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

ADDITIONAL INFORMATION

Related Product Information for VEGFR1/Flt-1 active protein	VEGFR1 (Vascular Endothelial Growth Factor Receptor 1), also known as FLT-1 (Fms-like Tyrosine Kinase 1), belongs to the class III subfamily of receptor tyrosine kinases. While VEGFR1, VEGFR2, and VEGFR3 are mainly expressed on endothelial cells, VEGFR1 is uniquely expressed on macrophages and primarily plays inhibitory roles. Inhibitors of VEGFR are used in cancer treatment. VEGFR1 acts as a cell-surface receptor for VEGFA, VEGFB, and PGF, playing essential roles in the development of embryonic vasculature, regulation of angiogenesis, cell survival, cell migration, macrophage function, chemotaxis, and cancer cell invasion. VEGFR1 binds VEGF with higher affinity than VEGFR2 but exhibits weaker kinase activity. The VEGF-kinase ligand/receptor signaling system is crucial for vascular development and the regulation of vascular permeability. Recombinant mouse VEGFR1/Flt-1, fused to hIgG-tag at C-terminus, was expressed in HEK293 cell and purified by using conventional chromatography techniques.
Product Categories/Family for VEGFR1/Flt-1 active protein	Immunology, Enzymes & Proteases, Angiogenesis, Cardiovascular; Proteins
References	Peters, K.G. et al. (1993) Proc. Natl. Acad. Sci. USA 90:8915-8919. Kendall R.L., et al., (1993), Natl. Acad. Sci. U.S.A. 90:10705-10709. Herley M.T., et al., (1999), Biochem. Biophys. Res. Commun. 262:731-738. Kendall R.L., et al., (1993), Natl. Acad. Sci. U.S.A. 90:10705-10709.

NCBI AND UNIPROT INFORMATION

NCBI GI #	34328180
NCBI GeneID	14254
NCBI Accession #	NP_034358.2
NCBI GenBank Nucleotide #	NM_010228.3
UniProt Accession #	P35969; O55094; Q61517
Molecular Weight	149,876 Da
NCBI Official Full Name	vascular endothelial growth factor receptor 1
NCBI Official Synonym Full Names	FMS-like tyrosine kinase 1
NCBI Official Symbol	Flt1
NCBI Official Synonym Symbols	Flt-1; sFlt1; VEGFR1; VEGFR-1; AI323757
NCBI Protein Information	vascular endothelial growth factor receptor 1
UniProt Protein Name	Vascular endothelial growth factor receptor 1
UniProt Gene Name	Flt1
UniProt Synonym Gene Names	Emrk2; Flt; Vegfr1; VEGFR-1; FLT-1
UniProt Entry Name	VGFR1_MOUSE

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.