

32-3133: VEGFR2 Recombinant Protein

Alternative Name : KDR D1-7,sKDR D1-7,Kinase insert domain receptor,Protein-tyrosine kinase receptor Flk-1,CD309,type III receptor tyrosine kinase,FLK1,VEGFR-2.

Description

Source : Insect Cells. Soluble VEGFR-2 Human Recombinant produced in baculovirus is monomeric, glycosylated, polypeptide having a molecular mass of 116 kDa. The soluble receptor protein contains only the first 7 extracellular domains, which contain all the information necessary for ligand binding. The sKDR is purified by proprietary chromatographic techniques. 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. 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 VEGF165 to VEGFR-2 is dependent on heparin.

Product Info

Amount :	10 µg
Purification :	Greater than 95.0% as determined by SDS-PAGE.
Content :	KDR was lyophilized from a concentrated (1 mg/ml) sterile solution containing 25mM MES pH-5.5 and 100mM NaCl.
Storage condition :	Lyophilized VEGFR-2 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution FLK1 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.
Amino Acid :	ASVGLPSVSLD LPRLSIQKDI LTIKANTTLQ ITCRGQRDL D WLWPNNQSGS EQRVEVTECS DGLFCKTLTI PKVIGNDTGA YKCFYRETDL ASVIYVYVQD YRSPFIASVS DQHG VVYITE NKNKTVVIPC LGSISNLNVS LCARYPEKRF VPDGNRISWD SKKGFTIPSY MISYAGMVFC EAKINDESYQ SIMYIVVVVG YRIYDVVLS SHGIELSVGE KLVLNCTART ELNVGIDFNW EYPSSKHQHK KLVNRDLKTQ SGSEMKKFLS TLTIDGVTRS DQGLYTCAAS SGLMTKKNST FVRVHEKPFV AFGSGMESLV EATVGERVRI PAKYLGYPPE EIKWYKNGIP LESNHTIKAG HVLTIMEVSE RDTGNYTVIL TNPISKEKQS HVVSLVYVVP PQIGEKSLIS PVDSYQYGT QTLTCTVYAI PPPHHHWYW QLEEECANEP SQAVSVTNPY PCEEWRSVED FQGGNKIEVN KNQFALIEGK NKTVSTLVIQ AANVSALYKC EAVNKVGRGE RVISFHVTRG PEITLQPD MQ PTEQESVSLW CTADRSTFEN LTWYKLGPPQ LPIHVGELPT PVCKNLDTLW KLNATMFSNS TNDILIMELK NASLQDQGDY VCLAQDRKTK KRHCVVRQLT VLERVAPTIT GNLENQTTSI GESIEV SCTA SGNPPPQIMW FKDNETLVED SGIVLKDGNR NLTIRVRKE DEGLYTCQAC SVLGC AKVEA FFIIEGA.

Application Note

It is recommended to reconstitute the lyophilized VEGFR2 in sterile water not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.