

Recombinant Human VEGFR2

CATALOG #:	4952-10 4952-100	10 µg 100 µg
LOT #:	_____	
SYNONYMS:	KDR D1-7, sKDR D1-7, Kinase insert domain receptor, Protein-tyrosine kinase receptor Flk-1, FLK1, VEGFR-2	
SOURCE:	Insect cells	
PURITY:	> 95 % by SDS-PAGE analyses Endotoxin level is < 0.1 ng per µg.	
MOL. WEIGHT:	116 kDa	
FORM:	KDR was lyophilized from a sterile solution containing 25 mM MES pH 5.5 and 100 mM NaCl.	
STORAGE CONDITIONS:	The lyophilized protein is best-stored desiccated at -20 °C.	

RECONSTITUTION: Centrifuge the vial prior to opening. Reconstitute in sterile 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 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: 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. No naturally occurring, secreted forms of VEGFR-2 have so far been reported. The binding of VEGF165 to VEGFR-2 is dependent on heparin. 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.

AMINO ACID SEQUENCE:

ASVGLPSVSL	DLPRLSIQKD	ILTIKANTTL	QITCRGQRDL	DWLWPNNQSG	SEQRVEVTEC	SDGLFCKTLT
IPKVI GNDTG	AYKCFYRETD	LASVIYVVYQ	DYRSPFIASV	SDQHGVVYIT	ENKNKTVVIP	CLGSISNLNV
SLCARYPEKR	FVPDGNRISW	DSKKGFTIPS	YMISYAGMVF	CEAKINDESY	QSIMYIVVVV	GYRIYDVVLS
PSHGIELSVG	EKLVLNCTAR	TELVNGIDFN	WEYPSSKHQH	KKLVNRDLKT	QSGSEMKKFL	STLTIDGVTR
SDQGLYTCAA	SSGLMTKKNS	FVRVHEKPFV	AFGSGMESLV	EATVGERVRI	PAKYLGYPPP	EIKWYKNGIP
LESNHTIKAG	HVLTIMEVSE	RDTGNYTVIL	TNPISKEKQS	HVSVLVVYVP	TPQIGEKSLI	SPVDSYQYGT
TQTLTCTVYA	IPPPHHIHXY	WQLEBECANE	PSQAVSVTNP	YPCBEWRSVE	DFQGGNKIEV	NKNQFALIEG
KNKTVSTLVI	QAANVSALYK	CEAVNKVGRG	ERVISFHVTR	GPEITLQPDM	QPTEQESVSL	WCTADRSTFE
NLTWYKLGPO	PLPIHVGELP	TPVCKNLDTL	WKLNATMFSN	STNDILIMEL	KNASLQDQGD	YVCLAQDRKT
KKRHCVVRQL	TVLERVAPTI	TGNLENQTTS	IGESIEVSCT	ASGNPPPQIM	WFKDNETLVE	DSGIVLKDGN
RNLTI RRVRK	EDEGLYTCQA	CSVLGC AKVE	AFFIIEGA			

BIOLOGICAL ACTIVITY: The activity of VEGFR2 D1-7 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 10.0 ng/ml, corresponding to a specific activity of 100,000IU/mg.

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