

Human KDR (D7) / VEGFR-2 soluble (InCs)

Synonyms: soluble vascular endothelial growth factor receptor-2 , soluble CD309, soluble VEGF receptor-2, sKDR.

PLEASE NOTE: ALWAYS CENTRIFUGE VIAL BEFORE OPENING

Size	Order#	Lot#	Expiry Date
5 µg	1620.952.005		
50 µg	1620.952.050		

Please enquire for bulk quantities and other vial sizes.

Description

Recombinant Human soluble Endothelial Growth Factor Receptor-2 (sKDR(D7)) is produced as a non-chimeric protein in a monomeric form. The soluble receptor protein consists of all 7 extracellular domains, which contain all the information necessary for high affinity ligand binding. The receptor monomers have a mass of approximately 116 kDa. 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. The binding of VEGF165 to VEGFR-2 is dependent on heparin.

- **Source** Insect cells
- **Purity** ≥ 95 % (SDS-PAGE, silver stained)

Biological Activity

Measured by its ability to inhibit the VEGF165-induced proliferation in human umbilical vein endothelial (HUVE) cells.

Reconstitution

The lyophilized human sKDR is soluble in water and most aqueous buffers, it should be reconstituted in water or PBS to a concentration of not lower than 100µg/ml.

Amino Acid Sequence

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ASVGLPSVSL DLPRLSIQKD ILTIKANTTL QITCRGQSDL DWLWPNNQSG SEQRVEVTEC SDGLFCKTLT
IPKVIGNDTG AYKCFYRETD LASVIYVYVQ DYRSPFIASV SDQHGVVYIT ENKNKTVVIP CLGSISNLNV
SLCARYPEKR FVPDGNRISW DSKKGFTIPS YMISYAGMVF CEAKINDESY QSIMYIVVVV GYRIYDVVLS
PSHGIELSVG EKLVLNCTAR TELNVGIDFN WEYPSSKHQH KKLVNRLDKT QSGSEMKKFL STLTIDGVTR
SDQGLYTCAA SSGLMTKKN S TFVRVHEKPF VAFGSGMESL VEATVGERVR IPAKYLGYPP PEIKWYKNGI
PLESNHTIKA GHVLTIMEVS ERDTGNYTVI LTNPISKEKQ SHVSLVYV PPQIGEKSLI SPVDSYQYGT
TQTLTCTVYA IPPPHIHWHY WQLEEECAN PSQAVSVTNP YPCEEWSVE DFQGGNKIEV NKNQFALIEG
KNKTVSTLVI QAAVNSALYK CEAVNKVGRG ERVISFHVTR GPEITLQPD QPTEQESVSL WCTADRSTFE
NLTWYKLGPO PLPIHVGELP TPVCKNLDTL WKLNATMFSN STNDILIMEL KNASLQDQGD YVCLAQDRKT
KKRHCVVRQL TVLERVAPTI TGNLENQTT IGESIEVSCT ASGNPPPQIM WFKDNETLVE DSGIVLKDGN
RNLTIIRVRK EDEGLYTCAQ CSVLGCAKVE AFFIIEGA
  
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Usage: For research use only. Not for use in diagnostic or therapeutic procedures. Not for human use.

*The Buffer may vary depending on the Lot #. Please contact our technical support if you have specific requirements.

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