

KDR

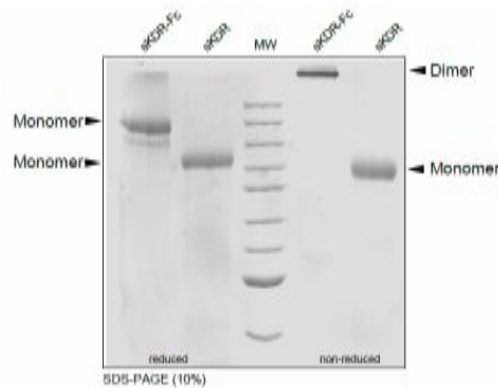
Recombinant Human VEGFR-2_{D7} Fc Chimera, soluble

Catalog No.	CRK100A CRK100B	Quantity:	10 µg 50 µg
Alternate Names:	Vascular endothelial growth factor receptor 2, CD309, Fetal liver kinase 1, FLK-1, Kinase insert domain receptor, KDR		
Description:	<p>Recombinant human soluble Vascular Endothelial Growth Factor Receptor-2 was fused with the Fc part of human IgG1. The recombinant mature sVEGFR-2_{D1-7}/Fc is a disulfide-linked homodimeric protein. The soluble receptor protein consists of all 7 extracellular domains (Met1-Ala757), which contain all the information necessary for high affinity ligand binding.</p> <p>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), and 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 signalling activity. Mitogenic activity in endothelial cells is mainly mediated by VEGFR-2 leading to their proliferation. Differential splicing of the <i>flt-1</i> gene leads to the formation of a secreted, soluble variant of VEGFR-1 (sVEGFR-1).</p> <p>No naturally occurring, secreted forms of VEGFR-2 have so far been reported. The binding of VEGF₁₆₅ to VEGFR-2 is dependent on heparin.</p>		
UniProt ID:	P35968		
GeneID:	3791		
Source:	Insect cells		
Molecular Weight:	145 kDa (968 aa) Monomer		
Formulation:	Lyophilized from PBS, pH 7.4		
Purity:	>90% by SDS-PAGE and visualized by silver stain		
Endotoxin Level:	< 1 EU/µg		
Biological Activity:	The activity of sVEGFR-2/Fc was determined by its ability to inhibit the VEGF-dependent proliferation of human umbilical vein endothelial cells.		
Reconstitution:	Centrifuge vial prior to opening. Add PBS or medium to the vial to fully solubilize the protein to a concentration ≥ 100 µg/ml. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein such as 0.1% BSA and store in working aliquots at -20°C to -80°C.		
Storage & Stability:	Lyophilized protein is stable for 1 year at -20°C to -80°C. Store reconstituted protein in working aliquots at -20°C to -80°C. Avoid repeated freeze-thaw cycles.		



Amino Acid Sequence: ASVGLPSVSL DLPRLSIQKD ILTIKANTTL QITCRGQRDL DWLWPNNQSG
SEQRVEVTEC SDGLFCKTLT IPKVIGNDTG AYKCFYRETD LASVIYVVVQ
DYRSPFIASV SDQHGVVYIT ENKNKTVVIP CLGSISNLNV SLCARYPEKR
FVPDGNRISW DSKKGFTIPS YMISYAGMVF CEAKINDESY QSIMYIVVVV
GYRIYDVVLS PSHGIELSVG EKLVLNCTAR TELNVGIDFN WEYPSSKHQH
KKLVNRDLKT QSGSEMKKFL STLTIDGVTR SDQGLYTCAA SSGLMTKKNS
TFVRVHEKPF VAFGSGMESL VEATVGERVR IPAKYLGYPPEIKWYKNGI
PLESNHTIKA GHVLTIMEVS ERDTGNYTVI LTNPISKEKQ SHVVSLVVYV PPQIGEKSLI
SPVDSYQYGT TQTLTCTVYA IPPPHHHWY WQLEEECANESQAVSVTNP
YPCEEWRVSVE DFQGGNKIEV NKNQFALIEG KNKTVSTLVI QAAVNSALYK

SDS-PAGE analysis of recombinant human soluble KDR_{D1-7} and soluble KDR_{D1-7} /Fc chimera. Silver stained. The soluble KDR_{D1-7} /Fc protein forms dimers whereas soluble KDR_{D1-7} does not.



NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.



Cell Sciences®
65 Parker Street
Unit 11
Newburyport, MA 01950

Toll Free: 888-769-1246
Phone: 978-572-1070
Fax: 978-992-0298

E-mail: info@cellsciences.com
Website: www.cellsciences.com