

Recombinant Human Kinase Insert Domain Receptor (a type III receptor tyrosine kinase), Fc-tagged

Cat. No. KDR-5442H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human KDR was fused with the Fc part of human IgG1. The recombinant mature KDR is a disulfide-linked homodimeric protein. The KDR monomers have a mass of approximately 160 kDa.
Species	Human
Source	Insect Cells
Description	KDR 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 KDR 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 KDR have so far been reported. The binding of VEGF165 to KDR is dependent on heparin.
Form	Lyophilized
Molecular Weight	160 kDa
Purity	> 90%, by SDS-PAGE and visualized by silver stain
Endotoxin Level	< 0.1 ng per µg of KDR
Biological Activity	The activity of KDR was determined by its ability to inhibit the VEGF-dependent

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proliferation of human umbilical vein endothelial cells. The ED50 for this effect is typically 10-30 ng/ml.

Reconstitution

The lyophilized KDR is soluble in water and most aqueous buffers. The lyophilized KDR should be reconstituted in PBS or medium to a concentration not lower than 50 ug/ml.

Storage

Lyophilized samples are stable for greater than six months at -20°C to -70°C. Reconstituted KDR should be stored in working aliquots at -20°C. Avoid repeated freeze-thaw cycles.

GENE INFORMATION

Gene Name KDR kinase insert domain receptor (a type III receptor tyrosine kinase) [Homo sapiens]

Official Symbol KDR

Synonyms KDR; kinase insert domain receptor (a type III receptor tyrosine kinase); FLK1; CD309; VEGFR; VEGFR2; vascular endothelial growth factor receptor 2; soluble VEGFR2; OTTHUMP00000158928; fetal liver kinase 1; fetal liver kinase-1; protein-tyrosine kinase receptor Flk-1; tyrosine kinase growth factor receptor

Gene ID 3791

mRNA Refseq NM_002253

Protein Refseq NP_002244

MIM 191306

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UniProt ID	P35968
Chromosome Location	4q11-q12
Pathway	Cytokine-cytokine receptor interaction; Endocytosis; Focal adhesion; VEGF signaling pathway; Signaling by VEGF
Function	ATP binding; growth factor binding; nucleotide binding; receptor activity; transferase activity; vascular endothelial growth factor receptor activity
Rendering of KDR	

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