

Active Recombinant Human KDR Protein, Fc-tagged, Alexa Fluor 488 conjugated

Cat. No. KDR-5442HAF488 **Lot. No.** (See product label)

SPECIFICATION

Product Overview Alexa Fluor 488 conjugated 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

Bio-activity The activity of KDR was determined by its ability to inhibit the VEGF-dependent proliferation of human umbilical vein endothelial cells. The ED50 for this effect is typically 10-30 ng/mL.

Molecular Mass 160 kDa

Endotoxin < 0.1 ng/ µg of KDR

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Purity	> 90 % by SDS-PAGE and analyzed by silver stain
Characteristic	Disulfide-linked homodimer Labeled with Alexa Fluor 488 via amines Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Storage	Lyophilized samples are stable for greater than six months at -20 to -70 centigrade. Reconstituted KDR should be stored in working aliquots at -20 centigrade. Avoid repeated freeze-thaw cycles.
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 µg/mL.
Conjugation	Alexa Fluor 488

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

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mRNA Refseq	NM_002253
Protein Refseq	NP_002244
MIM	191306
UniProt ID	P35968

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