## **PRODUCT INFORMATION**

**Expression system** Baculovirus

**Domain** 20-764aa

**UniProt No.** P35968

NCBI Accession No. NP\_002244

Alternative Names Vascular endothelial growth factor receptor 2, KDR, CD309, FLK1, VEGFR, VEGFR2

# **PRODUCT SPECIFICATION**

Molecular Weight 110.5 kDa (987aa)

**Concentration** 0.5mg/ml (determined by absorbance at 280nm)

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

### Purity

> 90% by SDS-PAGE

**Endotoxin level** < 1 EU per 1ug of protein (determined by LAL method)

Tag hlgG-His-Tag

Application SDS-PAGE

### **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

### Description

KDR, also known as vascular endothelial growth factor receptor 2, is one of the subtypes of VEGFR. VEGF receptors are receptors for vascular endothelial growth factor (VEGF). There are three main subtypes of VEGFR (1, 2 and 3). VEGFR2 was shown to be the primary signal transducer for angiogenesis and the development of pathological conditions like cancer. Also, this protein is expressed mainly in the endothelial cells, and the



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expression is upregulated in the tumor vasculature. Recombinant human KDR protein, fused to hIgG-His-tag at Cterminus, was expressed in insect cell and purified by using conventional chromatography techniques.

#### Amino acid Sequence

<ADP>ASVGLPS VSLDLPRLSI QKDILTIKAN TTLQITCRGQ RDLDWLWPNN QSGSEQRVEV TECSDGLFCK TLTIPKVIGN DTGAYKCFYR ETDLASVIYV YVQDYRSPFI ASVSDQHGVV YITENKNKTV VIPCLGSISN LNVSLCARYP EKRFVPDGNR ISWDSKKGFT IPSYMISYAG MVFCEAKIND ESYQSIMYIV VVVGYRIYDV VLSPSHGIEL SVGEKLVLNC TARTELNVGI DFNWEYPSSK HQHKKLVNRD LKTQSGSEMK KFLSTLTIDG VTRSDQGLYT CAASSGLMTK KNSTFVRVHE KPFVAFGSGM ESLVEATVGE RVRIPAKYLG YPPPEIKWYK NGIPLESNHT IKAGHVLTIM EVSERDTGNY TVILTNPISK EKQSHVVSLV VYVPPQIGEK SLISPVDSYQ YGTTQTLTCT VYAIPPPHHI HWYWQLEEEC ANEPSQAVSV TNPYPCEEWR SVEDFQGGNK IEVNKNQFAL IEGKNKTVST LVIQAANVSA LYKCEAVNKV GRGERVISFH VTRGPEITLQ PDMQPTEQES VSLWCTADRS TFENLTWYKL GPQPLPIHVG ELPTPVCKNL DTLWKLNATM FSNSTNDILI MELKNASLQD QGDYVCLAQD RKTKKRHCVV RQLTVLERVA PTITGNLENQ TTSIGESIEV SCTASGNPPP QIMWFKDNET LVEDSGIVLK DGNRNLTIRR VRKEDEGLYT CQACSVLGCA KVEAFFIIEG AQEKTNLE<LE PKSCDKTHTC PPCPAPELLG GPSVFLFPPK PKDTLMISRT PEVTCVVDV SHEDPEVKFN WYVDGVEVHN AKTKPREEQY NSTYRVVSVL TVLHQDWLNG KEYKCKVSNK ALPAPIEKTI SKAKGQPREP QVYTLPPSRD ELTKNQVSLT CLVKGFYPSD IAVEWESNGQ PENNYKTTPP VLDSDGSFFL YSKLTVDKSR WQQGNVFSCS VMHEALHNHY TQKSLSLSPG KHHHHHH>

### **General References**

Han KY., et al, (2009) Biochem Biophys Res Commun. 382:124-128. Takyar S., et al, (2016) FASEB J. 30:1317-1327.

### DATA

#### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

