

#### Human CellExp VEGFR2/Flk-1/KDR, human recombinant protein

KDR, CD309, FLK1, VEGFR, VEGFR2, kinase insert domain receptor Catalog # PBV11022r

#### **Specification**

## Human CellExp VEGFR2/Flk-1/KDR, human recombinant protein - Product info

Primary Accession <u>P35968</u>

Calculated MW This protein with 6×his tag at C-terminus,

and has a calculated MW of 84.1 kDa.

DTT-reduced protein migrates as 100-110 kDa protein due to glycosylation. KDa

# Human CellExp VEGFR2/Flk-1/KDR, human recombinant protein - Additional Info

Gene ID 3791
Gene Symbol VEGFR2

**Other Names** 

KDR, CD309, FLK1, VEGFR, VEGFR2, kinase insert domain receptor

Gene Source

Source

Assay&Purity

Human

HEK293 cells

SDS-PAGE; ≥95%

Assay2&Purity2 N/A;
Recombinant Yes

Results Measured by its ability to inhibit the VEGF

dependent proliferation of HUVEC human umbilical vein endothelial cells. The ED50 for this effect is typically 9-20 ng/ml in the

presence of 5 ng/ml rhVEGF165.

Target/Specificity

VEGFR2

#### **Application Notes**

Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50  $\mu$ g/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

#### **Format**

Lyophilized

### **Storage**

-20°C; Lyophilized from 0.22  $\mu m$  filtered solution in PBS, pH7.4. Generally 5-8% Mannitol or trehalose is added as a protectant before lyophilization.

### Human CellExp VEGFR2/Flk-1/KDR, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.



- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Human CellExp VEGFR2/Flk-1/KDR, human recombinant protein - Images

# Human CellExp VEGFR2/Flk-1/KDR, human recombinant protein - Background

Kinase insert domain receptor (KDR) also known as CD309, FLK1, VEGFR, VEGFR2, and is one of the subtypes of VEGFR. VEGF receptors are receptors for vascular endothelial growth factor (VEGF). There are three main subtypes of VEGFR, numbered 1, 2 and 3. The VEGF receptors have an extracellular portion consisting of 7 immunoglobulin-like domains, a single transmembrane spanning region and an intracellular portion containing a split tyrosine-kinase domain. VEGF-A binds to VEGFR-1 (Flt-1) and VEGFR-2 (KDR/Flk-1). VEGFR-2 appears to mediate almost all of the known cellular responses to VEGF. The function of VEGFR-1 is less well defined, although it is thought to modulate VEGFR-2 signaling. Another function of VEGFR-1 may be to act as a dummy/decoy receptor, sequestering VEGF from VEGFR-2 binding (this appears to be particularly important during vasculogenesis in the embryo). In addition, VEGFR2 is able to interact with HIV-1 extracellular Tat protein upon VEGF activation, and seems to enhance angiogenesis in Kaposi's sarcoma lesions.

# Human CellExp VEGFR2/Flk-1/KDR, human recombinant protein - References

Jin P., et al. Arthritis Res. Ther. 10:R73-R73(2008). Albuquerque R.J., et al. Nat. Med. 15:1023-1030(2009). Yin L.Y., et al. Submitted (DEC-1997) to the EMBL/GenBank/DDBJ databases. Yu Y., et al. Submitted (MAY-1998) to the EMBL/GenBank/DDBJ databases. Hillier L.W., et al. Nature 434:724-731(2005).