Human CellExp™ VEGFR2/Flk-1/KDR, human recombinant

CATALOG #: 7399-20 20 µg
7399-100 100 µg

ALTERNATE NAMES: KDR, CD309, FLK1, VEGFR, VEGFR2, kinase insert domain receptor

SOURCE: HEK 293 cells (Met 1 - Glu 764)

PURITY: ≥ 95% by SDS-PAGE gel

MOL. WEIGHT: 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.

ENDOTOXIN LEVEL: <1 EU/µg by LAL method

FORM: Lyophilized

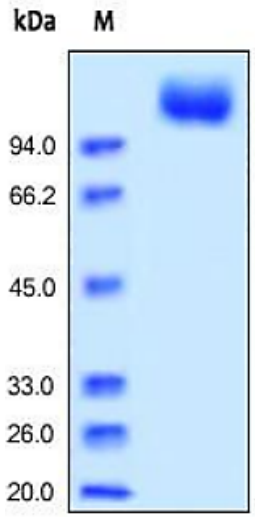
FORMULATION: Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Generally 5-8% Mannitol or trehalose is added as a protectant before lyophilization.

STORAGE CONDITIONS: Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freezing and thawing cycles.

RECONSTITUTION: Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/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.

DESCRIPTION: 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 able to interact with HIV-1 extracellular Tat protein upon VEGF activation, and seems to enhance angiogenesis in Kaposi's sarcoma lesions.

BIOLOGICAL ACTIVITY: Measured by its ability to inhibit the VEGF dependent proliferation of HUVEC human umbilical vein endothelial cells. The ED_{50} for this effect is typically 9-20 ng/ml in the presence of 5 ng/ml rhVEGF165.



Human recombinant VEGFR2

RELATED PRODUCTS:

- Human CellExp™ VEGFR1 /Flt-1, human recombinant **(Cat # 7237-10)**
- VEGFR2, human recombinant **(Cat # 4952-10, -100)**
- Human CellExp™ Human Recombinant VEGF-C **(Cat # 7231-10)**
- Human CellExp™ Human Recombinant VEGF 165 **(Cat # 6485-10, -50)**
- VEGF121, human recombinant **(Cat. No. 4963-10, -50, -1000)**
- VEGF165, human recombinant **(Cat. No. 4363-10, -50, -1000)**
- VEGF165, murine recombinant **(Cat. No. 4364-10, -50, -1000)**
- VEGF165, rat recombinant **(Cat. No. 4365-10, -50, -1000)**
- VEGF120, murine recombinant **(Cat. No. 4964-10, -100, -1000)**

FOR RESEARCH USE ONLY! Not to be used in humans.