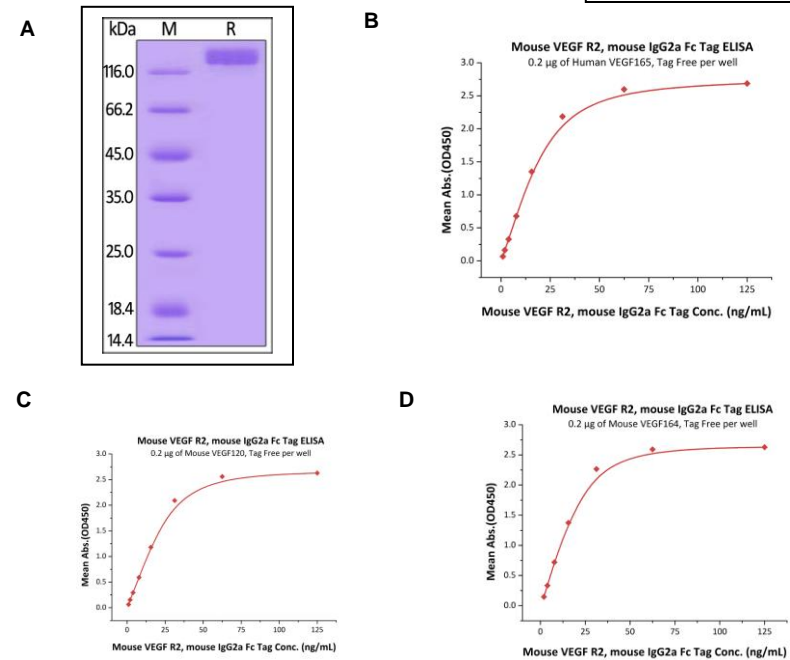


# Human CellExp™ VEGF R2/ KDR, Fc Tag Mouse Recombinant

|                             |   |       |
|-----------------------------|---|-------|
| <b>CATALOG NO:</b>          | P1259-20  | 20 µg |
| <b>ALTERNATE NAMES:</b>     | KDR, CD309, FLK1, VEGFR, VEGFR2   |       |
| <b>SOURCE:</b>              | HEK 293 cells (Ala 20 - Glu 762)  |       |
| <b>PURITY:</b>              | > 95% by SDS – PAGE   |       |
| <b>MOL. WEIGHT:</b>         | This protein carries a mouse IgG2a Fc tag at the C-terminus. The protein has a calculated MW of 110.1 kDa. The protein migrates as 120-135 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.  |       |
| <b>ENDOTOXIN LEVEL:</b>     | < 1.0 EU per 1µg of protein (determined by LAL method)  |       |
| <b>FORM:</b>                | Lyophilized   |       |
| <b>FORMULATION:</b>         | Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 100 mM Glycine, pH7.5. Normally trehalose is added as protectant before lyophilization.   |       |
| <b>STORAGE CONDITIONS:</b>  | Store at -20°C. After reconstitution, aliquot and store at -80°C and use within 3 months. Avoid repeated freezing and thawing cycles.   |       |
| <b>RECONSTITUTION:</b>      | Centrifuge the vial prior to opening. Reconstitute in sterile deionized water to a concentration of 50 µg/ml. Solubilize for 30 to 60 minutes at room temperature with occasional gentle mixing. Carrier protein (0.1% (W/V) HSA or BSA) is recommended for further dilution and long term storage. Do not vortex.  |       |
| <b>DESCRIPTION:</b>         | Kinase insert domain receptor (KDR) is 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). 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. |       |
| <b>BIOLOGICAL ACTIVITY:</b> | Immobilized Human VEGF165 at 2 µg/mL (100 µL/well) can bind Mouse VEGF R2, mouse IgG2a Fc Tag with a linear range of 1-31 ng/mL.  |       |

rev. 11/19

For research use only



**Fig. A. Mouse VEGF R2, mouse IgG2a Fc Tag on SDS-PAGE under reducing (R) condition.**

**Fig. B. Immobilized Human VEGF165, Tag Free at 2 µg/mL (100 µL/well) can bind Mouse VEGF R2, mouse IgG2a Fc Tag with a linear range of 1-31 ng/mL**

**Fig. C. Immobilized Mouse VEGF120, Tag Free at 2 µg/mL (100 µL/well) can bind Mouse VEGF R2, mouse IgG2a Fc Tag with a linear range of 1-31 ng/mL**

**Fig. D. Immobilized Mouse VEGF164, Tag Free at 2 µg/mL (100 µL/well) can bind Mouse VEGF R2, mouse IgG2a Fc Tag with a linear range of 2-31 ng/mL**

## RELATED PRODUCT:

- Human CellExp™ VEGF 121, Human Recombinant (Cat. No. 6484)
- Human CellExp™ VEGF 165, Human Recombinant (Cat. No. 6485)
- Human CellExp™ VEGF120, mouse recombinant (Cat. No. 7424)
- Human CellExp™ VEGF164, mouse recombinant (Cat. No. 7425)
- Human CellExp™ VEGF-B, human recombinant (Cat. No. 7230)

**FOR RESEARCH USE ONLY! Not to be used on humans.**