

# **Human VEGFR2, His Tag, HEK293**

 Catalog Number
 LDG042PHM

 Package
 5 μg / 20 μg / 100 μg / Customized package

For full product information, images and publications, please visit our website.



## **Specifications**

**Species of Origin** 

Human

**Affinity Tag** 

His Tag (C-term)

**Purity** 

>95% as determined by SDS-PAGE analysis.

**Endotoxin Level** 

<0.1 EU per 1  $\mu g$  of the protein by the LAL method.

**Expression System** 

HEK293

**Storage Buffer** 

Lyophilized from a 0.2  $\mu m$  filtered solution of PBS, pH 7.4.

Molecular weight

The protein has a calculated MW of 87.08 kDa. The protein migrates as 120-160 kDa under reducing condition (SDS-PAGE analysis).

**Form** 

Lyophilized

## **Background**



#### **Background**

Human Vascular Endothelial Growth Factor Receptor 2 (VEGFR2), also known as KDR (Kinase Insert Domain Receptor), is a transmembrane receptor protein primarily expressed on endothelial cells. It plays a central role in angiogenesis, the process by which new blood vessels are formed from existing ones. VEGFR2 is activated by binding to its ligands, primarily Vascular Endothelial Growth Factors (VEGFs), initiating signaling cascades that promote endothelial cell proliferation, migration, and survival. This pivotal role in angiogenesis makes VEGFR2 a critical target in various pathological conditions, including cancer, diabetic retinopathy, and age-related macular degeneration. In cancer, overexpression of VEGFR2 is associated with tumor growth, metastasis, and poor prognosis. Consequently, VEGFR2 inhibitors, such as monoclonal antibodies and small molecule tyrosine kinase inhibitors, have been developed as antiangiogenic therapies to suppress tumor vascularization and inhibit disease progression. Understanding the intricate mechanisms of VEGFR2 signaling offers opportunities for the development of targeted therapies and personalized medicine strategies in angiogenesis-related disorders.

**Sequence Note** 

Met1-Glu764

#### **Synonyms**

Vascular endothelial growth factor receptor 2, Fetal liver kinase 1 (FLK-1), Kinase insert domain receptor (KDR), Protein-tyrosine kinase receptor flk-1, CD309

### Instruction



#### Reconstitution

It is recommended to reconstitute the lyophilized protein in 4 mM HCl to a concentration not less than 200  $\mu$ g/mL and incubate the stock solution for at least 20 min to ensure sufficient redissolved.

#### **Stability & Storage**

This product is stable after storage at:

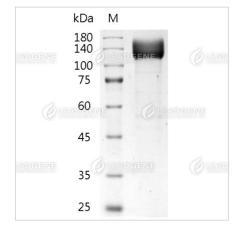
- -20°C for 12 months in lyophilized state from date of receipt.
- -20°C or -80°C for 1 month under sterile conditions after reconstitution.

Avoid repeated freeze/thaw cycles.

#### **Shipping**

The product is shipped with polar packs. Upon receipt, store it immediately at -20°C or lower for long term storage.

### **Image**



SDS-PAGE analysis of recombinant human VEGFR2.

**Disclaimer:** For Research Use or Further Manufacturing Only.