

## **Product datasheet for TP727299**

## OriGene Technologies, Inc.

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## **VEGF Receptor 2 (KDR) Human Recombinant Protein**

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant Human VEGF Receptor 2/VEGF R2/FLK-1/KDR (C-Fc)

Species: Human

**Expression cDNA Clone** 

or AA Sequence:

Ala20-Glu764

Tag: C-Fc

**Buffer:** Lyophilized from a 0.2 um filtered solution of PBS, pH 7.4.

**Note:** Recombinant Human Vascular Endothelial Growth Factor Receptor 2 is produced by our

Mammalian expression system and the target gene encoding Ala20-Glu764 is expressed with

a Fc tag at the C-terminus.

Storage: Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3

weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

**Stability:** 12 months from date of despatch

**Locus ID:** 3791 **UniProt ID:** P35968

Synonyms: Vascular endothelial growth factor receptor 2; KDR; VEGFR-2; Fetal liver kinase 1; FLK-1; Kinase

insert domain receptor; Protein-tyrosine kinase receptor flk-1

**Summary:** Human Vascular endothelial growth factor receptor 2(KDR, VEGFR-2) is a member of the class

III subfamily of receptor tyrosine kinases (RTKs). KDR is involved in a number of fundamental biological processes such as the regulation of angiogenesis, vascular development, vascular permeability, and embryonic hematopoiesis. It also plays an essential role in promoting proliferation, survival, migration and differentiation of endothelial cells, reorganization of the actin cytoskeleton. VEGFR2 is identified as the receptor for VEGF and VEGFC and an early marker for endothelial cell progenitors, whose expression is restricted to endothelial cells in vivo. The adaptor protein SHB has been shown to interact with VEGFR2 in receptor tyrosine kinase signaling. 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. VEGF R2 is thought to be the primary inducer of VEGF-mediated blood vessel growth, while VEGF R3

plays a significant role in VEGF-C and VEGF-D-mediated lymphangiogenesis.





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**Protein Families:** Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase, Transmembrane

**Protein Pathways:** Cytokine-cytokine receptor interaction, Endocytosis, Focal adhesion, VEGF signaling pathway