



Recombinant Protein Technical Manual

Recombinant Human VEGFR2/Flk/KDR Protein (His Tag)

RPES3747

Product Data:

Product SKU: RPES3747

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: P35968

Protein Information:

Molecular Mass: 84.3 kDa

AP Molecular Mass: 84-95 kDa

Tag: C-His

Bio-activity:

Purity: > 95% as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

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.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Vascular endothelial growth factor receptor 2; KDR; VEGFR-2; Fetal liver kinase 1; FLK; Kinase insert domain receptor; Protein-tyrosine kinase receptor flk;CD309;Flk;FLK1;VEGFR;VEGFR2

Immunogen Information:

Sequence: Ala20-Glu764

Background:

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 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.