

Recombinant Mouse VEGF Receptor 2/VEGF R2/FLK-1/KDR (C-Fc)

Catalog Number: PKSM041405

Note: Centrifuge before opening to ensure complete recovery of vial contents.

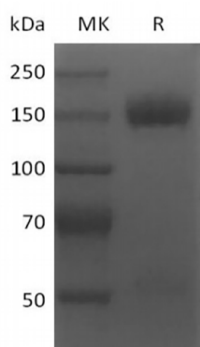
Description

Species	Mouse
Source	HEK293 Cells-derived Mouse VEGF R2/FLK-1/KDR protein Ala20-Glu762, with an C-terminal Fc
Calculated MW	110 kDa
Observed MW	140-170 kDa
Accession	P35918
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°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 20mM NaH ₂ PO ₄ , 150mM NaCl, 0.1M Arg, 0.1M Glu, 0.01 %Tween20, pH7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

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-1 extracellular Tat protein upon VEGF activation, and seems to enhance angiogenesis in Kaposi's sarcoma lesions. VEGFR2 is thought to be the primary inducer of VEGF-mediated blood vessel growth, while VEGFR3 plays a significant role in VEGF-C and VEGF-D-mediated lymphangiogenesis.