

Recombinant Mouse VEGF-A/VEGF164 Protein

Catalog Number: PKSM041180

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

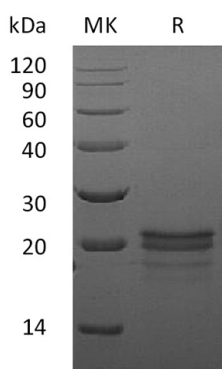
Description

Species	Mouse
Source	P.pastoris-derived Mouse VEGF-A/VEGF164 protein Ala27-Arg190
Calculated MW	19.3 kDa
Observed MW	18-22 kDa
Accession	Q00731-2
Bio-activity	Loaded Mouse VEGFR2-Fc(PKSM041405) on Protein A Biosensor, can bind Mouse VEGF 164(CX73) with an affinity constant of 0.44 nM as determined in BLI assay.

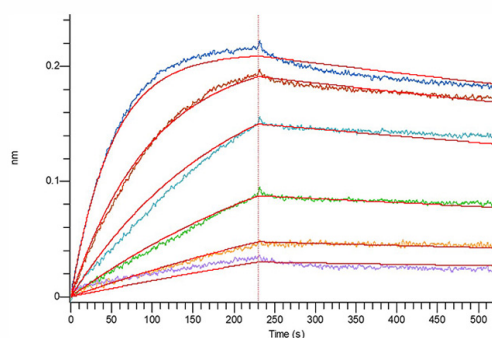
Properties

Purity	> 90 % 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 PB, 250mM NaCl, pH7.0. 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



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Background

Mouse Vascular endothelial growth factor (VEGF or VEGF-A), is a potent mediator of both angiogenesis and vasculogenesis in the fetus and adult. It is a member of the PDGF/VEGF growth factor family that is characterized by a cystine knot structure formed by eight conserved cysteine residues. Alternately spliced isoforms of 120, 164 and 188 aa found in mouse. VEGF binds the type I transmembrane receptor tyrosine kinases VEGF R1 (also called Flt-1) and VEGF R2 (Flk-/KDR) on endothelial cells. Although affinity is highest for binding to VEGF R1, VEGF R2 appears to be the primary mediator of VEGF angiogenic activity. VEGF is required during embryogenesis to regulate the proliferation, migration, and survival of endothelial cells. It may play a role in increasing vascular permeability during lactation, when increased transport of molecules from the blood is required for efficient milk protein synthesis.