## Recombinant Mouse VEGF121 protein(His Tag)

Catalog Number: PKSM041502



Description	
Species	Mouse
Mol_Mass	15.0 kDa
Accession	Q00731
Bio-activity	Measure by its ability to induce proliferation in HUVEC cells. The $ED_{50}$ for this effect
	is <3 ng/mL.
Properties	
Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.1 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 $< -20^{\circ}$ C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS,pH 8.0.
	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	
	<pre>kDa</pre>
	75-
	63- 48-
	35-

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

> 95 % as determined by reducing SDS-PAGE.

25-

17-

## Background

Human VEGF121; also known as Vascular endothelial growth factor A; VEGFA; Vascular permeability factor; VPF and VEGF; is a homodimeric; heparin-binding glycoprotein which belongs to the platelet-derived growth factor (PDGF)/ vascular endothelial growth factor (VEGF) family. VEGF-A is a glycosylated mitogen that specifically acts on endothelial cells and has various effects; including mediating increased vascular permeability; inducing angiogenesis; vasculogenesis; permeabilization of blood vessels and endothelial cell growth; increasing microvascular permeability; promoting cell migration and inhibiting apoptosis. Alternatively spliced transcript variants of VEGF-A encod either secreted or cell-associated isoforms. The lymphangiogenesis may be promoted by upregulation of VEGF121; which may in turn act in part via induction of VEGF-C. It binds to the FLT1/VEGFR1 and KDR/VEGFR2 receptors; heparan sulfate and heparin. NRP1/Neuropilin-1 binds isoforms VEGF-165 and VEGF-145. Isoform VEGF165B binds to KDR but does not activate downstream signaling pathways; does not activate angiogenesis and inhibits tumor growth.

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