VEGF-A/VEGF121 (C-6His), Human, Recombinant

Cat. No. : PCK014

General Information

Synonyms	Vascular Endothelial Growth Factor A;VEGF-A;Vascular Permeability Factor;VPF;VEGFA;VEGF
Species	Human
Expression host	Human Cells
Sequence	Ala27-Arg147
Accession	P15692-9
Tag	C-6His
Mol mass	15.1 kDa
Expiration date	12 months
Bio activity	Immobilized Human VEGFR1-Fc at 5 μg/mL (100 μL/well) can bind Human VEGF 121-His. The ED50 of Human VEGF 121-His is 9.44 ng/mL.

Product feature

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin (EU/μg)	< 0.1
Storage	Lyophilized protein should be stored at -5~-20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at -5~-20°C for 3 months.
Shipping	Ice bag
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 μg/mL. Dissolve the lyophilized protein in sterile water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Background

Human VEGF121, also known as Vascular Endothelial Growth Factor A, VEGFA, Vascular Permeability Factor, VPF and VEGF, is a homodimeric, heparin-binding glyco Protein 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.