Data Sheet (Cat.No.TMPK-00825)

TargetMol

VEGF121 Protein, Human, Recombinant (His & Avi)

General Information

Synonyms:	VPF;VEGF;VEGFA;VEGFMGC70609;MGC70609;RP1-261G23.1;MVCD1;VAS
Protein Construction:	Ala27-Arg147
Species:	Human
Expression Host:	HEK293 Cells
Accession:	P15692-9
Molecular Weight:	17 kDa (predicted). Due to glycosylation, the protein migrates to 18 kDa and 22-25 kDa under reduced (R) condition, 30 kDa and 32-40 kDa under Non reducing (N) condition based on Tris-Bis PAGE result.

QC Testing

Biological Activity:	Immobilized Human VEGF121, His Tag at 2μg/ml (100ul/Well). Dose response curve for Biotinylated Human VEGFR1, His Tag with the EC50 of 42ng/ml determined by ELISA.
Purity:	> 95% as determined by Tris-Bis PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, 250 mM Arginine (pH 7.4). Typically, 8% trehalose is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Vascular endothelial growth factor (VEGF or VEGF-A), also known as vascular permeability factor (VPF), is a potent mediator of both angiogenesis and vasculogenesis in the fetus and adult. VEGF165 appears to be the most abundant and potent isoform, followed by VEGF121 and VEGF189.

Reference

Rosen, L. S. VEGF-Targeted Therapy: Therapeutic Potential and Recent Advances[J]. The Oncologist, 2005, 10(6): 382-39

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