

HumanKine® recombinant human VEGF121 protein-GMP grade



Animal Component-Free

Human cell expressed

Tag-Free

Endotoxin Free

Product Description

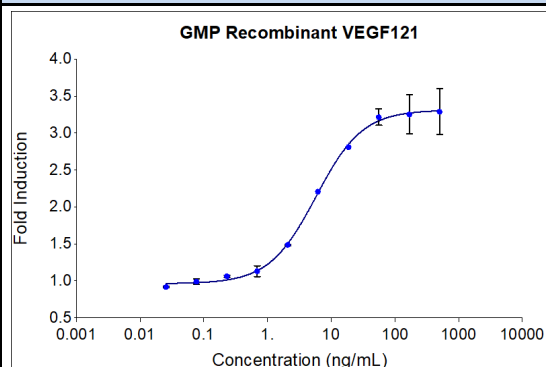
Animal-free Recombinant Human VEGF121 is expressed in human 293 cells as a glycosylated cytokine with an apparent molecular mass of 28 kDa as dimer and 40 kDa as trimer. Production in human 293 cells offers authentic glycosylation, contributing to stability in cell growth media. The cytokine is produced in a human cell expression system with serum free, chemically defined media. VEGF121 is a potent growth and angiogenic cytokine. It stimulates proliferation and survival of endothelial cells, and promotes angiogenesis and vascular permeability.

Alternative Names	L VEGFA, MVCD1, Vascular permeability factor, VEGF, VEGF A, VEGF121, VEGFA, VPF
Accession Number	P15692-9
Source	Human Embryonic Kidney cells (HEK293). HEK293-derived VEGF121 protein
Species Reactivity	human,pig
Adventitious Virus	Master Cell Bank tested Negative for Adventitious Viruses

Specifications

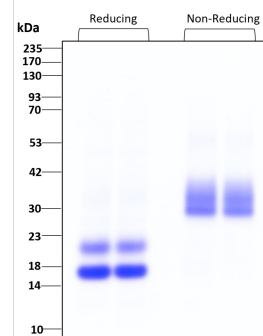
Test	Method	Specification
Activity	Dose-dependent production of luciferase in a HEK293T VEGF luciferase reporter cell line	1.5-9 ng/mL
Molecular Mass	SDS-PAGE	17 and 21 kDa reduced, 28 to 40 kDa non-reduced, homodimer and homotrimer, glycosylated
Purity	SDS-PAGE	>95%
Endotoxin	LAL	<0.1 EU/μg
Mycoplasma	PCR	Not Detected

Activity Data



GMP Recombinant human GMP VEGF121 (HZ-1204-GMP) induces dose-dependent luciferase production in a HEK293T VEGF luciferase reporter cell line. Luciferase production was assessed by the One-Step™ luciferase assay Kit. HEK293T VEGF luciferase reporter cells were treated with increasing concentrations of GMP recombinant VEGF121 for 18 hours. The EC50 was

SDS-PAGE



Purity of GMP recombinant human VEGF121 was determined by SDS- polyacrylamide gel electrophoresis. The protein was resolved in an SDS- polyacrylamide gel in reducing and non-reducing conditions and stained using Coomassie blue.

Preparation	
Shipping Temperature	ambient temperature
Formulation	1x PBS, See Certificate of Analysis for details
Reconstitution	Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein to 0.2 mg/mL in sterile 1x PBS pH 7.4 containing 0.1% endotoxin-free recombinant human serum albumin (HSA). Gently swirl or tap vial to mix.

Stability and Storage	Product Form	Temperature Conditions	Storage Time (From Date of Receipt)
	Lyophilized	-20°C to -80°C	Until Expiry Date
	Lyophilized	Room Temperature	2 weeks
	Reconstituted as per CofA	-20°C to -80°C	6 months
	Reconstituted as per CofA	4°C	1 week
Avoid repeated freeze-thaw cycles.			

Proteintech GMP Quality Policy HumanKine® GMP Proteins

Invitro recombinant protein production can be prone to variability due to various reasons ranging from quality of raw materials to inconsistency in the process. Therefore, HumanKine®, a proteintech brand's GMP proteins are produced and tested under an ISO 13485 certified quality management system in a clean room facility. Proteintech manufactures the GMP HumanKine® products according to the applicable sections in the following documents: USP Chapter 1043 (Ancillary Materials for Cell, Gene, and Tissue-Engineered Products, USP Chapter 92 (Growth Factors and Cytokines Used in Cell Therapy Manufacturing), WHO TRS, No. 822, 1992 Annex 1 (Good Manufacturing Practices for Biological Products), Ph. Eur. General Chapter 5.2.12, and EudraLex – Volume 4 – Part IV (Guidelines on GMP specific to ATMPs). Proteintech strives to achieve the utmost quality GMP raw material ensuring all applicable guidelines are taken into consideration.

The QMS is built to provide our customers with consistent and pure product delivered by documented processes, qualified personnel, validated processes, qualified equipment, qualified vendors, and a stringent final product release process. Although the final product release process is important, Proteintech performs in-process QC steps after each major manufacturing stage. Production records and facilities may be available for an inspection by approved personnel.

Our GMP policy covers all the aspects of production; from raw materials, facility, equipment, and Instruments to training and personal hygiene of staff. It also guarantees that the process is explicit, validated and well documented for transparency and traceability.

www.ptglab.com

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