

Mouse VEGF164 Protein, His Tag (MALS verified)

Catalog # VE4-M5243



BIOSYSTEMS
Acro

Synonym

RP1-261G23.1, MGC70609, MVCD1, VEGFA, VPF

Source

Mouse VEGF164 Protein, His Tag (VE4-M5243) is expressed from human 293 cells (HEK293). It contains AA Ala 27 - Arg 190 (Accession # [Q00731-2](#)).

Predicted N-terminus: His

Molecular Characterization

Poly-his	VEGF164(Ala 27 - Arg 190) Q00731-2
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This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 21.2 kDa. The protein migrates as 26-31 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

The protein is designed as a dimer.

Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

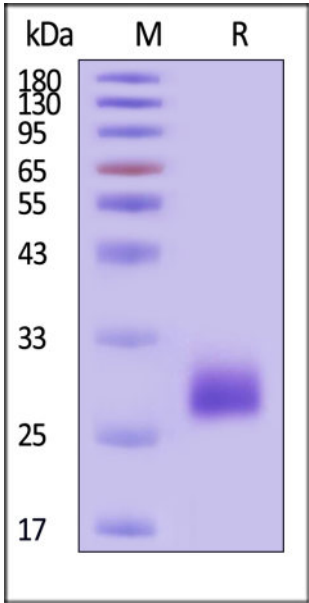
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

ACRO Quality Management System

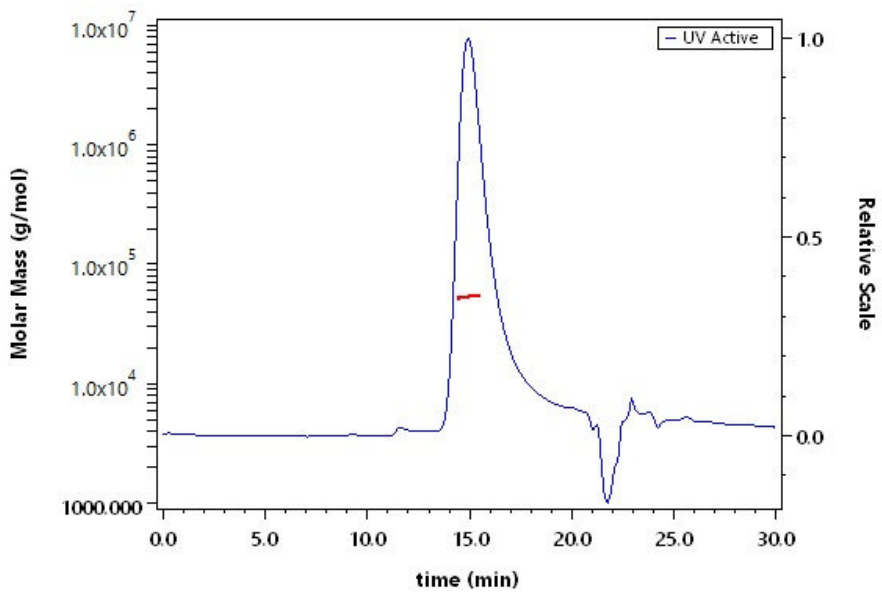
- [QMS\(ISO, GMP\)](#).
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



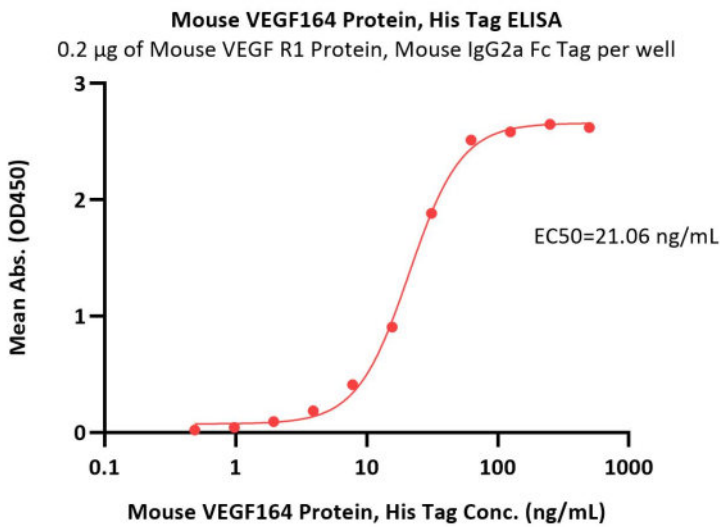
Mouse VEGF164 Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS



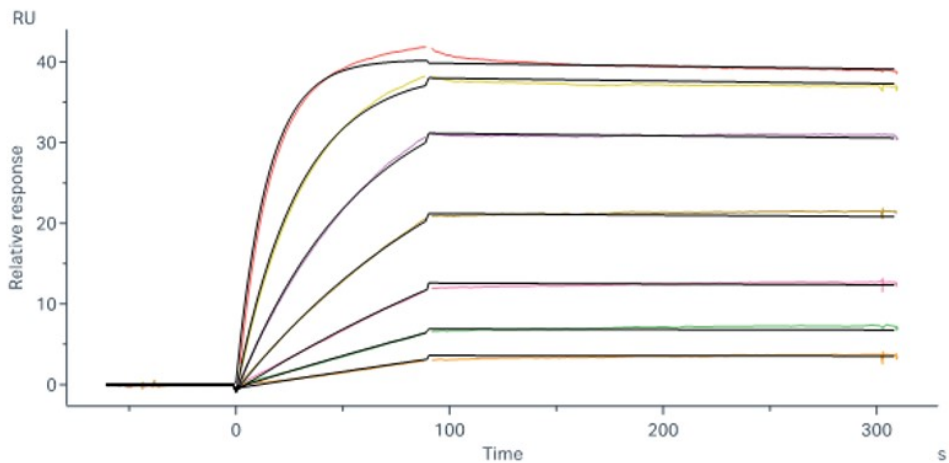
The purity of Mouse VEGF164 Protein, His Tag (Cat. No. VE4-M5243) is more than 95% and the molecular weight of this protein is around 45-60 kDa verified by SEC-MALS.

Bioactivity-ELISA



Immobilized Mouse VEGF R1 Protein, Mouse IgG2a Fc Tag (Cat. No. VE1-M5256) at 2 µg/mL (100 µL/well) can bind Mouse VEGF164 Protein, His Tag (Cat. No. VE4-M5243) with a linear range of 0.5-63 ng/mL (QC tested).

Bioactivity-SPR



Mouse VEGF R2 Protein, Mouse IgG2a Fc Tag (Cat. No. VE2-M5258) captured on CM5 chip via anti-mouse antibodies surface can bind Mouse VEGF164 Protein, His Tag (Cat. No. VE4-M5243) with an affinity constant of 0.032 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

Vascular endothelial growth factor (VEGF) is also known as vascular permeability factor (VPF) and VEGF-A, and is a member of the platelet-derived growth factor (PDGF)/vascular endothelial growth factor (VEGF) family and encodes a protein that is often found as a disulfide linked homodimer. This protein is a glycosylated

mitogen that specifically acts on endothelial cells and has various effects, including mediating increased vascular permeability, inducing angiogenesis, vasculogenesis and endothelial cell growth, promoting cell migration, and inhibiting apoptosis.



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