

Synonym

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

Source

Mouse VEGF164 Protein, Tag Free(VE4-M4216) is expressed from human 293 cells (HEK293). It contains AA Ala 27 - Arg 190 (Accession # [AAB22253.1](#)). Predicted N-terminus: Ala 27

Molecular Characterization

VEGF164(Ala 27 - Arg 190)
AAB22253.1

This protein carries no "tag".

The protein has a calculated MW of 19.3 kDa. The protein migrates as 23-30 kDa under reducing (R) condition (SDS-PAGE) due to different glycosylation.

Endotoxin

Less than 0.1 EU per µg by the LAL method / rFC method.

Sterility

Negative

Purity

>95% as determined by SDS-PAGE.
>95% as determined by SEC-HPLC.

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.

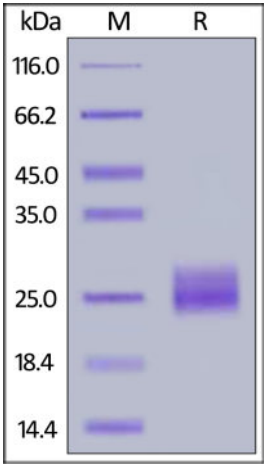
Storage

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:

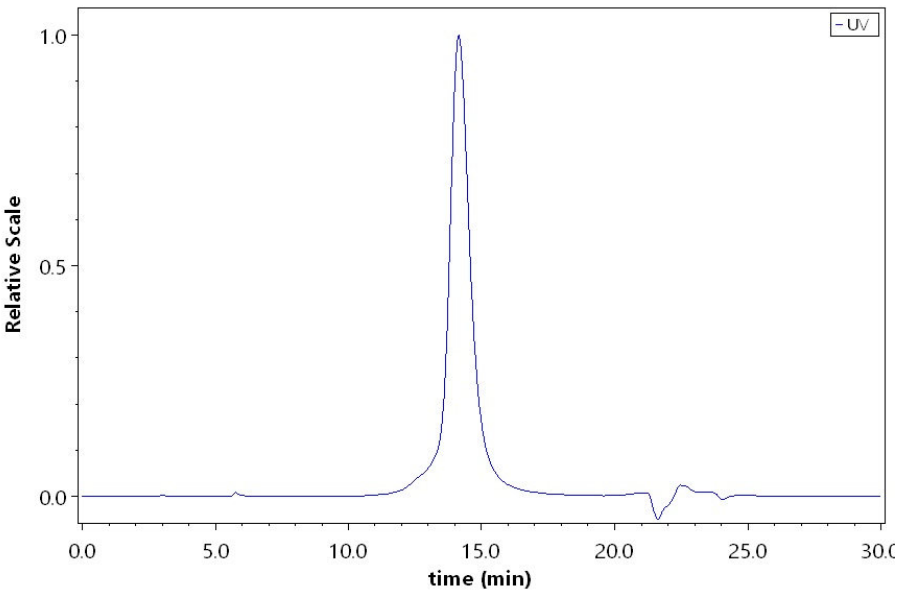
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Mouse VEGF164 Protein, Tag Free on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-HPLC



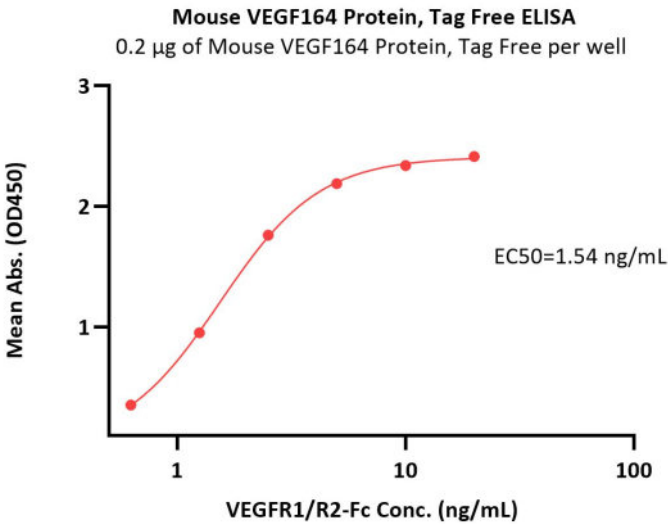
The purity of Mouse VEGF164 Protein, Tag Free (Cat. No. VE4-M4216) was greater than 95% as determined by SEC-HPLC.

Bioactivity-ELISA

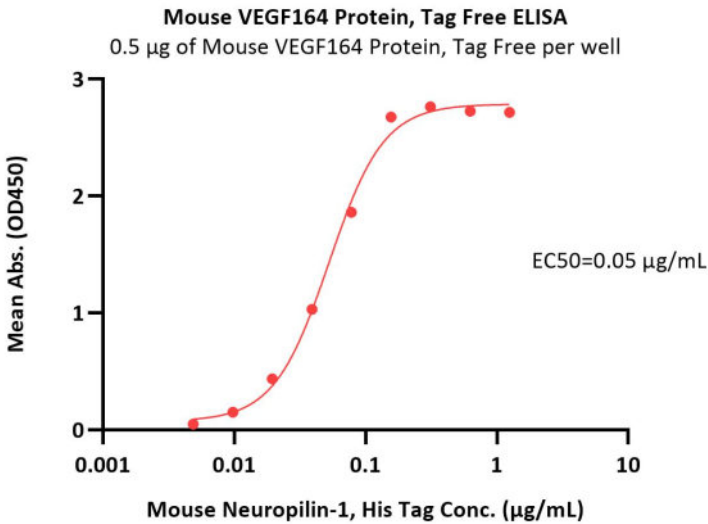


Mouse VEGF164 Protein, Tag Free (HPLC-verified)

Catalog # VE4-M4216



Immobilized Mouse VEGF164 Protein, Tag Free (Cat. No. VE4-M4216) at 2 µg/mL (100 µL/well) can bind VEGFR1/R2-Fc with a linear range of 0.6-2.5 ng/mL (QC tested).



Immobilized Mouse VEGF164 Protein, Tag Free (Cat. No. VE4-M4216) at 5 µg/mL (100 µL/well) can bind Mouse Neuropilin-1, His Tag (Cat. No. NR1-M52H3) with a linear range of 0.005-0.156 µg/mL (Routinely tested).

Background

Vascular endothelial growth factor A (VEGFA) is also known as Vascular permeability factor (VPF). VEGFA belongs to the PDGF/VEGF growth factor family. VEGFA 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. Alternatively spliced transcript variants, encoding either freely secreted or cell-associated isoforms, have been characterized. VEGFA is produced by a group of three major isoforms as a result of alternative splicing and if any three isoforms are produced (VEGFA120, VEGFA164, and VEGFA188) then this will not result in vessel defects and death of the full VEGFA knockout in mice.

