

**Synonym**

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

**Source**

Biotinylated Mouse VEGF120, His,Avitag(VE0-M82Q2) is expressed from human 293 cells (HEK293). It contains AA Ala 27 - Arg 146 (Accession # [Q00731-3](#)).

Predicted N-terminus: His

**Molecular Characterization**

This protein carries a polyhistidine tag at the N-terminus, followed by an Avi tag (Avitag™)

The protein has a calculated MW of 17.3 kDa. The protein migrates as 22-24 kDa and 24-26 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Labeling**

*Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.*

**Protein Ratio**

Passed as determined by the HABA assay / binding ELISA.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

>95% as determined by SDS-PAGE.

**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.*

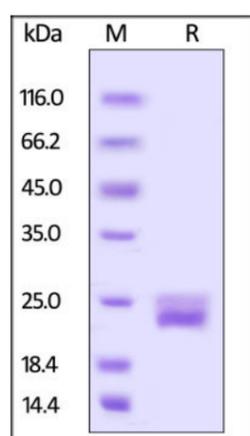
**Storage**

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

*Please avoid repeated freeze-thaw cycles.*

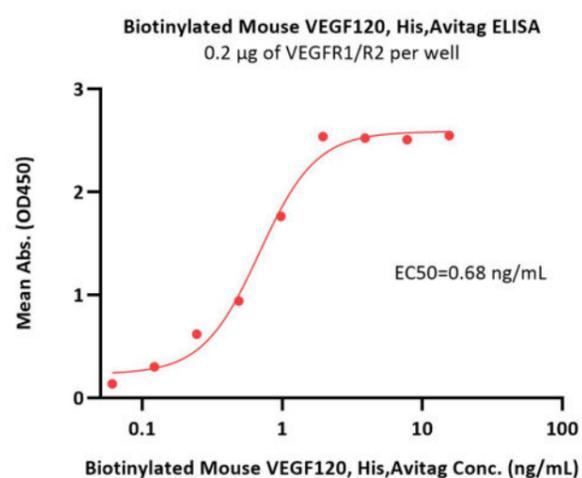
This product is stable after storage at:

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

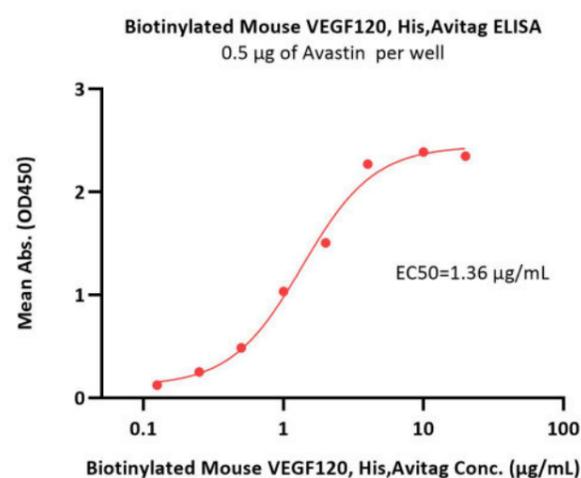
**SDS-PAGE**

Biotinylated Mouse VEGF120, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

**Bioactivity-ELISA**



Immobilized VEGFR1/R2 at 2 µg/mL (100 µL/well) can bind Biotinylated Mouse VEGF120, His,Avitag (Cat. No. VE0-M82Q2) with a linear range of 0.1-2 ng/mL (QC tested).



Immobilized Avastin at 5 µg/mL (100 µL/well) can bind Biotinylated Mouse VEGF120, His,Avitag (Cat. No. VE0-M82Q2) with a linear range of 0.125-2 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.

## Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.