

Synonym

VCAM1,CD106,INCAM-100,V-CAM 1,VCAM-1

Source

Biotinylated Human VCAM-1, Fc,Avitag, premium grade(VC1-H82F6) is expressed from human 293 cells (HEK293). It contains AA Phe 25 - Glu 698 (Accession # [P19320-1](#)).
Predicted N-terminus: Phe 25

It is produced under our rigorous quality control system that incorporates a comprehensive set of tests including sterility and endotoxin tests. Product performance is carefully validated and tested for compatibility for cell culture use or any other applications in the early preclinical stage. When ready to transition into later clinical phases, we also offer a custom GMP protein service that tailors to your needs. We will work with you to customize and develop a GMP-grade product in accordance with your requests that also meets the requirements for raw and ancillary materials use in cell manufacturing of cell-based therapies.

Molecular Characterization

VCAM-1(Phe 25 - Glu 698) P19320-1	Fc(Pro 100 - Lys 330) P01857	Avi
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This protein carries a human IgG1 Fc tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 102.4 kDa. The protein migrates as 130 kDa±5 kDa under reducing (R) condition, and >250 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under non-reducing (NR) 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 0.01 EU per µg by the LAL method / rFC method.

Protein A

<5 ppm of protein tested by ELISA.

Host Cell Protein

<0.5 ng/µg of protein tested by ELISA.

Host Cell DNA

<0.02 ng/µg of protein tested by qPCR.

Sterility

Negative

Mycoplasma

Negative

Purity

>95% as determined by SDS-PAGE.

>90% 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.

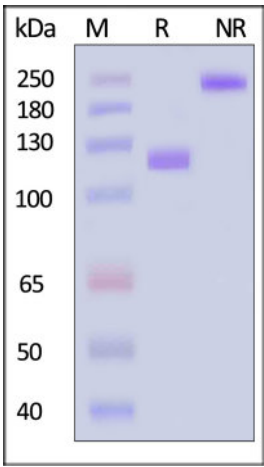
This product is stable after storage at:

- -20°C to -70°C for 24 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

Discounts, Gifts,
and more!

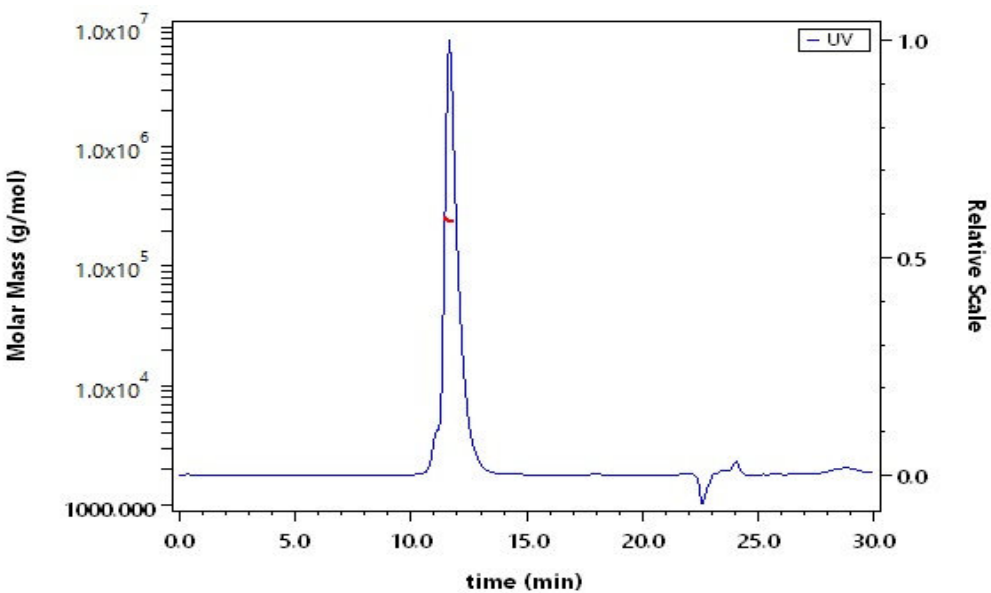


SDS-PAGE



Biotinylated Human VCAM-1, Fc,Avitag, premium grade on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

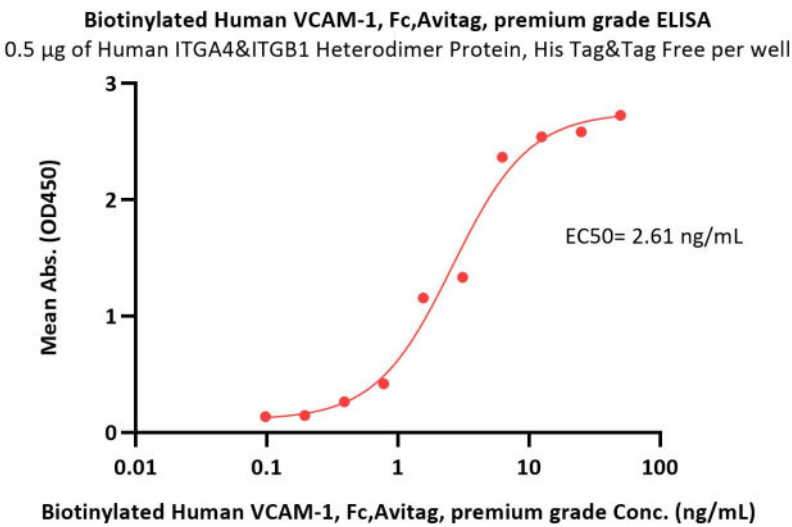
SEC-MALS



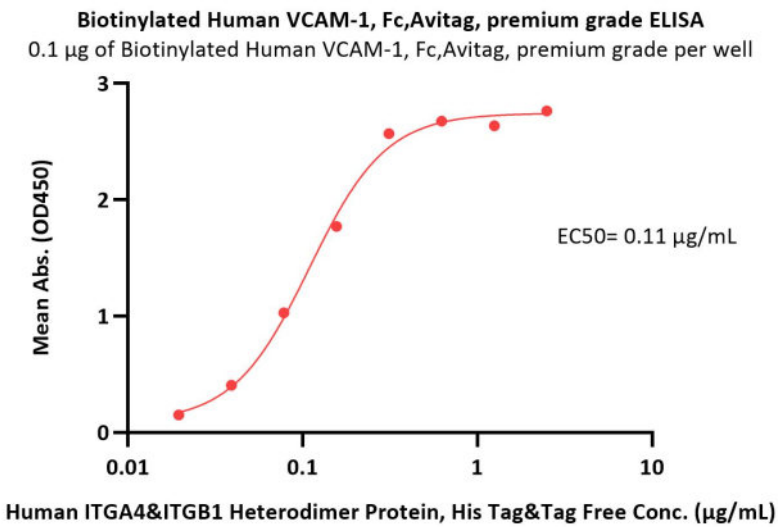
The purity of Biotinylated Human VCAM-1, Fc,Avitag, premium grade (Cat. No. VC1-H82F6) is more than 90% and the molecular weight of this protein is around 210-250 kDa verified by SEC-MALS.

[Report](#)

Bioactivity-ELISA



Immobilized Human ITGA4&ITGB1 Heterodimer Protein, His Tag&Tag Free (Cat. No. IT1-H52W1) at 5 µg/mL (100 µL/well) can bind Biotinylated Human VCAM-1, Fc,Avitag, premium grade (Cat. No. VC1-H82F6) with a linear range of 0.1-13 ng/mL (QC tested).



Immobilized Biotinylated Human VCAM-1, Fc,Avitag, premium grade (Cat. No. VC1-H82F6) at 1 µg/mL (100 µL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 µg/well) plate can bind Human ITGA4&ITGB1 Heterodimer Protein, His Tag&Tag Free (Cat. No. IT1-H52W1) with a linear range of 0.02-0.313 µg/mL (Routinely tested).

Background

Vascular cell adhesion protein 1 (VCAM1) is also known as CD106, INCAM-100 and L1CAM, is a cell surface sialoglycoprotein belonging to the immunoglobulin superfamily. VCAM1 / CD106 contains 7 Ig-like C2-type (immunoglobulin-like) domains. CD106 / VCAM-1 is expressed on inflamed vascular endothelium, as well as on macrophage-like and dendritic cell types in both normal and inflamed tissue. L1CAM / VCAM-1 is Important in cell-cell recognition and appears to function in leukocyte-endothelial cell adhesion. CD106 / VCAM1 interacts with the beta-1 integrin VLA4 on leukocytes, and mediates both adhesion and signal transduction. The VCAM1 / VLA4 interaction may play a pathophysiologic role both in immune responses and in leukocyte emigration to sites of inflammation. INCAM-100 / VCAM1 binds to ECMV-D capsid proteins and acts as a receptor for this virus.

