Human VCAM-1 / CD106 Protein, His Tag (MALS verified)

Catalog # VC1-H5224

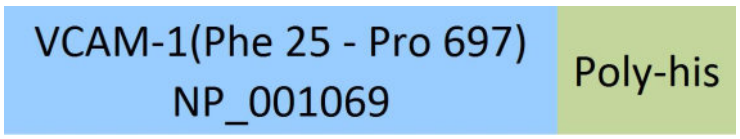
Synonym

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

Source

Human VCAM-1, His Tag(VC1-H5224) is expressed from human 293 cells (HEK293). It contains AA Phe 25 - Pro 697 (Accession # NP_001069).
Predicted N-terminus: Phe 25

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 74.9 kDa. The protein migrates as 85-100 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

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

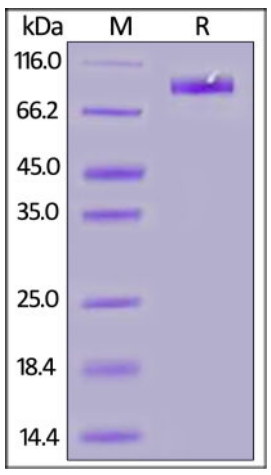
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

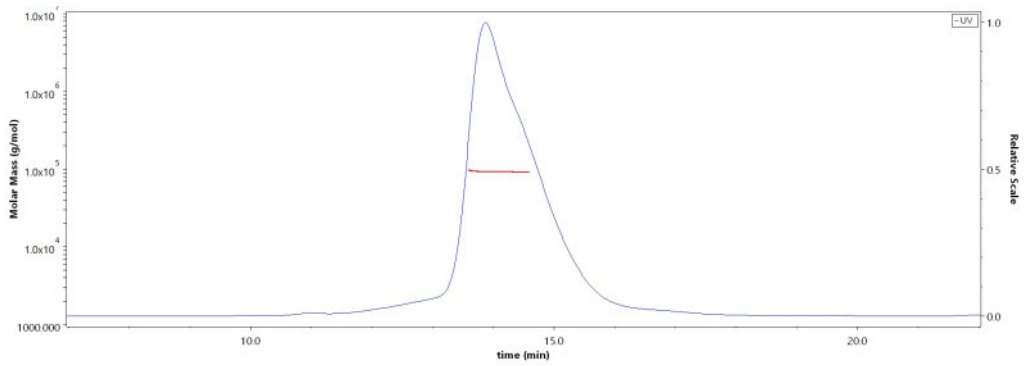
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



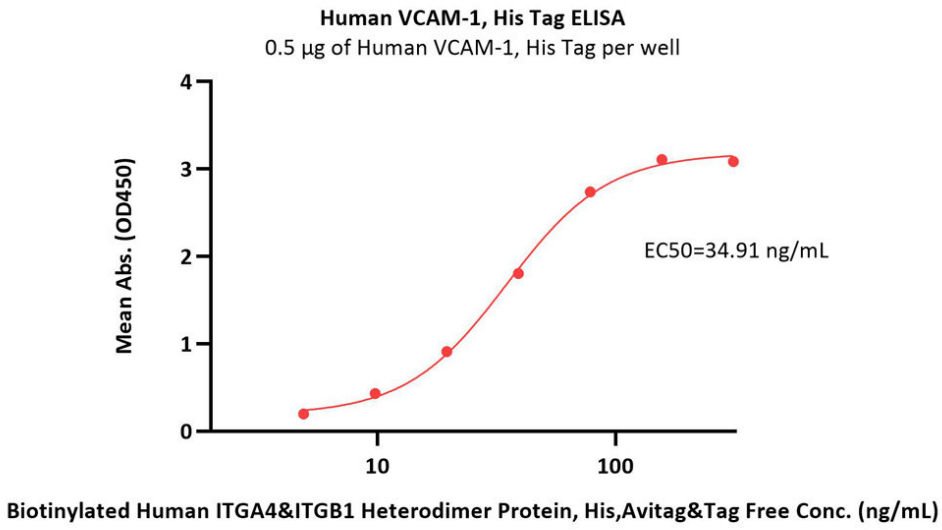
Human VCAM-1, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS



The purity of Human VCAM-1, His Tag (Cat. No. VC1-H5224) is more than 90% and the molecular weight of this protein is around 78-106 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



Immobilized Human VCAM-1, His Tag (Cat. No. VC1-H5224) at 5 μg/mL (100 μL/well) can bind Biotinylated Human ITGA4&ITGB1 Heterodimer Protein, His,Avitag&Tag Free (Cat. No. IT1-H82W1) with a linear range of 4-78 ng/mL (QC 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 inflammed vascular endothelium, as well as on macrophage-like and dendritic cell types in both normal and inflammed 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.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.