

Human MAdCAM-1 Protein, Fc Tag, low endotoxin (MALS verified)

Catalog # MAM-H5253



BIOSYSTEMS
Acro

Surprise Inside!

Synonym

MAdCAM-1, MAdCAM1, Mucosal vascular addressin cell adhesion molecule 1 transcript variant 1

Source

Human MAdCAM-1, Fc Tag (MAM-H5253) is expressed from human 293 cells (HEK293). It contains AA Gln 19 - Gln 333 (Accession # [Q4PKD0-1](#)).

Predicted N-terminus: Gln 19

Molecular Characterization

MAdCAM-1(Gln 19 - Gln 333) Q4PKD0-1	Fc(Pro 100 - Lys 330) P01857
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This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 59.6 kDa. The protein migrates as 70-100 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.01 EU per µg by the LAL method / rFC method.

Purity

>95% 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.

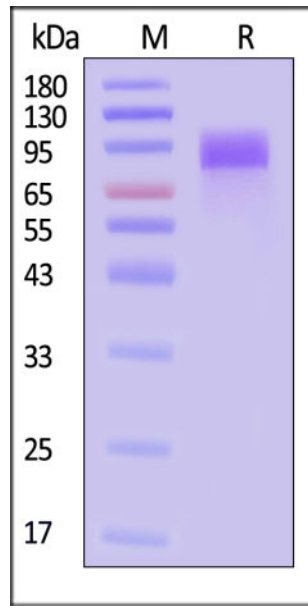
This product is stable after storage at:

- -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

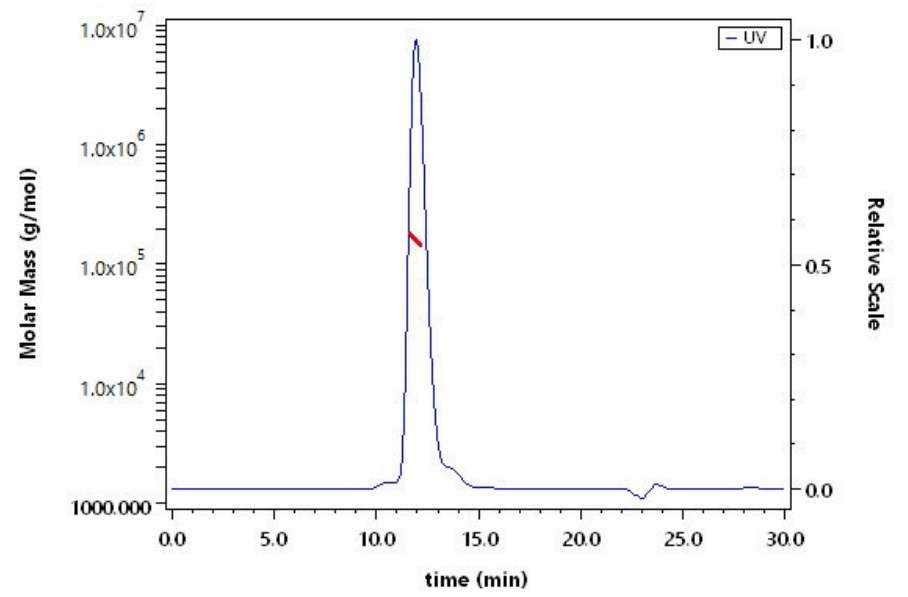
- [QMS\(ISO, GMP\)](#)
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



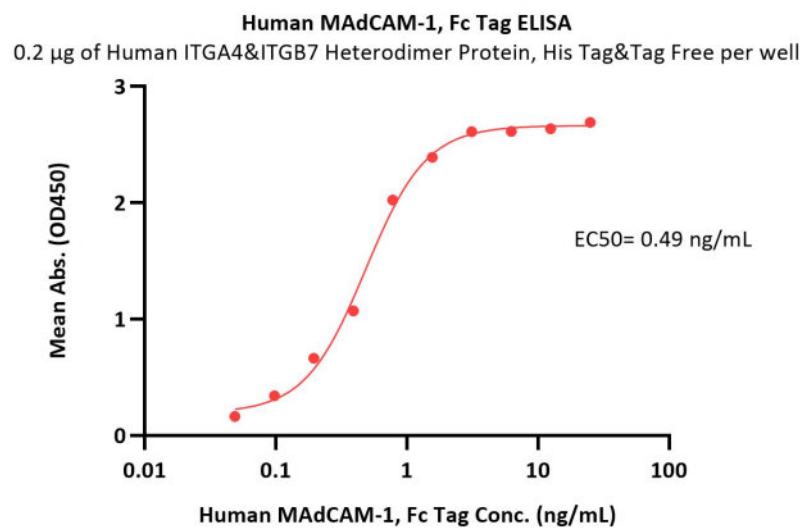
Human MAdCAM-1, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS



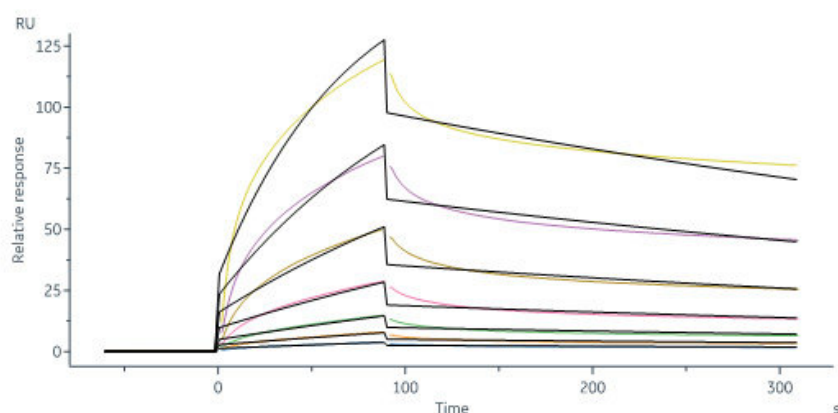
The purity of Human MAdCAM-1, Fc Tag (Cat. No. MAM-H5253) is more than 95% and the molecular weight of this protein is around 145-175 kDa verified by SEC-MALS.

Bioactivity-ELISA



Immobilized Human ITGA4&ITGB7 Heterodimer Protein, His Tag&Tag Free (Cat. No. IT7-H52W4) at 2 µg/mL (100 µL/well) can bind Human MAdCAM-1, Fc Tag (Cat. No. MAM-H5253) with a linear range of 0.05-1 ng/mL (QC tested).

Bioactivity-SPR



Human MAdCAM-1, Fc Tag (Cat. No. MAM-H5253) captured on Protein A Chip can bind Cynomolgus ITGA4&ITGB7 Heterodimer Protein, His Tag&Tag Free (Cat. No. IT7-C52W4) with an affinity constant of 5.77 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

The mucosal addressin cell adhesion molecule-1 (MAdCAM-1) takes a key role in the endothelial adhesion and migration of lymphocytes to sites of inflammation in inflammatory disease. In vitro and in vivo data indicate that blockade of the adhesion molecule mucosal address in cell adhesion molecule (MAdCAM) pathway

decreases leukocyte homing to the gut by inhibiting the interaction between MAdCAM and its ligand the $\alpha 4\beta 7$ integrin expressed on lymphocytes.



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