

Synonym

MCAM,CD146,MUC18

Source

Human MCAM, His Tag(CD6-H5229) is expressed from human 293 cells (HEK293). It contains AA Val 24 - Gly 559 (Accession # NP_006491.2). Predicted N-terminus: Val 24

Molecular Characterization

MCAM(Val 24 - Gly 559) NP_006491.2

Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 60.5 kDa. The protein migrates as 70-100 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from $0.22~\mu m$ 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

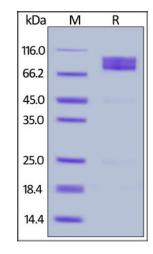
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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 MCAM, 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%.

Bioactivity-SPR

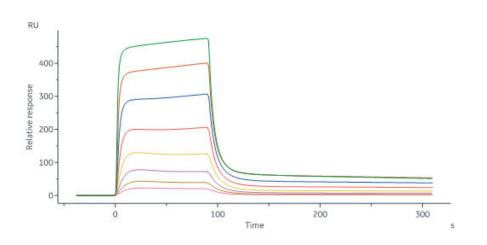


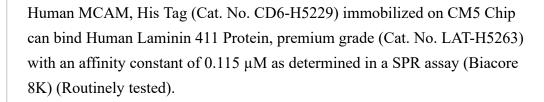
Human MCAM / CD146 Protein, His Tag

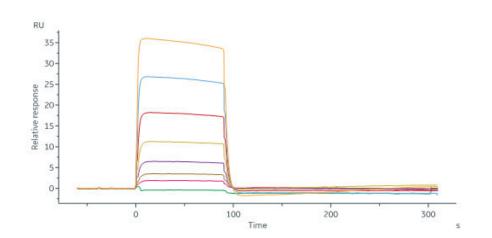
Catalog # CD6-H5229











Human Laminin 411 Protein, premium grade (Cat. No. LAT-H5263) captured on Protein A Chip can bind Human MCAM, His Tag (Cat. No. CD6-H5229) with an affinity constant of 107 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

CD146, also known as the melanoma cell adhesion molecule (MCAM) or cell surface glycoprotein MUC18, is a 113kDa cell adhesion molecule currently used as a marker for endothelial cell lineage. As a member of the Immunoglobulin superfamily, It is expressed on chicken embryonic spleen and thymus, activated human T cells, endothelial progenitors such as angioblasts and mesenchymal stem cells, and strongly expressed on blood vessel endothelium and smooth muscle.

CD146 has been demonstrated to appear on a small subset of T and B lymphocytes in the peripheral blood of healthy individuals. The CD146+ T cells display an immunophenotype consistent with effector memory cells and have a distinct gene profile from the CD146- T cells.

As a Ca2+ independent cell adhesion molecule involved in heterophilic cell to cell interactions and a surface receptor, CD146 triggers tyrosine phosphorylation of FYN and PTK2 and subsequently induced signal transduction, proteolysis or immune recognition.