

**Synonym**

MCAM,CD146,MUC18

**Source**

Rat MCAM, His Tag(MCM-R52H4) is expressed from human 293 cells (HEK293). It contains AA Val 24 - Leu 560 (Accession # [Q9EPF2-1](#) ).

Predicted N-terminus: Val 24

**Molecular Characterization**

MCAM(Val 24 – Leu 560) Q9EPF2-1	Poly-his
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This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 61.2 kDa. The protein migrates as 70-110 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.

**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.*

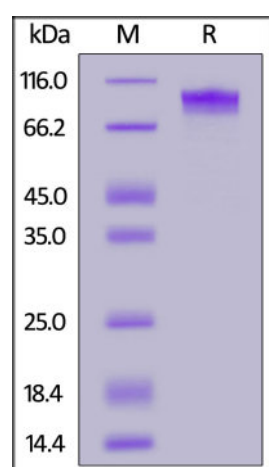
**Storage**

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**

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

**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 Ca<sup>2+</sup> 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.

### Clinical and Translational Updates

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