



# Recombinant Protein Technical Manual

## Recombinant Human CD146/MCAM Protein (His Tag)

RPES0295

### Product Data:

**Product SKU:** RPES0295

**Size:** 10µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** NP\_006491.2

### Protein Information:

**Molecular Mass:** 61.3 kDa

**AP Molecular Mass:** 80-90 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 98 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** CD146;MUC18

## Immunogen Information:

**Sequence:** Met 1-Gly 559

## Background:

The CD146 antigen, also known as melanoma cell adhesion molecule (MCAM) and MUC18, is an integral membrane glycoprotein belonging to the immunoglobulin superfamily. CD146 contains the characteristic immunoglobulin-like domains (V-V-C2-C2-C2), a transmembrane region and a short cytoplasmic tail. The CD146 expression is detected in endothelial cells in vascular tissue throughout the body, and plays a role in cell adhesion, as well as in cohesion of the endothelial monolayer at intercellular junctions in vascular tissue. 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. This protein is also expressed predominantly on metastatic lesions and advanced primary tumours, and thus has been suggested to play an important role in tumour progression and the development of metastasis in certain human carcinomas.