

Catalog Number: 10115-R044-F

General Information	
<b>Immunogen:</b>	Recombinant Human CD146 / MCAM protein (Catalog#10115-H08H)
<b>Reagents:</b>	FITC-conjugated rabbit monoclonal antibody
<b>Specificity:</b>	Human CD146 / MCAM
<b>Clone ID:</b>	44
<b>Ig Type:</b>	Rabbit IgG
<b>Applications:</b>	Flow Cytometry, WB
<b>Concentration:</b>	5 µl/Test, 0.2 mg/ml
<b>Formulation:</b>	Aqueous solution containing 0.5% BSA and 0.1% sodium azide
<b>Storage:</b>	2 °C - 8 °C in the dark

## Preparation

This antibody was obtained from a rabbit immunized with purified, recombinant Human CD146 / MCAM (rh CD146; Catalog#10115-H08H; NP\_006491.2; Met 1-Gly 559) and conjugated with FITC under optimum conditions, the unreacted FITC was removed.

## Storage

This antibody is stable for 12 months from date of receipt when stored at 2°C - 8°C. Protected from prolonged exposure to light. **Do not freeze !**

Sodium azide is toxic to cells and should be disposed of properly. Flush with large volumes of water during disposal

## Applications

### Flow Cytometry –

**Fig 1, Fig 2. Flow cytometric analysis of anti-CD146 reactivity on HeLa cells and A549 cells.**

Profile of anti-CD146 reactivity on HeLa cells, A549 cells analyzed by flow cytometry.

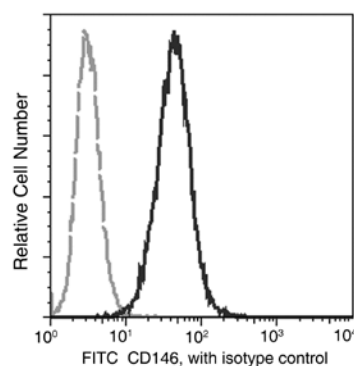


Fig 1. Analysis of anti-CD146 reactivity on HeLa cells

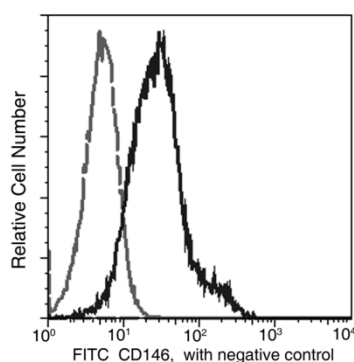


Fig 2. Analysis of anti-CD146 reactivity on A549 cells

Flow cytometry was performed on a BD FACSCalibur flow cytometry system.

Please refer to [www.sinobiological.com/Flow-Cytometry-FACS-Protocols-a-750.html](http://www.sinobiological.com/Flow-Cytometry-FACS-Protocols-a-750.html) for technical protocols.

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**Western blot** – This antibody can be used at 1-2 µg/mL with the appropriate secondary reagents to detect Human CD146 in WB.

#### **Specificity**

Human CD146 / MCAM

**No cross-reactivity** in ELISA with

Human CD66a

Human CD166

Human CD106

Human BCAM

Human CD226

#### **Background**

The CD146 antigen, also known as MCAM, 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. CD146 is expressed predominantly on metastatic lesions and advanced primary tumours, and has been suggested to play an important role in tumour progression and the development of metastasis in certain human carcinomas.

#### **Reference**

1. Lehmann, JM. et al., 1989, Proc. Natl. Acad. Sci. 86: 9891-5.
2. Shih IM. et al., 1999, J. Pathol. 189: 4-11.
3. Xie S. et al., 1997, Cancer. Res. 57 : 2295-303.
4. Guezguez, B. et al., 2007, J. Immunol. 179: 6673-85.