## **Technical Data Sheet**

# FITC Mouse anti-Human CD146

#### **Product Information**

560846 **Material Number:** 

MCAM; MELCAM; MUC18; Gicerin; Melanoma cell adhesion molecule Alternate Name:

100 tests 5 μ1 Vol. per Test: P1H12 Clone:

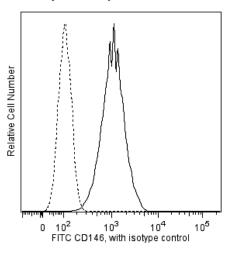
Human Umbilical Vein Cells Immunogen:

Mouse IgG1, κ Isotype: QC Testing: Human Reactivity:

Aqueous buffered solution containing BSA and ≤0.09% sodium azide. Storage Buffer:

### Description

The P1H12 antibody reacts with a 118 kDa transmembrane glycoprotein also known as MCAM, MUC18, or Mel-CAM. CD146 is a member of the immunoglobulin superfamily and is expressed by angioblasts and mesenchymal stems cells and is strongly expressed by blood vessel endothelium and smooth muscle. CD146 is also expressed by melanoma cells, intermediate trophoblasts and a subpopulation of activated T cells. The P1H12 monoclonal antibody has been reported to block endothelial cell adhesion that is observed very early in embryogenesis.



Flow cytometric analysis of CD146 expression on human HeLa cells. HeLa cells (ATCC, Cat No. CCL-2) were stained with FITC Mouse anti-Human CD146 antibody (Cat. No. 560846; solid line fluorescence histogram) or a FITC Mouse IgG1, κ Isotype Control (Cat. No. 554679 used at a matching concentration; dashed line histogram) antibody. Flow cytometric fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of viable cells. Flow cytometry was performed using a BD LSR™ II flow cytometry system.

#### **Preparation and Storage**

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed.

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

#### **Application Notes**

Application

Flow cytometry Routinely Tested

### **Suggested Companion Products**

Catalog Number Clone FITC Mouse IgG1, κ Isotype Control MOPC-21 554679 0.1 mg

### **Product Notices**

- 1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 × 10<sup>6</sup> cells in a 100-μl experimental
- An isotype control should be used at the same concentration as the antibody of interest. 2.
- Source of all serum proteins is from USDA inspected abattoirs located in the United States.
- Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

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- 5. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
- 6. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

#### References

Elshal MF, Khan SS, Takahashi Y, Solomon MA, McCoy JP, Jr. CD146 (Mel-CAM), an adhesion marker of endothelial cells, is a novel marker of lymphocyte subset activation in normal peripheral blood. *Blood*. 2005; 106(8):2923-2924. (Clone-specific: Flow cytometry)

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Shih IM, Elder DE, Hsu MY, Herlyn M. Regulation of Mel-CAM/MUC18 expression on melanocytes of different stages of tumor progression by normal keratinocytes. *Am J Pathol.* 1994; 145(4):837-845. (Biology)

Solovey A, Lin Y, Browne P, Choong S, Wayner E, Hebbel R P. Circulating activated endothelial cells in sickle cell anemia. *N Engl J Med.* 1997; 337(22):1584-1590. (Clone-specific: Fluorescence microscopy)

Solovey AN, Gui L, Chang L, Enenstein J, Browne PV, Hebbel RP. Identification and functional assessment of endothelial P1H12. *J Lab Clin Med.* 2001; 138(5):322-331. (Clone-specific)

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