

A22520

Leader in Biomolecular Solutions for Life Science



## ABflo® 488 Rabbit anti-Human CD146 mAb

Catalog No.: A22520

### Basic Information

#### Observed MW

Refer to figures

#### Calculated MW

72kDa

#### Category

SMab Recombinant Monoclonal Antibody

#### Applications

FC

#### Cross-Reactivity

Human

#### CloneNo number

ARC56715-ABf488

#### Conjugate

ABflo® 488. Ex:491nm. Em:516nm.

### Recommended Dilutions

FC                      5 µl per 10<sup>6</sup> cells in  
                                 100 µl volume

### Background

Melanoma cell adhesion molecule (MCAM, MUC18, CD146) is an immunoglobulin superfamily member originally described as a cell surface adhesion protein and marker of the progression and metastasis of melanoma. Expression of MCAM protein is seen in vascular endothelial cells, activated T lymphocytes, smooth muscle, and bone marrow stromal cells. Research studies demonstrate increased MCAM expression in endothelial cells from angiogenesis-related disorders, including inflammatory bowel disease, Crohn's disease, rheumatoid arthritis, tumors, and chronic renal failure. MCAM-expressing human mesenchymal stromal cells (hMSC) in the hematopoietic microenvironment are responsible for maintaining the self-renewal of hematopoietic stem and progenitor cells (HSPC) through direct contact between hMSC and HSPC. Related studies suggest that activation of the Notch signaling pathway may also, in part, play a role in HSPC maintenance. Additional research indicates that MCAM may play a role in multiple sclerosis, an autoimmune inflammatory disease that affects central nervous system neurons. Endothelial MCAM within the blood-brain barrier act as adhesion receptors that permit lymphocytes to transmigrate across the barrier and produce the inflammatory lesions that characterize the disorder.

### Immunogen Information

#### Gene ID

4162

#### Swiss Prot

P43121

#### Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 24-559 of human CD146 (NP\_006491.2).

#### Synonyms

CD146; MUC18; HEMCAM; METCAM; MeICAM

### Contact



[www.abclonal.com](http://www.abclonal.com)

### Product Information

#### Source

Rabbit

#### Isotype

IgG

#### Purification

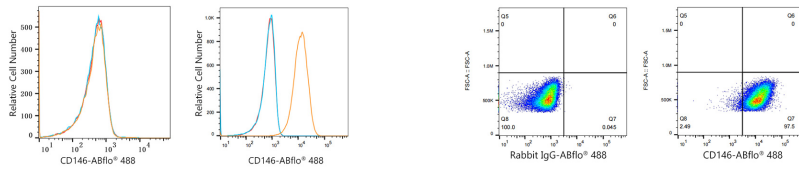
Affinity purification

#### Storage

Store at 2-8°C. Avoid freeze.

Buffer: PBS with 0.03% proclin300, 0.2% BSA, pH7.3.

## Validation Data



Flow cytometry:  $1 \times 10^6$  MCF7 cells (negative control, left) and HUVEC cells (right) were surface-stained with ABflo® 488 Rabbit anti-Human CD146 mAb (A22520, 5  $\mu$ l/Test, orange line) or ABflo® 488 Rabbit IgG isotype control (A22069, 5  $\mu$ l/Test, blue line). Non-fluorescently stained cells were used as blank control (red line).

Flow cytometry:  $1 \times 10^6$  HUVEC cells were surface-stained with ABflo® 488 Rabbit IgG isotype control (A22069, 5  $\mu$ l/Test, left) or ABflo® 488 Rabbit anti-Human CD146 mAb (A22520, 5  $\mu$ l/Test, right).