

A22521

Leader in Biomolecular Solutions for Life Science



ABflo® 647 Rabbit anti-Human CD146 mAb

Catalog No.: A22521

Basic Information

Observed MW

Refer to figures

Calculated MW

57kDa/72kDa

Category

SMab Recombinant Monoclonal Antibody

Applications

FC

Cross-Reactivity

Human

CloneNo number

ARC56715-ABf647

Conjugate

ABflo® 647. Ex:648nm. Em:664nm.

Recommended Dilutions

FC 5 µl per 10⁶ 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

Product Information

Source

Rabbit

Isotype

IgG

Purification

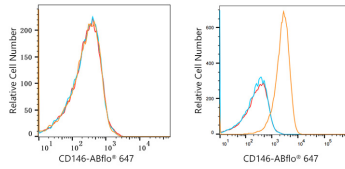
Affinity purification

Storage

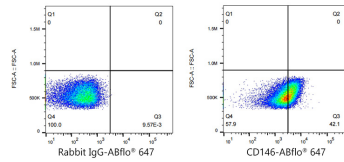
Store at 2-8°C. Avoid freeze.

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

Validation Data



Flow cytometry: 1×10^6 MCF7 cells (negative control, left) and HUVEC cells (right) were surface-stained with ABflo® 647 Rabbit anti-Human CD146 mAb (A22521, 5 μ l/Test, orange line) or ABflo® 647 Rabbit IgG isotype control (A22070, 5 μ l/Test, blue line). Non-fluorescently stained cells were used as blank control (red line).



Flow cytometry: 1×10^6 HUVEC cells were surface-stained with ABflo® 647 Rabbit IgG isotype control (A22070, 5 μ l/Test, left) or ABflo® 647 Rabbit anti-Human CD146 mAb (A22521, 5 μ l/Test, right).