

DESCRIPTION

| | |
|---------------------------|---|
| Species Reactivity | Human |
| Specificity | Detects human MCAM/CD46 in Western blots and direct ELISAs. In direct ELISAs, less than 10% cross-reactivity with recombinant human (rh) ALCAM, rhBCAM, rhNCAM-L1, rhTROP-2 and recombinant mouse MCAM is observed. |
| Source | Polyclonal Goat IgG |
| Purification | Antigen Affinity-purified |
| Immunogen | Mouse myeloma cell line NS0-derived recombinant human MCAM/CD146 Met1-Gly559 Accession # AAA20824 |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS. |

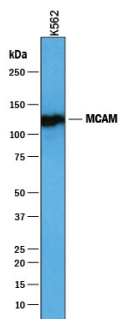
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

| | Recommended Concentration | Sample |
|-----------------------------|---------------------------|-----------|
| Western Blot | 1 µg/mL | See Below |
| Immunocytochemistry | 5-15 µg/mL | See Below |
| Immunohistochemistry | 5-15 µg/mL | See Below |
| Simple Western | 10 µg/mL | See Below |

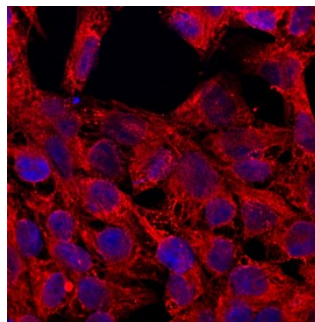
DATA

Western Blot



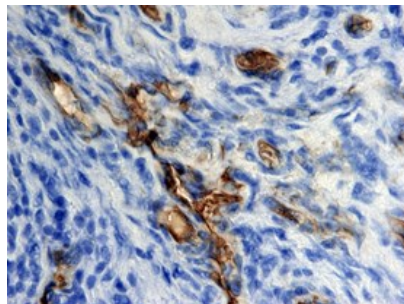
Detection of Human MCAM/CD146 by Western Blot. Western blot shows lysates of K562 human chronic myelogenous leukemia cell line. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human MCAM/CD146 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF932) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for MCAM/CD146 at approximately 117 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



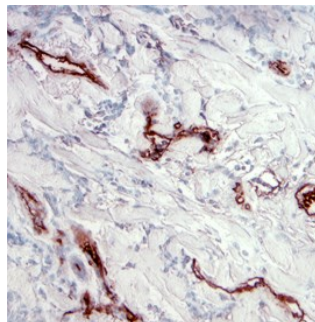
MCAM/CD146 in BG01V Human Embryonic Stem Cells. MCAM/CD146 was detected in immersion fixed BG01V human embryonic stem cells using Goat Anti-Human MCAM/CD146 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF932) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the Northern-Lights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to cell membranes and cytoplasm. View our protocol for [Fluorescent ICC Staining of Stem Cells on Coverslips](#).

Immunohistochemistry



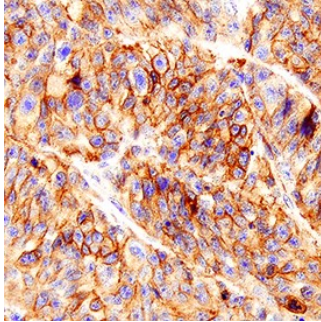
MCAM/CD146 in Human Melanoma. MCAM/CD146 was detected in immersion fixed paraffin-embedded sections of human melanoma tissue using Goat Anti-Human MCAM/CD146 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF932) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

Immunohistochemistry



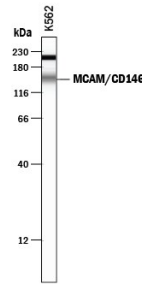
MCAM/CD146 in Human Melanoma. MCAM/CD146 was detected in immersion fixed paraffin-embedded sections of human melanoma tissue using Goat Anti-Human MCAM/CD146 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF932) at 5 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

Immunohistochemistry



MCAM/CD146 in Human Melanoma Tissue. MCAM/CD146 was detected in immersion fixed paraffin-embedded sections of human melanoma tissue using Goat Anti-Human MCAM/CD146 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF932) at 3 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Goat IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC004). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to plasma membrane in cancer cells. View our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.

Simple Western



Detection of Human MCAM/CD146 by Simple Western™. Simple Western lane view shows lysates of K562 human chronic myelogenous leukemia cell line, loaded at 0.2 mg/mL. A specific band was detected for MCAM/CD146 at approximately 152 kDa (as indicated) using 10 µg/mL of Goat Anti-Human MCAM/CD146 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF932) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system. Non-specific interaction with the 230 kDa Simple Western standard may be seen with this antibody.

PREPARATION AND STORAGE

Reconstitution Reconstitute at 0.2 mg/mL in sterile PBS.

Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

Stability & Storage Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

MCAM, also known as MUC18, is a putative adhesion molecule that belongs to the immunoglobulin superfamily. It is associated with tumor progression and metastasis of various carcinomas and may be involved in embryonic neural development.