

## DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse MCAM/CD146 in direct ELISAs and Western blots. In direct ELISAs, approximately 40% cross-reactivity with recombinant rat MCAM is observed and approximately 10% cross-reactivity with recombinant human MCAM is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse MCAM/CD146 Val24-Tyr563 Accession # Q8R2Y2
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

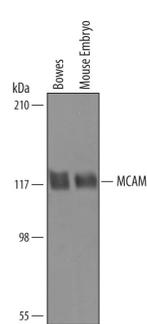
## APPLICATIONS

**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
<b>Western Blot</b>	1 µg/mL	See Below
<b>Immunocytochemistry</b>	5-15 µg/mL	See Below
<b>Simple Western</b>	10 µg/mL	See Below

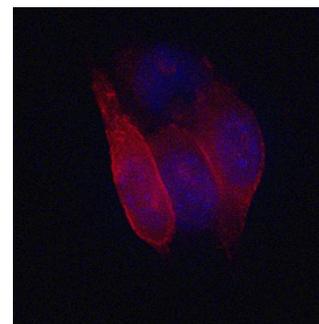
## DATA

### Western Blot



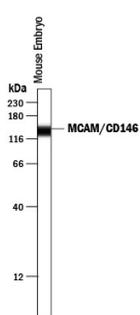
**Detection of Human and Mouse MCAM/CD146 by Western Blot.** Western blot shows lysates of Bowes human melanoma cell line and mouse embryo tissue. PVDF Membrane was probed with 1 µg/mL of Sheep Anti-Mouse MCAM/CD146 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6106) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). 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 8.

### Immunocytochemistry



**MCAM/CD146 in B16-F1 Mouse Cell Line.** MCAM/CD146 was detected in immersion fixed B16-F1 mouse melanoma cell line using Sheep Anti-Mouse MCAM/CD146 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6106) at 1.7 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red; Catalog # NL010) and counterstained with DAPI (blue). Specific staining was localized to plasma membranes. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

### Simple Western



**Detection of Mouse MCAM/CD146 by Simple Western™.** Simple Western lane view shows lysates of mouse embryo tissue (15 d.p.c.), loaded at 0.2 mg/mL. A specific band was detected for MCAM/CD146 at approximately 138 kDa (as indicated) using 10 µg/mL of Sheep Anti-Mouse MCAM/CD146 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6106) followed by 1:50 dilution of HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

MCAM (Melanoma cell adhesion molecule; also CD146 and MUC18) is a 110-120 kDa member of a small group of Ig-superfamily molecules that includes CD239 and CD166. MCAM has also been reported at a molecular weight of approximately 150 kDa. In rodent, MCAM is reportedly expressed on neurons, endothelial cells, NK cells, neutrophils, mesenchymal stem cells and melanoma cells. MCAM appears to contribute to intercellular endothelial cell junctions, and possibly contributes to the migration of select cell types. Mature mouse MCAM is a 625 amino acid (aa) type I transmembrane glycoprotein. Its extracellular region is 540 aa in length (aa 24-563). It contains two V-type Ig-like domains (aa 24-244) followed by three C2-type Ig-like domains (aa 246-512). One cytoplasmic region splice form shows a seven aa substitution for aa 600-648. Unlike human, rodent MCAM does not undergo a splicing event that will generate a soluble isoform. Over aa 24-563, mouse MCAM shares 90% and 74% aa identity with rat and human MCAM, respectively.