

## DESCRIPTION

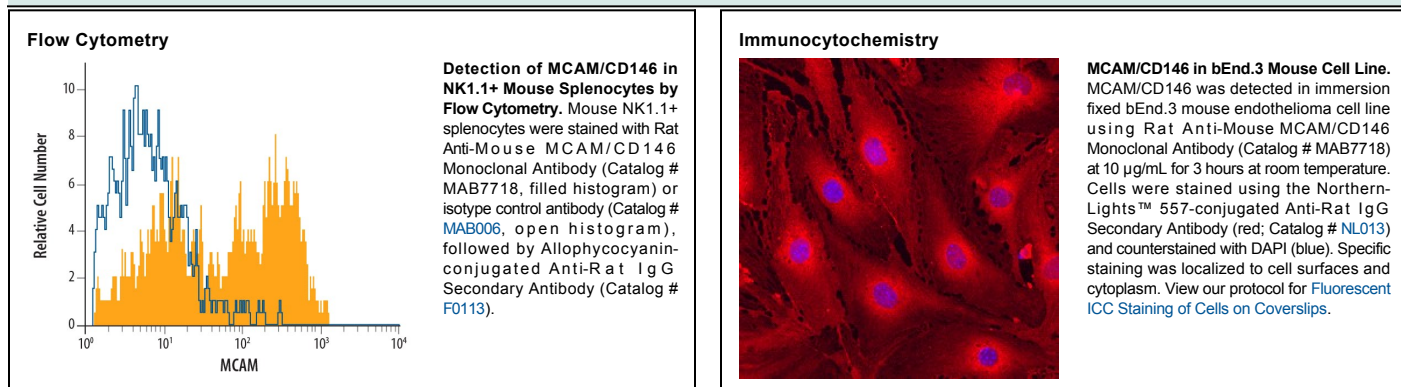
<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse MCAM/CD146 in direct ELISAs. In direct ELISAs, less than 5% cross-reactivity with recombinant mouse (rm) MAdCAM-1 is observed, and no cross-reactivity with rmALCAM, rmNCAM, rmL1CAM, rmOCAM, rmTROP-2, recombinant human MCAM, or recombinant rat MCAM is observed.
<b>Source</b>	Monoclonal Rat IgG <sub>2A</sub> Clone # 733216
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse MCAM/CD146 Met1-Val563 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>Flow Cytometry</b>	2.5 µg/10 <sup>6</sup> cells	See Below
<b>Immunocytochemistry</b>	8-25 µg/mL	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<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.