

DESCRIPTION

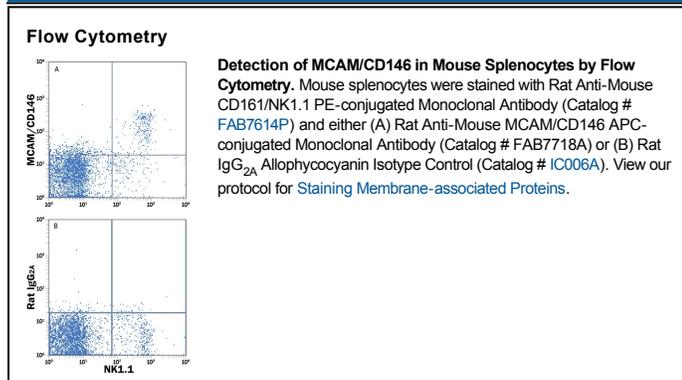
Species Reactivity	Mouse
Specificity	Detects mouse MCAM/CD146 in direct ELISAs. In direct ELISAs, less than 5% cross-reactivity with recombinant mouse (rm) MAdCAM-1 is observed, and no cross-reactivity with rmALCAM, rmNCAM, rmL1CAM, rmOCAM, rmTROP-2, recombinant human MCAM, or recombinant rat MCAM is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 733216
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse MCAM/CD146 Met1-Val563 Accession # Q8R2Y2
Conjugate	Allophycocyanin Excitation Wavelength: 620-650 nm Emission Wavelength: 660-670 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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
Flow Cytometry	10 μ L/10 ⁶ cells	See Below

DATA



PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

MCAM (Melanoma Cell Adhesion Molecule), also known as CD146 and MUC18, is a 110-120 kDa member of a small group of Ig-superfamily molecules that includes CD239 and CD166. In rodents, 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. It has been suggested that CD146 may act homotypically, or contribute to a Fzd:Dv12:CD146 Wnt receptor complex. 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.