

**Biotin anti-mouse MAdCAM-1**

**Catalog # / Size:** 1203530 / 500 µg  
1203525 / 50 µg

**Clone:** MECA-367

**Isotype:** Rat IgG2a, κ

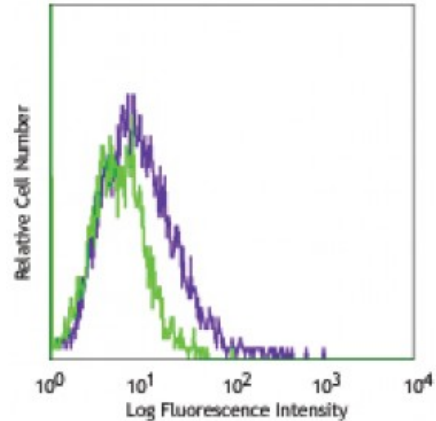
**Immunogen:** Endothelial cells

**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 0.5



TNF-a-stimulated bEND.3 cells stained with MECA-367 biotin, followed by Sav-PE

**Applications:**

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤0.25 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** Additional reported applications (for the relevant formats) include: *in vitro* and *in vivo* blocking of lymphocyte adhesion and *in vivo* blocking of lymphocyte homing<sup>1-4,7</sup>, immunohistochemical staining<sup>1,5,6</sup> of acetone-fixed frozen sections, immunoprecipitation, and Western blotting<sup>1</sup>.

**Application References:**

1. Streeter PR, *et al.* 1988. *Nature* 331:41.
2. Briskin MJ, *et al.* 1993. *Nature* 363:461.
3. Berlin C, *et al.* 1993. *Cell* 74:185.
4. Bargatze RF, *et al.* 1995. *Immunity* 3:99.
5. Tanneau GM, *et al.* 1999. *J. Histochem. Cytochem.* 47:1581.
6. Savinov AY, *et al.* 2003. *J. Exp. Med.* 197:643.
7. Rivera-Nieves J, *et al.* 2005. *J. Immunol.* 174:2343.

**Description:** MAdCAM-1 is a 58-66kD type I glycoprotein, also known as Mucosal addressin cell adhesion molecule-1. This mucosal vascular addressin is a member of the Ig superfamily found on fetus and neonatal endothelial cells. In adults, MAdCAM-1 is predominately expressed on high endothelial venule (HEV) of Peyer's patches, mesenteric lymph nodes and gut lamina propria. It is also expressed on vascular endothelium in mammary glands and pancreas. MAdCAM-1, through its interaction with integrin α4β7 or CD62L, is involved in lymphocyte tethering, rolling, and homing. It has been reported that immobilized MAdCAM-1 is able to co-stimulate T cell proliferation. The MECA-367 antibody blocks the interaction of MAdCAM-1 with its counter-receptor both *in vitro* and *in vivo*. *In vivo* administration of the mAb is able to reduce T-cell mediated inflammation in some gastrointestinal diseases.

**Antigen** 1. Streeter PR, *et al.* 1988. *Nature* 331:41

- References:**
2. Briskin MJ, *et al.* 1993. *Nature* 363:461.
  3. Berlin C, *et al.* 1993. *Cell* 74:185.
  4. Lehnert K, *et al.* 1998. *Eur. J. Immunol.* 28:3605.
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