SONY

Product Data Sheet

PE anti-mouse MAdCAM-1

Catalog # / Size: 1203550 / 100 µg
1203545 / 25 µg

Clone: MECA-367

Isotype: Rat IgG2a, κ

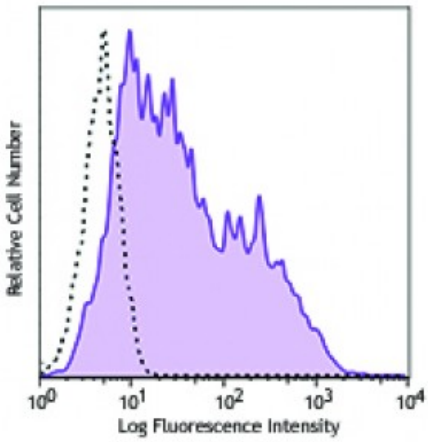
Immunogen: Endothelial cells

Reactivity: Mouse

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

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

Concentration: 0.2



TNFα-stimulated bEND.3 cells were stained with anti-mouse MAdCAM-1 (clone MECA-367) PE (filled histogram) or mouse IgG2a, κ isotype control PE (open histogram).

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 ≤0.5 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[1-4,7], immunohistochemical staining[1,5,6] of acetone-fixed frozen sections, immunoprecipitation, and Western blotting1.

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.
8. Hindley JP, *et al.* 2012. *Cancer Res.* 72:5473. PubMed.

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 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. Lehnert K, *et al.* 1998. *Eur. J. Immunol.*