

## Technical Data Sheet

## Biotin Rat Anti-Mouse MAdCAM-1

## Product Information

<b>Material Number:</b>	553808
<b>Size:</b>	0.5 mg
<b>Concentration:</b>	0.5 mg/ml
<b>Clone:</b>	MECA-89
<b>Immunogen:</b>	Mouse mesenteric and peripheral lymph node cells
<b>Isotype:</b>	Rat (WI) IgG2a, $\kappa$
<b>Reactivity:</b>	QC Testing: Mouse
<b>Storage Buffer:</b>	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

## Description

The MECA-89 antibody reacts with mucosal vascular addressin MAdCAM-1. In the fetus and neonate, MAdCAM-1 is the predominant vascular addressin on the high endothelial venules (HEV) of peripheral lymph nodes. In adult mice, MAdCAM-1 is preferentially expressed in mucosal lymphoid tissues and lamina propria; it is also expressed on sinus-lining cells in the spleen. MAdCAM-1 expression is upregulated on the HEV of peripheral lymph nodes in adult NOD mice and is involved in the development of diabetes and insulinitis. Furthermore, there is evidence that IFN- $\gamma$  can induce MAdCAM-1 expression in non-mucosal sites in adult mice. MAdCAM-1 is a predominant ligand for integrin  $\alpha 4\beta 7$ , a lymphocyte mucosal homing receptor, and a facultative ligand for CD62L (L-selectin). MECA-89 mAb binds to the second domain of MAdCAM-1 and does not block MAdCAM-1-dependent binding *in vitro*. Source of the immunogen was endothelial cells from BALB/c mouse mesenteric and peripheral lymph nodes.

## Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with biotin under optimum conditions, and unreacted biotin was removed. Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

## Application Notes

## Application

Flow cytometry	Routinely Tested
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## Recommended Assay Procedure:

For immunohistochemical staining, we recommend the use of purified MECA-89 mAb in our special formulation for immunohistochemistry, Cat. No. 550555.

## Suggested Companion Products

Catalog Number	Name	Size	Clone
553928	Biotin Rat IgG2a $\kappa$ Isotype Control	0.25 mg	R35-95
554061	PE Streptavidin	0.5 mg	(none)

## Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to [www.bdbiosciences.com/pharmingen/protocols](http://www.bdbiosciences.com/pharmingen/protocols) for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

## References

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Streeter PR, Rouse BT, Butcher EC. Immunohistologic and functional characterization of a vascular addressin involved in lymphocyte homing into peripheral lymph nodes. *J Cell Biol.* 1988; 107(5):1853-1862.(Immunogen)

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