

Technical Data Sheet

Purified Rat Anti-Mouse MAdCAM-1

Product Information

Material Number:	553806
Size:	0.5 mg
Concentration:	0.5 mg/ml
Clone:	MECA-367
Immunogen:	Mouse endothelial cells from BALB/c mouse mesenteric and peripheral lymph nodes.
Isotype:	Rat (WI) IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

The MECA-367 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 mice⁴ and is involved in the development of diabetes and insulinitis. Furthermore, there is evidence that IFN- γ 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-367 mAb binds to the first domain of MAdCAM-1 and blocks MAdCAM-1-dependent binding *in vitro* and lymphocyte homing to Peyer's patch HEV *in vivo*. 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.
Store undiluted at 4°C.

Application Notes

Application

Flow cytometry	Routinely Tested
Immunoprecipitation	Reported
Western blot	Reported
Immunoaffinity Chromatography	Reported
Blocking	Reported
Immunohistochemistry-frozen	Reported

Recommended Assay Procedure:

For IHC, we recommend the use of purified MECA-367 mAb in our special formulation for immunohistochemistry, Cat. No. 550556.

Suggested Companion Products

Catalog Number	Name	Size	Clone
553927	Purified Rat IgG2a, κ Isotype Control	0.5 mg	R35-95
554016	FITC Goat Anti-Rat Ig	0.5 mg	Polyclonal

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 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.

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