



20150116ML

Anti-Mouse MAdCAM-1 (#11A55)

**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

Cat.-no.:	103-M432
Size:	100 µg
Lot. No.:	According to product label

Preparation: This antibody was produced from a hybridoma (mouse myeloma fused with spleen cells from a rat) immunized with mouse recombinant protein of MAdCAM-1 EC domain.

Target Background

Synonyms (Target):	Madcam1; AV211525
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Mucosal addressin cell adhesion molecule1 (MAdCAM1) is an immunoglobulin (Ig) cell adhesion molecule family member. In addition to Ig domains, it contains a mucin-like domain and a membrane proximal domain with similarity to IgA. MAdCAM1 is involved in lymphocyte homing to mucosal sites and is expressed on high endothelial venules (HEV) of both mesenteric lymph nodes and Peyer's patches. It has also been found to be expressed on sinuslining cells of the spleen. The integrin, $\alpha 4\beta 7$, has been shown to function as the MAdCAM1 receptor. The Ig domains of MAdCAM1 have been found to be critical to $\alpha 4\beta 7$ binding. The mucin domain has been shown to have activity in LSelectin binding. MAdCAM1 expression has been demonstrated to be upregulated by TNF α and IL1 β . MAdCAM1 appears to play a role in inflammatory bowel disease (IBD) as its expression is highly upregulated in IBD and most likely serves to recruit $\alpha 4\beta 7$ expressing lymphocytes to the region. In vivo studies involving nonobese diabetic (NOD) mice have also suggested that MAdCAM1/ $\alpha 4\beta 7$ interaction plays a role in diabetes development in this model. Mouse MAdCAM1 is a 405 amino acid (aa) residue protein with a 21 aa signal sequence, a 344 aa extracellular domain, a 20 aa transmembrane domain and a 20 aa cytoplasmic domain.

Database References Target

Protein RefSeq:	NP_038619.2
Uniprot ID:	G5E838
mRNA RefSeq:	NM_013591.2

Product Specifications

Host	Rat
Reactivity against	Mouse
Clonality	Monoclonal Antibody
Clone	(#11A55)
Isotype	IgG2
Purification	Protein A/G chromatography
Antigen	recombinant mouse MAdCAM-1 EC domain
Formulation	lyophilized
Reconstitution buffer	PBS (sterile)

Reconstitution: Reconstitute the antibody with 200 µl sterile PBS and the final concentration is 500 µg/ml.

Stability: Lyophilized samples are stable for 2 years from date of receipt when stored at -70°C. Reconstituted antibody can be aliquoted and stored frozen at < -20 °C for at least for six months without detectable loss of activity.

Remarks: This antibody detects specifically mouse MadCAM-1 with WB

**AVOID REPEATED FREEZE AND THAW CYCLES!**

Applications

The antibody can be used within the following applications:

WB, Blocking

Recommended usage:

WB: 1:100-500

Blocking T lymphomas cells adhesion to MadCAM-1

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!