

Datasheet: MCA2320T

Description:	MOUSE ANTI HUMAN MAdCAM-1
Specificity:	MAdCAM-1
Other names:	MUCOSAL ADDRESSIN CELL ADHESION MOLECULE-1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	314G8
Isotype:	IgG1
Quantity:	25 µg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/10 - 1/100
Immunohistology - Frozen	▪			1/25 - 1/200
Immunohistology - Paraffin			▪	
ELISA	▪			
Immunoprecipitation			▪	

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using the appropriate negative/positive controls.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Recombinant soluble MAdCAM-1-fc fusion protein.

**External Database
Links**

UniProt:

[Q13477](#) [Related reagents](#)

Entrez Gene:

[8174](#) MADCAM1 [Related reagents](#)

Fusion Partners

Spleen cells from immunised Balb/c mice were fused with cells of the mouse P3X63Ag8.653 myeloma cell line.

Specificity

Mouse anti Human MAdCAM-1 antibody, clone 314G8 recognizes human mucosal addressin cell adhesion molecule 1 (MAdCAM-1) a 60kD cell surface protein that is involved in lymphocyte trafficking. MAdCAM-1 is expressed on high endothelial venules of Peyer's patches and mesenteric lymph nodes. MAdCAM-1 expression has also been reported in the gut lamina propria but clone 314G8 does not recognize MAdCAM-1 in these tissues. Clone 314G8 reacts with the ligand-binding first Ig domain and reports suggest that a splice variant exists in the gut which is not recognized by clone 314G8. Clone 314G8 is reported to block the interaction of MAdCAM-1 with alpha 4 beta 7 ([Leung *et al.* 2004](#)).

Flow Cytometry

Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul.

References

1. Leung, E. *et al.* (1996) Cloning of the mucosal addressin MAdCAM-1 from human brain: identification of novel alternatively spliced transcripts. [Immunol Cell Biol. 74 \(6\): 490-6.](#)
2. Leung, E. *et al.* (2004) Bioassay detects soluble MAdCAM-1 in body fluids. [Immunol Cell Biol. 82 \(4\): 400-9.](#)
3. Olloquequi, J. *et al.* (2011) Significant increase of CD57+ cells in pulmonary lymphoid follicles of COPD patients. [Eur Respir J. 37 \(2\): 289-98.](#)
4. Guerra-Pérez, N. *et al.* (2015) Retinoic Acid Imprints a Mucosal-like Phenotype on Dendritic Cells with an Increased Ability To Fuel HIV-1 Infection. [J Immunol. pii: 1402623.](#)
5. Goode, D. *et al.* (2014) Sex hormones selectively impact the endocervical mucosal microenvironment: implications for HIV transmission. [PLoS One. 9 \(5\): e97767.](#)
6. Guzzo, C. *et al.* (2017) Virion incorporation of integrin $\alpha 4\beta 7$ facilitates HIV-1 infection and intestinal homing. [Sci Immunol. 2 \(11\) \[Epub ahead of print\].](#)

Storage

Store at +4°C or at -20°C if preferred.
Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life

18 months from date of despatch.

**Health And Safety
Information**

Material Safety Datasheet documentation #10040 available at:
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

- Goat Anti Mouse IgG (STAR76...) [RPE](#)
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

Goat Anti Mouse IgG (STAR77...) [HRP](#)
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR8...) [DyLight@800](#)
Goat Anti Mouse IgG (STAR70...) [FITC](#)
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
Human Anti Mouse IgG1 (HCA036...) [HRP](#)
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight@488](#), [DyLight@549](#),
[DyLight@649](#), [DyLight@680](#), [DyLight@800](#),
[FITC](#), [HRP](#)

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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