

## Datasheet: MCA708T

<b>Description:</b>	MOUSE ANTI HUMAN CD103
<b>Specificity:</b>	CD103
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	2G5.1
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/50 - 1/100
Immunohistology - Frozen (1)	▪			1/50 - 1/100
Immunohistology - Paraffin		▪		
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	
Immunofluorescence	▪			

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 appropriate negative/positive controls.

**(1)The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.**

<b>Target Species</b>	Human
<b>Species Cross Reactivity</b>	Reacts with: Cynomolgus monkey, Rhesus Monkey <b>N.B.</b> Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.
<b>Product Form</b>	Purified IgG - liquid

<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from ascites
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative</b>	<0.1% Sodium Azide (NaN <sub>3</sub> )
<b>Stabilisers</b>	0.5% Bovine Serum Albumin
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Human intestinal lymphocytes
<b>External Database Links</b>	<p><b>UniProt:</b></p> <p><a href="#">P38570</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b></p> <p><a href="#">3682</a>    ITGAE    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_1100549
<b>Fusion Partners</b>	Spleen cells from immunized BALB/c mice were fused with cells of the NS1 mouse myeloma cell line
<b>Specificity</b>	<p><b>Mouse anti Human CD103 antibody, clone 2G5.1</b> recognizes the human CD103 cell surface antigen, also known as the alpha<sup>E</sup> integrin, HML-1 antigen, Mucosal lymphocyte 1 antigen or Integrin alpha-E. CD103 is a 1161 amino acid, ~130 kDa single pass type 1 transmembrane glycoprotein.</p> <p>Mouse anti Human CD103 antibody, clone 2G5.1 reacts with various subsets of human intra-epithelial lymphocytes:- 40% of lamina propria T-cells; 30% of mesenteric lymphoblasts and some lymphocytes from other mucosa. It recognises less than 0.1% bone marrow cells and less than 0.7% PBL.</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 5 x 10 <sup>5</sup> cells in 100ul.
<b>Histology Positive Control Tissue</b>	Intestine
<b>References</b>	<ol style="list-style-type: none"> <li>1. Cerf-Bensussan, N. <i>et al.</i> (1986) A monoclonal antibody specific for rat intestinal lymphocytes. <a href="#">J Immunol. 136 (1): 76-82.</a></li> <li>2. Cerf-Bensussan, N. <i>et al.</i> (1987) A monoclonal antibody (HML-1) defining a novel membrane molecule present on human intestinal lymphocytes. <a href="#">Eur J Immunol. 17 (9): 1279-85.</a></li> <li>3. Kutleša, S. <i>et al.</i> (2002) E-cadherin-mediated interactions of thymic epithelial cells with CD103+ thymocytes lead to enhanced thymocyte cell proliferation. <a href="#">J Cell Sci. 115 (Pt 23): 4505-15.</a></li> <li>4. Presicce P <i>et al.</i> (2012) Myeloid dendritic cells isolated from tissues of SIV-infected Rhesus macaques promote the induction of regulatory T cells. <a href="#">AIDS. 26 (3): 263-73.</a></li> </ol>

5. Swan, Z.D. *et al.* (2016) Macrophage accumulation in gut mucosa differentiates AIDS from chronic SIV infection in rhesus macaques. [Eur J Immunol. 46 \(2\): 446-54.](#)
6. Nugent, J.L. *et al.* (2021) A nonhuman primate model of vertical sleeve gastrectomy facilitates mechanistic and translational research in human obesity. [iScience. 24 \(12\): 103421.](#)

<b>Storage</b>	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.  Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA708T10041">https://www.bio-rad-antibodies.com/SDS/MCA708T10041</a>
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)  
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