

Datasheet: MCA708

BATCH NUMBER 165946

Description:	MOUSE ANTI HUMAN CD103
Specificity:	CD103
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	2G5.1
Isotype:	IgG2a
Quantity:	0.2 mg

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	▪			1/50 - 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.

Target Species

Human

Species Cross Reactivity

Reacts with: Cynomolgus monkey, Rhesus Monkey

N.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.

Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from ascites
Buffer Solution	Phosphate buffered saline
Preservative	<0.1% Sodium Azide (NaN ₃)
Stabilisers	0.5% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Human intestinal lymphocytes
External Database Links	<p>UniProt: P38570 Related reagents</p> <p>Entrez Gene: 3682 ITGAE Related reagents</p>
RRID	AB_321984
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the NS1 mouse myeloma cell line
Specificity	<p>Mouse anti Human CD103 antibody, clone 2G5.1 recognizes the human CD103 cell surface antigen, also known as the alpha^E 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>
Flow Cytometry	Use 10ul of the suggested working dilution to label 5 x 10 ⁵ cells in 100ul.
Histology Positive Control Tissue	Intestine
References	<ol style="list-style-type: none"> 1. Cerf-Bensussan, N. <i>et al.</i> (1986) A monoclonal antibody specific for rat intestinal lymphocytes. J Immunol. 136 (1): 76-82. 2. Cerf-Bensussan, N. <i>et al.</i> (1987) A monoclonal antibody (HML-1) defining a novel membrane molecule present on human intestinal lymphocytes. Eur J Immunol. 17 (9): 1279-85. 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. J Cell Sci. 115 (Pt 23): 4505-15.

4. Presicce P *et al.* (2012) Myeloid dendritic cells isolated from tissues of SIV-infected Rhesus macaques promote the induction of regulatory T cells. [AIDS. 26 \(3\): 263-73.](#)
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.](#)

Storage 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.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA708>
10041

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...) [HRP](#)
 Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
 Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
 Goat Anti Mouse IgG (STAR76...) [RPE](#)
 Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
 Goat Anti Mouse IgG (STAR70...) [FITC](#)
 Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight@488](#), [DyLight@550](#),
[DyLight@650](#), [DyLight@680](#), [DyLight@800](#),
[FITC](#), [HRP](#)
 Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
 Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

Recommended Negative Controls

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

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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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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Printed on 05 Sep 2023

