

Datasheet: MCA708

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 Stabilisers	<0.1% Sodium Azide (NaN ₃) 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 immunised 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> (1987) A monoclonal antibody (HML-1) defining a novel membrane molecule present on human intestinal lymphocytes. Eur J Immunol. 17 (9): 1279-85. 2. Cerf-Bensussan, N. <i>et al.</i> (1986) A monoclonal antibody specific for rat intestinal lymphocytes. J Immunol. 136 (1): 76-82. 3. Sopper, S. <i>et al.</i> (1997) Lymphocyte subsets and expression of differentiation markers in blood and lymphoid organs of rhesus monkeys. Cytometry. 29 (4): 351-62. 4. Yoshino, N. <i>et al.</i> (2000) Upgrading of flow cytometric analysis for absolute counts, cytokines and other antigenic molecules of Cynomolgus monkeys (<i>Macaca fascicularis</i>) by using anti-human cross-reactive antibodies. Exp. Anim. 49: 97-110.

5. Swan, Z.D. *et al.* (2015) Macrophage accumulation in gut mucosa differentiates AIDS from chronic SIV infection in rhesus macaques. [Eur J Immunol. Nov 9. \[Epub ahead of print\]](#)
6. 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.](#)
7. Kutleša, S. *et al.* (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.](#)
8. 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: 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Human Anti Mouse IgG2a (HCA037...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight@488 , DyLight@550 , DyLight@650 , DyLight@680 , DyLight@800 , FITC , HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP

Recommended Negative Controls

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

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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

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