

## Datasheet: MCA708

<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>	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](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.
<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 Stabilisers</b>	0.09% Sodium Azide 0.5% Bovine Serum Albumin
<b>Approx. Protein</b>	IgG concentration 1.0 mg/ml

## Concentrations

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**Immunogen** Human intestinal lymphocytes

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## External Database Links

**UniProt:**

[P38570](#) [Related reagents](#)

**Entrez Gene:**

[3682](#) ITGAE [Related reagents](#)

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**RRID** AB\_321984

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**Fusion Partners** Spleen cells from immunised BALB/c mice were fused with cells of the NS1 mouse myeloma cell line

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## Specificity

**Mouse anti Human CD103 antibody, clone 2G5.1** 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.

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.

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## Flow Cytometry

Use 10ul of the suggested working dilution to label  $5 \times 10^5$  cells in 100ul.

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## Histology Positive Control Tissue

Intestine

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## References

1. Cerf-Bensussan, N. *et al.* (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. *et al.* (1986) A monoclonal antibody specific for rat intestinal lymphocytes. [J Immunol. 136 \(1\): 76-82.](#)
  3. Sopper, S. *et al.* (1997) Lymphocyte subsets and expression of differentiation markers in blood and lymphoid organs of rhesus monkeys. [Cytometry. 29 \(4\): 351-62.](#)
  4. Yoshino, N. *et al.* (2000) Upgrading of flow cytometric analysis for absolute counts, cytokines and other antigenic molecules of Cynomolgus monkeys (*Macaca fascicularis*) 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.](#)
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## Storage

Store at +4°C or at -20°C if preferred.

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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10041 available at:  
10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)  
Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Rabbit Anti Mouse IgG (STAR8...) [DyLight®800](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
Human Anti Mouse IgG2a (HCA037...) [FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®680](#),  
[DyLight®800](#), [FITC](#), [HRP](#)

### Recommended Negative Controls

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

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