

Datasheet: MCA2338GA

Description:	MOUSE ANTI BOVINE CD13	
Specificity:	CD13	
Format:	Purified	
<b>Product Type:</b>	Monoclonal Antibody	
Clone:	CC81	
Isotype:	lgG1	
Quantity:	0.1 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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	<b>Suggested Dilution</b>
Flow Cytometry	•			1/100 - 1/1000
Immunohistology - Frozen	•			1/25 - 1/50
Immunohistology - Paraffin			•	
ELISA			•	
Immunoprecipitation			•	
Western Blotting			•	

Where this product 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 product for use in their own system using appropriate negative/positive controls.

Target Species	Bovine	
Product Form	Purified IgG - liquid	
Preparation	Purified IgG prepared by affinity chromatography on Protein A supernatant	A from tissue culture
Buffer Solution	Phosphate buffered saline	
Preservative Stabilisers	0.09% sodium azide (NaN <sub>3</sub> )	
Carrier Free	Yes	

Approx.	Protein
Concent	rations

IgG concentration 1.0 mg/ml

#### Immunogen

Cells from cattle intestine.

### External Database Links

#### **UniProt:**

P79098 Related reagents

### **Entrez Gene:**

404191 ANPEP Related reagents

### **Synonyms**

APN

## **Specificity**

Mouse anti bovine CD13, clone CC81, recognises bovine CD13, a 150 kDa type II membrane protein shown to be a metallopeptidase in humans. In cattle the antigen recognised by clone CC81 is primarily expressed on enterocytes and cells with a dendritic morphology in the small intestine. Clone CC81 also defines a subpopulation of dendritic cells in afferent lymph that are CC81 Ag +ve and SIRPalpha -ve, which show differences in their capacities to stimulate T cells and cytokine synthesis compared to the CC81 Ag –ve SIRPalpha +ve dendritic cells.

### Flow Cytometry

Use 10µl of the suggested working dilution to label 10<sup>6</sup> cells in 100µl

#### References

- 1. Howard, C.J. *et al.* (1997) Identification of two distinct populations of dendritic cells in afferent lymph that vary in their ability to stimulate T cells. <u>J Immunol</u>. 159 (11): 5372-82.
- 2. Hope, J.C. *et al.* (2001) Differences in the induction of CD8+ T cell responses by subpopulations of dendritic cells from afferent lymph are related to IL-1 alpha secretion. <u>J Leukoc Biol. 69 (2): 271-9.</u>
- 3. Stephens, S. A. *et al.* (2003) Differences in cytokine synthesis by the sub-populations of dendritic cells from afferent lymph. Immunology. 110: 48-57.
- 4. Bastos, R.G. *et al.* (2008) Bovine NK cells acquire cytotoxic activity and produce IFN-gamma after stimulation by *Mycobacterium bovis* BCG or *Babesia bovis*-exposed splenic dendritic cells. <u>Vet Immunol Immunopathol.</u> 124: 302-12.
- 5. Schneider DA *et al.* (2011) Dynamics of bovine spleen cell populations during the acute response to *Babesia bovis* infection: an immunohistological study. <u>Parasite Immunol. 33</u> (1): 34-44.
- 6. Fries, P.N. *et al.* (2011) Age-related changes in the distribution and frequency of myeloid and T cell populations in the small intestine of calves. <u>Cell Immunol. 271 (2):</u> 428-37.
- 7. Fries, P. *et al.* (2011) Mucosal dendritic cell subpopulations in the small intestine of newborn calves. <u>Dev Comp Immunol. 35 (10): 1040-51.</u>
- 8. Toka, F.N. *et al.* (2011) Rapid and transient activation of γδ T cells to IFN-γ production, NK cell-like killing, and antigen processing during acute virus infection. <u>J Immunol. 186</u> (8): 4853-61.

### **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 #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2338GA">https://www.bio-rad-antibodies.com/SDS/MCA2338GA</a> 10040
Regulatory	For research purposes only

# **Related Products**

# **Recommended Secondary Antibodies**

Rabbit Anti Mouse IgG (STAR12...)

Goat Anti Mouse IgG IgA IgM (STAR87...)

HRP

Goat Anti Mouse IgG (STAR76...)

RPE

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

Goat Anti Mouse IgG (STAR77...) HRP

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

Rabbit Anti Mouse IgG (STAR13...) HRP
Rabbit Anti Mouse IgG (STAR9...) FITC

**Recommended Negative Controls** 

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M429753:240424'

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