

Datasheet: MCA2338GA

Description:	MOUSE ANTI BOVINE CD13
Specificity:	CD13
Other names:	AMINOPEPTIDASE N
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	CC81
Isotype:	IgG1
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 www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/100 - 1/1000
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody 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 G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Carrier Free	Yes
Approx. Protein Concentrations	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 10ul of the suggested working dilution to label 10⁶ cells in 100ul.

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. [J Immunol. 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. [J Leukoc Biol. 69 \(2\): 271-9.](#)
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. [Vet Immunol Immunopathol. 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. [Parasite Immunol. 33 \(1\): 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. [Cell Immunol. 271 \(2\): 428-37.](#)
7. Fries, P. *et al.* (2011) Mucosal dendritic cell subpopulations in the small intestine of newborn calves. [Dev Comp Immunol. 35 \(10\): 1040-51.](#)
8. Toka, F.N. *et al.* (2011) Rapid and transient activation of $\gamma\delta$ T cells to IFN- γ production, NK cell-like killing, and antigen processing during acute virus infection. [J Immunol. 186 \(8\): 4853-61.](#)

Storage

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

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life

18 months from date of despatch.

**Health And Safety
Information**

Material Safety Datasheet documentation #10040 available at:
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight@488 , DyLight@549 , DyLight@649 , DyLight@680 , DyLight@800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR8...)	DyLight@800
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Human Anti Mouse IgG1 (HCA036...)	HRP

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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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