

## Datasheet: MCA2041A488

**BATCH NUMBER 165390**

<b>Description:</b>	MOUSE ANTI BOVINE CD172a:Alexa Fluor® 488
<b>Specificity:</b>	CD172a
<b>Other names:</b>	SIRP ALPHA
<b>Format:</b>	ALEXA FLUOR® 488
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	CC149
<b>Isotype:</b>	IgG2b
<b>Quantity:</b>	100 TESTS/1ml

### 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	▪			1/5 - 1/10

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 conjugated to Alexa Fluor®488 - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®488	495	519

**Preparation** Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

**Buffer Solution** Phosphate buffered saline

**Preservative** 0.09% Sodium Azide (NaN<sub>3</sub>)  
**Stabilisers** 1% Bovine Serum Albumin

**Approx. Protein** IgG concentration 0.05 mg/ml

## Concentrations

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**Immunogen** Bovine afferent veiled dendritic cells

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## External Database Links

### UniProt:

[O46631](#) [Related reagents](#)

### Entrez Gene:

[327666](#) SIRPA [Related reagents](#)

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**Synonyms** MYD1, PTPNS1, SHPS1, SIRP

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**Specificity** **Mouse anti Bovine CD172a antibody, clone CC149** recognizes bovine CD172a, also known as MyD-1 antigen and SIRPA.

CD172a is a ~55 kDa single pass type 1 membrane protein belonging to the family of signal regulatory proteins (SIRP). CD172a has been identified as the receptor for CD47. Bovine CD172a is strongly expressed by splenic macrophages, monocytes and a subset of afferent lymph veiled cells (ALVC) and by dendritic cells in the skin.

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**Flow Cytometry** Use 10ul of the suggested working dilution to label  $1 \times 10^6$  cells in 100ul

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## References

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13. Okino, C.H. *et al.* (2020) A polymorphic CD4 epitope related to increased susceptibility to *Babesia bovis* in Canchim calves. [Vet Immunol Immunopathol. 230: 110132.](#)
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15. Kolar, Q.K. *et al.* (2020) Anatomical distribution of respiratory tract leukocyte cell subsets in neonatal calves. [Vet Immunol Immunopathol. 227: 110090.](#)
16. Park, D.S. *et al.* (2021) Dynamic changes in blood immune cell composition and function in Holstein and Jersey steers in response to heat stress. [Cell Stress Chaperones. 26 \(4\): 705-20.](#)
17. Ibeagha-Awemu, E.M. *et al.* (2021) Regionally Distinct Immune and Metabolic Transcriptional Responses in the Bovine Small Intestine and Draining Lymph Nodes During a Subclinical *Mycobacterium avium* subsp. *paratuberculosis* Infection. [Front Immunol. 12: 760931.](#)
18. Marzo, S. *et al.* (2022) Characterisation of dendritic cell frequency and phenotype in bovine afferent lymph reveals kinetic changes in costimulatory molecule expression. [Vet Immunol Immunopathol. 243: 110363.](#)
19. Casaro, S. *et al.* (2022) Flow cytometry panels for immunophenotyping dairy cattle peripheral blood leukocytes [Vet Immunol Immunopathol. 248: 110417.](#)

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**Further Reading** 1. Howard, C.J. *et al.* (1999) Dendritic cells in cattle: phenotype and function. [Vet Immunol Immunopathol. 72 \(1-2\): 119-24.](#)

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**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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety** Material Safety Datasheet documentation #10041 available at:

**Information** <https://www.bio-rad-antibodies.com/SDS/MCA2041A488>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL:Alexa Fluor® 488 \(MCA691A488\)](#)

### Recommended Useful Reagents

[BOVINE DENDRITIC CELL GROWTH KIT \(PBP014KZZ\)](#)

[BOVINE DENDRITIC CELL GROWTH KIT \(PBP015KZZ\)](#)

[MOUSE ANTI BOVINE CD205:FITC \(MCA1651F\)](#)

[MOUSE ANTI BOVINE CD205 \(MCA1651GA\)](#)

**Product inquiries:** [www.bio-rad-antibodies.com/technical-support](http://www.bio-rad-antibodies.com/technical-support)

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