

Datasheet: MCA2041GA

BATCH NUMBER 155742

Description:	MOUSE ANTI BOVINE CD172a
Specificity:	CD172a
Other names:	SIRP ALPHA
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	CC149
Isotype:	IgG2b
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 - 1/200
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. 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.

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 (NaN ₃)

Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
External Database Links	<p>UniProt: O46631 Related reagents</p> <p>Entrez Gene: 327666 SIRPA Related reagents</p>
Synonyms	MYD1, PTPNS1, SHPS1, SIRP
Specificity	<p>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.</p> <p>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.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> Howard, C.J. <i>et al.</i> (1999) Dendritic cells in cattle: phenotype and function. Vet Immunol Immunopathol. 72 (1-2): 119-24. Price, S.J. & Hope, J.C.. (2009) Enhanced secretion of interferon-gamma by bovine gammadelta T cells induced by coculture with <i>Mycobacterium bovis</i>-infected dendritic cells: evidence for reciprocal activating signals. Immunology. 126:201-8 Waters, W.R. (2009) Signal regulatory protein alpha (SIRPalpha) cells in the adaptive response to ESAT-6/CFP-10 protein of tuberculous mycobacteria. PLoS One. 4: e6414. Brackenbury, L.S. <i>et al.</i> (2005) Identification of a cell population that produces alpha/beta interferon <i>in vitro</i> and <i>in vivo</i> in response to noncytopathic bovine viral diarrhea virus. J Virol. 79: 7738-44. Smith, R. <i>et al.</i> (2003) A novel MyD-1 (SIRP-1alpha) signaling pathway that inhibits LPS-induced TNFalpha production by monocytes. Blood.102: 2532-40. Jensen, K. <i>et al.</i> (2014) Comparison of small interfering RNA (siRNA) delivery into bovine monocyte-derived macrophages by transfection and electroporation. Vet Immunol Immunopathol. 158 : 224-32. Tahoun, A. <i>et al.</i> (2015) Functional analysis of bovine TLR5 and association with IgA responses of cattle following systemic immunisation with H7 flagella. Vet Res. 46: 9. Hussen J <i>et al.</i> (2014) The chemokine CCL5 induces selective migration of bovine classical monocytes and drives their differentiation into LPS-hyporesponsive macrophages <i>in vitro</i>. Dev Comp Immunol. 47 (2): 169-77. Eger, M. <i>et al.</i> (2015) Impacts of parturition and body condition score on glucose uptake capacity of bovine monocyte subsets. Vet Immunol Immunopathol. 166 (1-2): 33-42. Vachier N <i>et al.</i> (2015) An <i>in vitro</i> model to assess the immunosuppressive effect of tick saliva on the mobilization of inflammatory monocyte-derived cells. Vet Res. 46 (1):

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11. Pridans, C. *et al.* (2016) A Csf1r-EGFP Transgene Provides a Novel Marker for Monocyte Subsets in Sheep. [J Immunol. 197 \(6\): 2297-305.](#)

12. Herry, V. *et al.* (2017) Local immunization impacts the response of dairy cows to *Escherichia coli* mastitis. [Sci Rep. 7 \(1\): 3441.](#)

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.

Guarantee

12 months from date of despatch

Health And Safety Information

Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2041GA>
10040

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...) [HRP](#)
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
Goat Anti Mouse IgG (STAR76...) [RPE](#)
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
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](#)
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL \(MCA691\)](#)

Recommended Useful Reagents

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

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

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

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