

Datasheet: MCA2041GA

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	UniProt:

Entrez Gene:

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

Synonyms	MYD1, PTPNS1, SHPS1, SIRP
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.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	1. Howard, C.J. <i>et al.</i> (1999) Dendritic cells in cattle: phenotype and function. Vet Immunol Immunopathol. 72 (1-2): 119-24. 2. 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 3. 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. 4. 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. 5. 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. 6. 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. 7. 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. 8. Hussien 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. 9. 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. 10. Vachriery 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): 117. 11. Pridans, C. <i>et al.</i> (2016) A Csf1r-EGFP Transgene Provides a Novel Marker for Monocyte Subsets in Sheep. J Immunol. 197 (6): 2297-305. 12. Herry, V. <i>et al.</i> (2017) Local immunization impacts the response of dairy cows to <i>Escherichia coli</i> 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.

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 IgG2b (HCA038...)	FITC , HRP

Recommended Negative Controls

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

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 \(MCA1651GA\)](#)

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