

Datasheet: MCA6079

Description:	MOUSE ANTI BOVINE CD172a
Specificity:	CD172a
Other names:	MyD-1 ANTIGEN, SIRP ALPHA
Format:	Con S/N
Product Type:	Monoclonal Antibody
Clone:	DH59B
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	▪			Neat - 1/10
Immunohistology - Frozen	▪			

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
Species Cross Reactivity	Reacts with: Bison, Water Buffalo, Sheep, Horse, Dog, Cat N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.
Product Form	Concentrated tissue culture supernatant - liquid
Preparation	Concentrated tissue culture supernatant clarified by filtration through a 0.2 micrometer filter
Buffer Solution	Serum free tissue culture medium containing proprietary protein free supplement
Preservative	0.09% Sodium Azide (NaN ₃)

Stabilisers

Approx. Protein Concentrations IgG concentration 1.0 mg/ml

Immunogen Cells from multiple species with the final screening of the fusion on cells from dog

External Database Links

UniProt:

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

Entrez Gene:

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

Synonyms MYD1, PTPNS1, SHPS1, SIRP

Specificity **Mouse anti Bovine CD172a, clone DH59B**, recognizes bovine CD172a also known as SIRP alpha or MyD-1 antigen. CD172a is a transmembrane signal regulatory protein expressed primarily by macrophages, monocytes, dendritic cells, granulocytes, myeloid progenitors, hematopoietic stem cells, and neurons ([Barclay et al. 2006](#)). The extracellular region of SIRP family consists of three immunoglobulin superfamily (IgSF) domains; two IgC and one IgV domain ([Barclay et al. 2006](#)).

The IgV domain of CD172a binds to CD47 ([Hatherley et al. 2007](#)). The binding domain of CD172a is analogous to that of immunoglobulins and T cell receptors and is involved in myeloid cell activation ([Berg et al. 2004](#)). However, signaling via CD172a is mainly inhibitory to cell function and phagocytosis ([Oldenburg et al. 2001](#)). CD172a expressing cells are stimulated in *Mycobacterium tuberculosis* infection, influencing migration of dendritic cells and macrophages, phagocytosis, and granuloma formation ([Waters et al. 2009](#)).

Flow Cytometry Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul

References

1. Herrmann L.M. et al. (2003) CD21-positive follicular dendritic cells: A possible source of PrPSc in lymph node macrophages of scrapie-infected sheep. [Am J Pathol. 162 \(4\): 1075-81](#)
2. Davis W.C. et al. (2007) Use of flow cytometry to identify monoclonal antibodies that recognize conserved epitopes on orthologous leukocyte differentiation antigens in goats, llamas, and rabbits. [Vet Immunol Immunopathol. 119 \(1-2\): 123-30.](#)
3. Ibrahim S. et al. (2007) Screening of anti-human leukocyte monoclonal antibodies for reactivity with equine leukocytes. [Vet Immunol Immunopathol. 119 \(1-2\): 63-80.](#)
4. Mé rant C. et al. (2009) Young foal and adult horse monocyte-derived dendritic cells differ by their degree of phenotypic maturity. [Vet Immunol Immunopathol. 131 \(1-2\): 1-8.](#)
5. Contreras G.A. et al. (2010) Lipomobilization in periparturient dairy cows influences the composition of plasma nonesterified fatty acids and leukocyte phospholipid fatty acids. [J Dairy Sci. 93 \(6\): 2508-16.](#)
6. Herrmann-Hoesing L.M. et al. (2010) Ovine progressive pneumonia virus capsid antigen as found in CD163- and CD172a-positive alveolar macrophages of persistently

infected sheep. [Vet Pathol. 47 \(3\): 518-28.](#)

Storage	Store at +4°C. DO NOT FREEZE. Should this product contain a precipitate we recommend microcentrifugation before use.
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Guarantee	12 months from date of despatch
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Health And Safety Information	Material Safety Datasheet documentation #20389 available at: 20389: https://www.bio-rad-antibodies.com/uploads/MSDS/20389.pdf
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Regulatory	For research purposes only
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Related Products

Recommended Secondary Antibodies

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

Recommended Useful Reagents

[MOUSE ANTI BOVINE CD14 \(MCA6085\)](#)

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