

Datasheet: MCA1648G

Description:	MOUSE ANTI BOVINE WC4
Specificity:	WC4
Other names:	SWC7
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	CC55
Isotype:	IgG1
Quantity:	0.25 mg

Product Details

RRID AB_906170

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	▪			1/50 - 1/100
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

Species Cross Reactivity

Reacts with: Pig, Sheep
N.B. Antibody reactivity and working conditions may vary between species.

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
Specificity	Mouse anti Bovine WC4 antibody, clone CC55 recognizes the bovine WC4 cell surface antigen, a ~90kDa molecule expressed by a subpopulation of B cells in peripheral blood and lymphoid tissues (Howard et al. 1993). It is suggested that WC4 like SWC7 in pigs is the bovine orthologue of human CD19 (Naessens and Howard 1991 , Ikebuchi et al. 2013).
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> (1991) Summary of workshop findings for leukocyte antigens of cattle. Vet Immunol Immunopathol. 27 (1-3): 21-7. Denham, S. <i>et al.</i> (1994) Monoclonal antibodies recognising differentiation antigens on porcine B cells. Vet Immunol Immunopathol. 43 (1-3): 259-67. Naessens, J. <i>et al.</i> (1997) Nomenclature and characterization of leukocyte differentiation antigens in ruminants. Immunol Today. 18 (8): 365-8. Boersma, W.J. <i>et al.</i> (2001) Summary of workshop findings for porcine B-cell markers. Vet Immunol Immunopathol. 80 (1-2): 63-78. Andersen, J.K. <i>et al.</i> (1999) Systematic characterization of porcine ileal Peyer's patch, I. apoptosis-sensitive immature B cells are the predominant cell type. Immunology. 98: 612-21. Szymańska-Czerwińska, M. <i>et al.</i> (2009) Effect of tylosin and prebiotics on the level of cytokines and lymphocyte immunophenotyping parameters in calves Central European Journal of Immunology. 34: 1-6. Ikebuchi, R. <i>et al.</i> (2013) Blockade of bovine PD-1 increases T cell function and inhibits bovine leukemia virus expression in B cells <i>in vitro</i>. Vet Res. 44: 59. Ikebuchi, R. <i>et al.</i> (2014) Differences in cellular function and viral protein expression between IgM^{high} and IgM^{low} B-cells in bovine leukemia virus-infected cattle. J Gen Virol. 95: 1832-42. Nishimori, A. <i>et al.</i> (2016) Direct polymerase chain reaction from blood and tissue samples for rapid diagnosis of bovine leukemia virus infection. J Vet Med Sci. 78 (5): 791-6.
Further Reading	1. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. Vet Res. 39: 54.
Storage	<p>Store at +4°C or at -20°C if preferred.</p> <p>This product should be stored undiluted.</p> <p>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.</p>
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 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®549 , DyLight®649 , DyLight®680 , DyLight®800 , FITC , 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
----------------------------------	---	------------------	---	---------------	---

'M334387:181127'

Printed on 02 Jan 2019

© 2019 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)