Datasheet: MCA626GA

BATCH NUMBER 173151

Description:	MOUSE ANTI BOVINE IgG2
Specificity:	IgG2
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	K192 4F10
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			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting			▪	

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 - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A 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
Immunogen	Purified Bovine IgG
Fusion Partners	Spleen cells from immunised mice were fused with cells of the P3.X63.Ag8.653 myeloma cell line
Specificity	**Mouse anti Bovine IgG2, clone K192 4F10**, is a monoclonal antibody specific for bovine IgG2, recognizing both the homozygous A1/A1 & heterozygous A1/A2 allotypes (Kacskovics & JButler 1996) and does not recognize other bovine immunoglobulin classes.
ELISA	This product is suitable for use in direct ELISA applications
References	1. Estes, D. M. *et al*. (1998) Effects of type I/type II interferons and transforming growth factor-beta on B-cell differentiation and proliferation. Definition of costimulation and cytokine requirements for immunoglobulin synthesis and expression. Immunology 95: 604-611. 2. French, D.M. *et al.* (1999) Emergence of *Anaplasma marginale* antigenic variants during persistent rickettsemia. Infect Immun. 67: 5834-40. 3. Arulkanthan, A. *et al.* (1999) Biased immunoglobulin G1 isotype responses induced in cattle with DNA expressing msp1a of *Anaplasma marginale*. Infect Immun. 67: 3481-7. 4. Morton, H.C. *et al.* (2001) Identification of residues within the extracellular domain 1 of bovine Fc gamma 2R essential for binding bovine IgG2. J Biol Chem. 276: 47794-800. 5. Wyatt, C.R. *et al.* (2001) Evidence for the emergence of a type-1-like immune response in intestinal mucosa of calves recovering from cryptosporidiosis. J Parasitol. 87: 90-5. 6. Barrio, M.B. *et al.* (2003) Assessment of the opsonic activity of purified bovine sIgA following intramammary immunization of cows with *Staphylococcus aureus*. J Dairy Sci. 86: 2884-94. 7. Abbott, J.R. *et al.* (2005) Rapid and long-term disappearance of CD4+ T lymphocyte responses specific for *Anaplasma marginale* major surface protein-2 (MSP2) in MSP2 vaccinates following challenge with live *A. marginale*. J Immunol. 174: 6702-15. 8. Kooyman, F.N. *et al.* (2007) Antibodies elicited by the bovine lungworm, *Dictyocaulus viviparus*, cross-react with platelet-activating factor. Infect Immun. 75: 4456-62. 9. Han, S. *et al.* (2010) *Anaplasma marginale* infection with persistent high-load bacteremia induces a dysfunctional memory CD4+ T lymphocyte response but sustained high IgG titers. Clin Vaccine Immunol. 17: 1881-90. 10. Salem, E. *et al.* (2019) Pathogenesis, Host Innate Immune Response, and Aerosol Transmission of Influenza D Virus in Cattle. J Virol. 93(7):e01853-18. 11. Noble, A. *et al.* (2024) Development of bovine IgG3-specific assays using a novel recombinant single-domain binding reagent Veterinary Immunology and Immunopathology. : 110852.
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.
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/MCA626GA
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

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

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

Product inquiries: 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

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