Datasheet: MCA2441P

BATCH NUMBER 172013

Description:	MOUSE ANTI BOVINE IgG2:HRP
Specificity:	IgG2
Format:	HRP
Product Type:	Monoclonal Antibody
Clone:	IL-A73
Isotype:	IgG2a
Quantity:	0.25 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	▪			1/100 - 1/1000
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 conjugated to Horseradish Peroxidase (HRP) - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.0095% MIT
Approx. Protein	IgG concentration 1.0 mg/ml

Concentrations	
Immunogen	Purified bovine IgG2
RRID	AB_1605096
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the X63.Ag8.653 myeloma cell line
Specificity	**Mouse anti Bovine IgG2, clone IL-A73**, is a monoclonal antibody specific for bovine IgG2 and does not recognise other bovine immunoglobulin classes. While normal serum levels of IgG1 are relatively constant in cattle at around 50%, IgG2 levels are highly variable between different strains and races. Mouse anti Bovine IgG2, clone IL-A73 immunoprecipitates a protein band of approximately 52-59kDa, consistent with the heavy chain of bovine IgG2 (Campbell *et al.* 1998).
References	1. Campbell, J.D. *et al.* (1998) A novel cell surface proliferation-associated marker expressed on T cells and up-regulated on germinal center B cells. J Leukoc Biol. 63 (5): 567-74. 2. Williams, D.J. *et al.* (1990) Quantitation of bovine immunoglobulin isotypes and allotypes using monoclonal antibodies. Vet Immunol Immunopathol. 24 (3): 267-83. 3. Williams, D.J. *et al.* (1996) The role of anti-variable surface glycoprotein antibody responses in bovine trypanotolerance. Parasite Immunol. 18 (4): 209-18. 4. Hecker, Y.P. *et al.* (2014) A *Neospora caninum* vaccine using recombinant proteins fails to prevent foetal infection in pregnant cattle after experimental intravenous challenge. Vet Immunol Immunopathol. 162 (3-4): 142-53. 5. Dorneles, E.M. *et al.* (2015) Immune Response of Calves Vaccinated with Brucella abortus S19 or RB51 and Revaccinated with RB51. PLoS One. 10 (9): e0136696. 6. Pereyra, R. *et al.* (2019) Evidence of reduced vertical transmission of *Neospora caninum.* associated with higher IgG1 than IgG2 serum levels and presence of IFN-γ in non-aborting chronically infected cattle under natural condition. Vet Immunol Immunopathol. 208: 53-57. 7. Jaramillo, J.O. *et al.* (2019) Immunisation of cattle against *Babesia bovis.* combining a multi-epitope modified vaccinia Ankara virus and a recombinant protein induce strong Th1 cell responses but fails to trigger neutralising antibodies required for protection. Ticks Tick Borne Dis. 10 (6): 101270. 8. Villa-Mancera, A. *et al.* (2021) Phage display-based vaccine with cathepsin L and excretory-secretory products mimotopes of *Fasciola hepatica.* induces protective cellular and humoral immune responses in sheep. Vet Parasitol. 289: 109340. 9. Di Giacomo, S. *et al.* (2022) Assessment on Different Vaccine Formulation Parameters in the Protection against Heterologous Challenge with FMDV in Cattle. Viruses. 14 (8): 1781. 10. Noble, A. *et al.* (2024) Development of bovine IgG3-specific assays using a novel recombinant single-domain binding reagent Veterinary Immunology and Immunopathology. : 110852.

11. Gilbert, F.B. *et al.* (2024) Expression of FcμR by bovine mononuclear blood leukocytes. Dev Comp Immunol. : 105304.

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 #20479 available at: https://www.bio-rad-antibodies.com/SDS/MCA2441P
Regulatory	For research purposes only

Related Products

Recommended Useful Reagents

AbGUARD® HRP STABILIZER PLUS (BUF052A)
AbGUARD® HRP STABILIZER PLUS (BUF052B)
AbGUARD® HRP STABILIZER PLUS (BUF052C)
TMB CORE (BUF056A)
TMB CORE+ (BUF062A)
TMB SIGNAL+ (BUF054A)

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
'M445999:251008'

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