

Datasheet: MCA2441P

BATCH NUMBER 166599

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 G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.01% Thiomersal
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.](#)

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
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Health And Safety Information	Material Safety Datasheet documentation #10094 available at: https://www.bio-rad-antibodies.com/SDS/MCA2441P 10094
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Regulatory	For research purposes only
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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+ \(BUF054A\)](#)

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