Datasheet: MCA1964

Description:	MOUSE ANTI BOVINE INTERFERON GAMMA
Specificity:	IFN GAMMA
Other names:	INTERFERON GAMMA
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	7B6
Isotype:	IgG1
Quantity:	0.5 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 (1)	▪			1/500 - 1/2000
Immunohistology - Frozen			▪	
Immunohistology - Paraffin (2)	▪			
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.

(1) **Membrane permeabilization is required for this application. The use of Leucoperm (Product Code BUF09) is recommended for this purpose.**

(2)**This product requires antigen retrieval using heat treatment prior to staining of paraffin sections.Sodium citrate buffer pH 6.0 is recommended for this purpose.**

Target Species

Bovine

Species Cross Reactivity

Reacts with: Sheep, Fallow deer, Goat

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	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
External Database Links	**UniProt:** P07353 Related reagents **Entrez Gene:** 281237 IFNG Related reagents
RRID	AB_2123455
Specificity	**Mouse anti Bovine interferon-γ antibody, clone 7B6** recognises both native and recombinant bovine IFN-γ. Bovine interferon-γ is a 166 amino acid ~18 kDa secreted cytokine with antiviral activity. Interferon-γ, secreted by lymphocytes in response to specific mitogens, is also a potent macrophage activator and has antiproliferative actions on transformed cells and can enhance functions of type-1 interferons.
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10^6 cells in 100ul.
References	1. Weynants, V. *et al.* (1998) Quantitative assessment by flow cytometry of T-lymphocytes producing antigen-specific gamma-interferon in *Brucella* immune cattle. Vet Immunol Immunopathol. 66 (3-4): 309-20. 2. Esteves, I. *et al.* (2004) Protective killed *Ehrlichia ruminantium* vaccine elicits IFN-gamma responses by CD4+ and CD8+ T lymphocytes in goats. Vet Immunol Immunopathol. 98 (1-2): 49-57. 3. Gillan, S. *et al.* (2010) Identification of immune parameters to differentiate disease states among sheep infected with *Mycobacterium avium* subsp. paratuberculosis. Clin Vaccine Immunol. 17: 108-17. 4. Stevens, E.T. *et al.* (2009) The induction of a cell-mediated immune response to bovine viral diarrhea virus with an adjuvanted inactivated vaccine. Vet Ther. 10: E1-8. 5. Lei, L. *et al.* (2008) Live *Mycobacterium avium* subsp. *paratuberculosis* and a killed-bacterium vaccine induce distinct subcutaneous granulomas, with unique cellular and cytokine profiles. Clin Vaccine Immunol. 15: 783-93. 6. Rogers, A.N. *et al.* (2005) Gammadelta T cell function varies with the expressed WC1 coreceptor. J Immunol. 174: 3386-93. 7. Rosbottom, A. *et al.* (2008) Upregulation of cytokines is detected in the placentas of

cattle infected with Neospora caninum and is more marked early in gestation when fetal death is observed. Infect Immun. 76 (6): 2352-61.
8. García-Jiménez, W.L. (2012) Histological and immunohistochemical characterisation of *Mycobacterium bovis* induced granulomas in naturally infected fallow deer (*Dama dama*). Vet Immunol Immunopathol. 149: 66-75.
9. Canal, A.M. *et al.* (2017) Immunohistochemical detection of pro-inflammatory and anti-inflammatory cytokines in granulomas in cattle with natural *Mycobacterium bovis* infection. Res Vet Sci. 110: 34-39.
10. Stevens, E.T. *et al.* (2009) The induction of a cell-mediated immune response to bovine viral diarrhea virus with an adjuvanted inactivated vaccine. Vet Ther. 10 (4): E1-8.
11. Çomakli, S. & Özdemir, S. (2019) Comparative Evaluation of the Immune Responses in Cattle Mammary Tissues Naturally Infected with Bovine Parainfluenza Virus Type 3 and Bovine Alphaherpesvirus-1. Pathogens. 8 (1)Feb 25 [Epub ahead of print].
12. Sirak, A. *et al.* (2021) Cellular and Cytokine Responses in Lymph Node Granulomas of Bacillus Calmette Guérin (BCG)-Vaccinated and Non-vaccinated Cross-Breed Calves Naturally Infected With *Mycobacterium bovis*. Front Vet Sci. 8: 698800.

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: 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 (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos., HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR76...)	RPE
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

Recommended Negative Controls

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

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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