

Datasheet: MCA2112

Description:	MOUSE ANTI BOVINE INTERFERON GAMMA
Specificity:	IFN GAMMA
Other names:	INTERFERON GAMMA
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	CC330
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)	■			1/50 - 1/100
Immunohistology - Frozen			■	
Immunohistology - Paraffin			■	
ELISA	■			5ug/ml as capture antibody
Immunoprecipitation			■	
Western Blotting			■	
ELISpot	■			

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

(1) **Membrane permeabilisation is required for this application. Bio-Rad recommends the use of Leucoperm™ (Product Code [BUF09](#)) for this purpose.**

Target Species	Bovine
Species Cross Reactivity	Reacts with: Sheep, Goat 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 A 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
Immunogen	Recombinant bovine IFN-gamma.
External Database Links	UniProt: P07353 Related reagents Entrez Gene: 281237 IFNG Related reagents
Specificity	Mouse anti Bovine interferon γ antibody, clone CC330 recognizes bovine interferon gamma, a 143 amino acid ~20 kDa immunomodulatory cytokine secreted predominantly by T lymphocytes in response to infection by invading micro-organisms. Interferon γ enhances cytotoxic activities of many cell types including macrophages, NK cells and T lymphocytes (Weiss et al. 2002).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells or 100ul whole blood.
ELISA	Mouse anti Bovine interferon- γ antibody, clone CC330 may be used as a capture reagent in a sandwich ELISA in combination with Mouse anti Bovine interferon- γ antibody, clone CC302 (MCA1783B) as a detection reagent and recombinant bovine interferon- γ (PBP007A) as a protein standard.
References	- Mwangi, W. <i>et al.</i> (2002) DNA-encoded fetal liver tyrosine kinase 3 ligand and granulocyte macrophage-colony-stimulating factor increase dendritic cell recruitment to the inoculation site and enhance antigen-specific CD4+ T cell responses induced by DNA vaccination of outbred animals. J Immunol. 169 (7): 3837-46. - Sow, F.B. <i>et al.</i> (2011) Respiratory syncytial virus is associated with an inflammatory response in lungs and architectural remodeling of lung-draining lymph nodes of newborn lambs. Am J Physiol Lung Cell Mol Physiol. 300 (1): L12-24. - Elh mouzi-Younes, J. <i>et al.</i> (2010) Ovine CD16+/CD14- blood lymphocytes present all the major characteristics of natural killer cells. Vet Res. 41 (1): 4. - Ferret-Bernard, S. <i>et al.</i> (2011) Mesenteric lymph node cells from neonates present a prominent IL-12 response to CpG oligodeoxynucleotide via an IL-15 feedback loop of amplification. Vet Res. 42:19. - Contreras, V. <i>et al.</i> (2010) Existence of CD8α-like dendritic cells with a conserved functional specialization and a common molecular signature in distant mammalian species. J Immunol. 185: 3313-25. - Elh mouzi-Younes, J. <i>et al.</i> (2009) Bovine neonate natural killer cells are fully functional and highly responsive to interleukin-15 and to NKp46 receptor stimulation. Vet Res. 2009 40: 54. - Ferret-Bernard, S. <i>et al.</i> (2010) Cellular and molecular mechanisms underlying the strong neonatal IL-12 response of lamb mesenteric lymph node cells to R-848. PLoS One. 5: e13705. - Begg, D.J. <i>et al.</i> (2009) Enzyme-linked immunospot: an alternative method for the detection of interferon gamma in Johne's disease. J Vet Diagn Invest. 21: 187-96. - Tourais-Esteves, I. <i>et al.</i> (2008) Neonatal goats display a stronger TH1-type cytokine response to TLR ligands than adults Dev Comp Immunol. 32: 1231-41. - Pascale, F. <i>et al.</i> (2008) Plasmacytoid dendritic cells migrate in afferent skin lymph. J Immunol. 180: 5963-72. - McLaughlin, K. <i>et al.</i> (2010) Hsp70 enhances presentation of FMDV antigen to bovine CD4+ T cells <i>in vitro</i>. Vet Res. 41: 36. - Panadero, R. <i>et al.</i> (2009) Immunomodulatory effect of <i>Hypoderma lineatum</i> antigens: in vitro effect on bovine lymphocyte proliferation and cytokine production. Parasite Immunol. 31: 72-7.

13. Baszler, T.V. *et al.* (2008) Bovine immune response to inoculation with *Neospora caninum* surface antigen SRS2 lipopeptides mimics immune response to infection with live parasites. [Clin Vaccine Immunol. 15: 659-67.](#)
14. Skyberg, J.A. *et al.* (2011) Murine and bovine $\gamma\delta$ T cells enhance innate immunity against *Brucella abortus* infections. [PLoS One. 6:e21978.](#)
15. Appana, G. *et al.* (2013) Antemortem and postmortem examinations of the cattle calf naturally infected with *Mycobacterium avium* subsp. paratuberculosis. *Eur J Microbiol and Immunol.* 3: 241–51.
16. Verhelst, D. *et al.* (2014) Parasite distribution and associated immune response during the acute phase of *Toxoplasma gondii* infection in sheep. [BMC Vet Res. 10: 293.](#)
17. Köhler H *et al.* (2015) Characterization of a caprine model for the subclinical initial phase of *Mycobacterium avium* subsp. paratuberculosis infection. [BMC Vet Res. 11 \(1\): 74.](#)
18. Bergmann, A. *et al.* (2015) *In Vivo* Volatile Organic Compound Signatures of *Mycobacterium avium* subsp. paratuberculosis. [PLoS One. 10 \(4\): e0123980.](#)
19. Cassady-Cain, R.L. *et al.* (2017) Inhibition of Antigen-Specific and Nonspecific Stimulation of Bovine T and B Cells by Lymphostatin from Attaching and Effacing *Escherichia coli*. [Infect Immun. 85 \(2\): pii: e00845-16. \[Epub ahead of print\]](#)

Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

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.

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 (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®549 , DyLight®649 , DyLight®680 , DyLight®800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Human Anti Mouse IgG1 (HCA036...)	HRP

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

North & South Tel: +1 800 265 7376

America 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

'M315509:180503'

Printed on 05 May 2018

© 2018 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)