

Datasheet: MCA1783A647

BATCH NUMBER 173908

Description:	MOUSE ANTI BOVINE INTERFERON GAMMA:Alexa Fluor®647
Specificity:	IFN GAMMA
Other names:	INTERFERON GAMMA
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	CC302
Isotype:	IgG1
Quantity:	100 TESTS/1ml

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)	▪			1/10 - 1/100

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.

Target Species	Bovine		
Species Cross Reactivity	Reacts with: Human, Pig, Dog, Horse, Sheep, Goat, Dolphin, Ferret, Mink, Fin Whale, Rabbit Based on sequence similarity, is expected to react with:Mustelid 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 conjugated to Alexa Fluor® 647 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®647	650	665

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) 1% bovine serum albumin
Approx. Protein Concentrations	IgG concentration 0.05mg/ml
External Database Links	UniProt: P07353 Related reagents Entrez Gene: 281237 IFNG Related reagents
RRID	AB_2123327
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line.
Specificity	Mouse anti Bovine IFN-γ antibody, clone CC302 recognizes bovine interferon-gamma, a 143 amino acid cytokine with potent activating, antiviral and anti proliferative properties, produced as a pro-peptide with an additional 23 amino acid N-terminal signal peptide sequence having a molecular weight of ~20 kDa. IFNγ is predominantly secreted by activated T lymphocytes in response to specific mitogens as a result of infection (Rhodes et al. 2000). Mouse anti bovine γ interferon antibody, clone CC302 has been demonstrated to be reactive to a number of mammalian species including human, sheep, dog, pig, goat and mink (Pedersen et al. 2002). Mouse anti Bovine IFNγ antibody, clone CC302 has been used successfully for the evaluation of γ interferon levels in the sera of calves naturally infected with <i>M. avium</i> subsp <i>paratuberculosis</i> (Appana et al. 2013) as a detection reagent using an ELISA.
Flow Cytometry	Use 10μl of the suggested working dilution to label 1x10 ⁶ cells in 100μl
References	- Hasvold, H.J. et al. (2002) <i>In vitro</i> responses to purified protein derivate of caprine T lymphocytes following vaccination with live strains of <i>Mycobacterium avium</i> subsp <i>paratuberculosis</i>. Vet Immunol Immunopathol. 90 (1-2): 79-89. - Mwangi, W. et al. (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. - Pedersen, L.G. et al. (2002) Identification of monoclonal antibodies that cross-react with cytokines from different animal species. Vet Immunol Immunopathol. 88 (3-4): 111-22.

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Further Reading

1. Rhodes, S. *et al.* (2000) Distinct response kinetics of gamma interferon and interleukin-4 in bovine tuberculosis. [Infect Immun. 68:5393-400.](#)

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. This product is photosensitive and should be protected from light.

Guarantee

12 months from date of despatch

Acknowledgements

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Regulatory	For research purposes only
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Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA928A647\)](#)

Product inquiries: www.bio-rad-antibodies.com/technical-support

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