

# Datasheet: MCA1783PE

**BATCH NUMBER 1809**

<b>Description:</b>	MOUSE ANTI BOVINE INTERFERON GAMMA:RPE
<b>Specificity:</b>	IFN GAMMA
<b>Other names:</b>	INTERFERON GAMMA
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	CC302
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	100 TESTS

## 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry (1)	▪			Neat - 1/10

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. Bio-Rad recommend the use of Leucoperm™ (Product Code [BUF09](#)) for this purpose.**

**For use on Equine samples Bio-Rad recommend [MCA1783F](#)**

<b>Target Species</b>	Bovine
<b>Species Cross Reactivity</b>	<p>Reacts with: Human, Pig, Dog, Horse, Sheep, Goat, Dolphin, Ferret, Mink, Fin Whale, Rabbit</p> <p>Based on sequence similarity, is expected to react with: Mustelid</p> <p><b>N.B.</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.</p>
<b>Product Form</b>	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized

<b>Reconstitution</b>	Reconstitute with 1 ml distilled water		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	RPE 488nm laser	496	578
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative</b>	0.09% Sodium Azide		
<b>Stabilisers</b>	1% Bovine Serum Albumin		
	5% Sucrose		
<b>External Database Links</b>	<b>UniProt:</b> <a href="#">P07353</a> <a href="#">Related reagents</a>  <b>Entrez Gene:</b> <a href="#">281237</a> IFNG <a href="#">Related reagents</a>		
<b>RRID</b>	AB_324003		
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line.		
<b>Specificity</b>	<p><b>Mouse anti Bovine IFN<math>\gamma</math> antibody, clone CC302</b>, 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. IFN<math>\gamma</math> is predominantly secreted by activated T lymphocytes in response to specific mitogens as a result of infection (<a href="#">Rhodes et al. 2000</a>).</p> <p>Mouse anti bovine <math>\gamma</math> interferon antibody, clone CC302 has been demonstrated to be reactive to a number of mammalian species including human, sheep, dog, pig, goat and mink (<a href="#">Pedersen et al. 2002</a>). Mouse anti Bovine IFN<math>\gamma</math> antibody, clone CC302 has been used successfully for the evaluation of <math>\gamma</math> interferon levels in the sera of calves naturally infected with <i>M. avium</i> subsp <i>paratuberculosis</i> (<a href="#">Appana et al. 2013</a>) as a detection reagent using an ELISA.</p>		
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul		
<b>References</b>	<ol style="list-style-type: none"> <li>Hasvold, H.J. <i>et al.</i> (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>. <a href="#">Vet Immunol Immunopathol. 90 (1-2): 79-89.</a></li> <li>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<sup>+</sup> T cell responses induced by DNA</li> </ol>		

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<b>Further Reading</b>	1. Rhodes, S. <i>et al.</i> (2000) Distinct response kinetics of gamma interferon and interleukin-4 in bovine tuberculosis. <a href="#">Infect Immun. 68:5393-400.</a>
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<b>Storage</b>	Store at +4°C.
	DO NOT FREEZE

This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

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<b>Guarantee</b>	12 months from date of despatch
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<b>Health And Safety</b>	Material Safety Datasheet documentation #20487 available at:
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**Information** <https://www.bio-rad-antibodies.com/SDS/MCA1783PE>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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