

# Datasheet: MCA1783F

**BATCH NUMBER 162257**

<b>Description:</b>	MOUSE ANTI BOVINE INTERFERON GAMMA:FITC
<b>Specificity:</b>	IFN GAMMA
<b>Other names:</b>	INTERFERON GAMMA
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	CC302
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.1 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry (1)	▪			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. The use of Leucoperm (Product Code [BUF09](#)) is recommended for this purpose.**

Target Species	Bovine		
Species Cross Reactivity	<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>		
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525

<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% sodium azide (NaN <sub>3</sub> ) 1% bovine serum albumin
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1 mg/ml
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P07353</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">281237</a>    IFNG    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_323313
<b>Fusion Partners</b>	Spleen cells from immunized BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Bovine IFN-γ 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. IFNγ 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 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 (<a href="#">Pedersen et al. 2002</a>). 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> (<a href="#">Appana et al. 2013</a>) as a detection reagent using an ELISA.</p>
<b>Flow Cytometry</b>	Use 10μl of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100μl
<b>References</b>	<ol style="list-style-type: none"> <li>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>. <a href="#">Vet Immunol Immunopathol. 90 (1-2): 79-89.</a></li> <li>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<sup>+</sup> T cell responses induced by DNA vaccination of outbred animals. <a href="#">J Immunol. 169 (7): 3837-46.</a></li> <li>Pedersen, L.G. et al. (2002) Identification of monoclonal antibodies that cross-react with cytokines from different animal species. <a href="#">Vet Immunol Immunopathol. 88 (3-4): 111-22.</a></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>
<b>Storage</b>	<p>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.</p> <p>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.</p>
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1783F">https://www.bio-rad-antibodies.com/SDS/MCA1783F</a> 10041
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

<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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