



Datasheet: MCA1783A488

**BATCH NUMBER 148967**

<b>Description:</b>	MOUSE ANTI BOVINE INTERFERON GAMMA:Alexa Fluor®488
<b>Specificity:</b>	IFN GAMMA
<b>Other names:</b>	INTERFERON GAMMA
<b>Format:</b>	ALEXA FLUOR® 488
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	CC302
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry (1)	▪			1/20 - 1/200

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

<b>Target Species</b>	Bovine						
<b>Species Cross Reactivity</b>	Reacts with: Human, Pig, Dog, Horse, Sheep, Goat, Dolphin, Ferret, Mink, Fin Whale, Rabbit Based on sequence similarity, is expected to react with:Mustelid <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.						
<b>Product Form</b>	Purified IgG conjugated to Alexa Fluor 488 - liquid						
<b>Max Ex/Em</b>	<table><thead><tr><th>Fluorophore</th><th>Excitation Max (nm)</th><th>Emission Max (nm)</th></tr></thead><tbody><tr><td>Alexa Fluor®488</td><td>495</td><td>519</td></tr></tbody></table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	Alexa Fluor®488	495	519
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Alexa Fluor®488	495	519					

<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 Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> ) 1% Bovine Serum Albumin
<b>Approx. Protein Concentrations</b>	IgG concentration 0.05mg/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_1628832
<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. 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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**Further Reading**

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**Storage**

Store at +4°C or at -20°C if preferred.  
Storage in frost-free freezers is not recommended.  
This product should be stored undiluted. This product is photosensitive and should be protected from light.  
Avoid repeated freezing and thawing as this may denature the antibody.

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**Guarantee**

12 months from date of despatch

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Material Safety Datasheet documentation #10041 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA1783A488>  
10041

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 488 \(MCA928A488\)](#)

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