Product Details

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.

<table>
<thead>
<tr>
<th>Applications</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Cytometry (1)</td>
<td>-</td>
<td>-</td>
<td></td>
<td>1/100 - 1/500</td>
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<tr>
<td>Immunohistology - Frozen</td>
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<tr>
<td>Immunohistology - Paraffin</td>
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<td>ELISA</td>
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<tr>
<td>Immunoprecipitation</td>
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<td>Western Blotting</td>
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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.
Purified IgG - liquid

Preparation: Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant.

Buffer Solution: Phosphate buffered saline

Preservative: 0.09% sodium azide (NaN₃)

Stabilisers: Carrier Free

Approx. Protein Concentrations: IgG concentration 1.0 mg/ml

UniProt: P07353

Entrez Gene: 281237 IFNG

RRID: AB_2123454

Fusion Partners: Spleen cells from immunized BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line.

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 M. avium. subsp paratuberculosis (Appana et al. 2013) as a detection reagent using an ELISA.

Flow Cytometry: Use 10μl of the suggested working dilution to label 1x10⁶ cells in 100μl

ELISA: Biotinylated mouse anti bovine IFNγ, clone CC302, may be used as the detection reagent in a sandwich ELISA with purified mouse anti bovine IFNγ, clone CC330, as the capture reagent and recombinant bovine IFNγ as the standard.

17. Wagner, B. et al. (2010) Interferon-γ, interleukin-4 and interleukin-10 production by T helper cells reveals intact Th1 and regulatory TR1 cell activation and a delay of the Th2 cell response in equine neonates and foals. Vet Res. 41: 47.
23. Dewals, B.G., et al. (2011) Malignant catarrhal fever induced by Alcelaphine herpesvirus 1 is characterized by an expansion of activated CD3+CD8+CD4- T cells expressing a cytotoxic phenotype in both lymphoid and non-lymphoid tissues Vet Res. 42(1): 95.
43. Maggioli, M.F. et al. (2016) Increased TNF-α/IFN-γ/IL-2 and Decreased TNF-α/IFN-γ Production by Central Memory T Cells Are Associated with Protective Responses against Bovine Tuberculosis Following BCG Vaccination. Front Immunol. 7: 421.
53. DaSilva, A.V.A. et al. (2018) Morphophysiological changes in the splenic extracellular...


69. Ferreras-Colino, E. *et al.* (2023) Oral immunization with heat-inactivated *Mycobacterium bovis* reduces local parasite dissemination and hepatic granuloma


**Further Reading**


**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.

**Guarantee**

12 months from date of despatch

**Health And Safety Information**

Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA1783

**Regulatory**

For research purposes only

**Related Products**

**Recommended Secondary Antibodies**

Rabbit Anti Mouse IgG (STAR12...) **RPE**

Goat Anti Mouse IgG IgA IgM (STAR87...) **HRP**

Goat Anti Mouse IgG (STAR76...) **RPE**

Rabbit Anti Mouse IgG (STAR13...) **HRP**

Goat Anti Mouse IgG (STAR70...) **FITC**

Goat Anti Mouse IgG (H/L) (STAR117...) **Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP**

Rabbit Anti Mouse IgG (STAR9...) **FITC**

Goat Anti Mouse IgG (STAR77...) **HRP**

Goat Anti Mouse IgG (Fc) (STAR120...) **FITC, HRP**

**Recommended Negative Controls**

**MOUSE IgG1 NEGATIVE CONTROL (MCA928)**

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

"M411500:221103"

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