**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

**RRID** AB_2123327

**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.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
</tr>
</thead>
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<tr>
<td></td>
<td></td>
<td></td>
<td>1/10 - 1/100</td>
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</table>

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.

**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.

**Product Form**

Purified IgG conjugated to Alexa Fluor® 647 - liquid

**Max Ex/Em**

<table>
<thead>
<tr>
<th>Fluorophore</th>
<th>Excitation Max (nm)</th>
<th>Emission Max (nm)</th>
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<tbody>
<tr>
<td>Alexa Fluor®647</td>
<td>650</td>
<td>665</td>
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</table>

**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 (NaN₃)

1% Bovine Serum Albumin

**Approx. Protein**

IgG concentration 0.05mg/ml
## Concentrations

### External Database Links

<table>
<thead>
<tr>
<th>UniProt:</th>
<th>Related reagents</th>
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<tbody>
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### Entrez Gene:

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<th>ID</th>
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<td>281237</td>
<td>IFNG</td>
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### Fusion Partners

Spleen cells from immunised BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line.

### Specificity

**Mouse anti Bovine IFNγ 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)*. Clone CC302 has been successfully used 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 10ul of the suggested working dilution to label 1x10^6 cells in 100ul.

### References


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34. Hansen, S. et al. (2013) Age-related changes in intracellular expression of IFN-γ and TNF-α in...
equine lymphocytes measured in bronchoalveolar lavage and peripheral blood. **Dev Comp Immunol.** 39 (3): 228-33.


37. Johnson, W.C. et al. (2008) Bovine WC1(-) gammadelta T cells incubated with IL-15 express the natural cytotoxicity receptor CD335 (NKp46) and produce IFN-gamma in response to exogenous IL-12 and IL-18. **Dev Comp Immunol.** 32 (8): 1002-10.


**Further Reading**


**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.

**Guarantee**

18 months from date of despatch.

**Acknowledgements**

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**Health And Safety**

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL: Alexa Fluor® 647 (MCA928A647)