### Description:
MOUSE ANTI BOVINE INTERFERON GAMMA: Alexa Fluor®488

### Specificity:
IFN GAMMA

### Other names:
INTERFERON GAMMA

### Format:
ALEXA FLUOR® 488

### Product Type:
Monoclonal Antibody

### Clone:
CC302

### Isotype:
IgG1

### Quantity:
100 TESTS/1ml

### Applications Details

<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>1/20 - 1/200</td>
</tr>
</tbody>
</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 488 - liquid

### Max Ex/Em

<table>
<thead>
<tr>
<th>Fluorophore</th>
<th>Excitation (nm)</th>
<th>Emission (nm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alexa Fluor®488</td>
<td>495</td>
<td>519</td>
</tr>
</tbody>
</table>

### Preparation
Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

### Buffer Solution
Phosphate buffered saline

### Preservative Stabilisers
0.09% Sodium Azide (NaN₃)
1% Bovine Serum Albumin

### Approx. Protein Concentrations
IgG concentration 0.05mg/ml
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**

23. Moreira Marcela L. et al. (2016) Vaccination against canine leishmaniosis increases the phagocytic activity, nitric oxide production and expression of cell activation/migration molecules in neutrophils and monocytes Veterinary Parasitology. 15 Feb [Epub ahead of print]
37. Johnson, W.C. et al. (2008) Bovine WC1(-) gammadeltaT 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.
38. 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.

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.

Shelf Life
18 months from date of despatch.

Acknowledgements
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Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL: Alexa Fluor® 488 (MCA928A488)