Datasheet: MCA1783PE

Description: MOUSE ANTI BOVINE INTERFERON GAMMA:RPE
Specificity: IFN GAMMA
Other names: INTERFERON GAMMA
Format: RPE
Product Type: Monoclonal Antibody
Clone: CC302
Isotype: IgG1
Quantity: 100 TESTS

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.

<table>
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<tr>
<th>Application</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>Neat - 1/10</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. Bio-Rad recommend the use of Leucoperm™ (Product Code BUF09) for this purpose.

For use on Equine samples Bio-Rad recommend MCA1783F

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 R. Phycoerythrin (RPE) - lyophilized

Reconstitution
Reconstitute with 1 ml distilled water

Max Ex/Em
<table>
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<tr>
<th>Fluorophore</th>
<th>Excitation (nm)</th>
<th>Emission (nm)</th>
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<tr>
<td>PE 488nm laser</td>
<td>496</td>
<td>578</td>
</tr>
<tr>
<td>PE 561nm laser</td>
<td>546</td>
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</table>

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

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

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.

Mouse anti bovine IFNγ antibody, clone CC302, recognizes bovine interferon-gamma, a 143 amino acid cytokine with potent activating, antiviral and anti proliferitive 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).

References


31. Sun L et al. (2012) The role of proliferation in the regulation of interferon gamma (IFNγ)
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.

DO NOT FREEZE

This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life
12 months from date of reconstitution

Health And Safety Information

Regulatory
For research purposes only

Related Products
Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:RPE (MCA928PE)