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>
<thead>
<tr>
<th>Applications</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
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</thead>
<tbody>
<tr>
<td>Flow Cytometry (1)</td>
<td></td>
<td></td>
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<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 Max (nm)</th>
<th>Emission Max (nm)</th>
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<tr>
<td>RPE 488nm laser</td>
<td>496</td>
<td>578</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

Preservative Stabilisers

0.09% Sodium Azide

1% Bovine Serum Albumin
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 1x10⁶ cells in 100ul

**References**

10. Lybeck, K.R. et al. (2009) Neutralization of interleukin-10 from CD14(+) monocytes enhances gamma interferon production in peripheral blood mononuclear cells from *Mycobacterium avium*
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.

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

Material Safety Datasheet documentation #10075 available at:

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL-RPE (MCA928PE)