Datasheet: MCA1783A488

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

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>Indicator</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
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<tbody>
<tr>
<td>Flow Cytometry (1)</td>
<td>✗</td>
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<td>1/20 - 1/200</td>
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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
Fluorophore: Alexa Fluor®488
Excitation Max (nm): 495
Emission Max (nm): 519

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
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

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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Health And Safety Information
Related Products

Recommended Negative Controls

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