

Datasheet: MCA5638KZZ

BATCH NUMBER 166337

Description:	BOVINE INTERFERON GAMMA ELISA KIT
Name:	IFN GAMMA
Format:	Kit
Product Type:	Kits
Quantity:	5 x 96 WELLS

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.

	Yes	No	Not Determined	Suggested Dilution
ELISA	▪			

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.

Target Species Bovine

External Database Links

UniProt:

[P07353](#) [Related reagents](#)

Entrez Gene:

[281237](#) IFNG [Related reagents](#)

Product Information

The Bovine Interferon Gamma Kit is specific for bovine interferon gamma (IFN-gamma), a secreted cytokine involved in anti-viral activity and growth regulation belonging to the type II interferon family.

IFN-gamma is produced by lymphocytes in response to activation by specific antigens or mitogens. In addition to its anti-viral activity, IFN-gamma has important immunoregulatory functions in the activation of macrophages and anti-proliferative effects upon transformed cells.

Test Principle

This assay is based on a sandwich ELISA using two different mouse anti bovine IFN-gamma monoclonal antibodies and a recombinant bovine IFN-gamma as a standard.

Intended Use	<p>Bovine Interferon gamma ELISA Kit (MCA5638KZZ) is an ELISA kit (5 x 96 wells) designed for the quantitative determination of bovine interferon gamma (BoIFN-gamma) in bovine serum, plasma and culture supernatant.</p> <p>This assay can measure BoIFN-gamma in the range 0.025-50 ng/ml in bovine serum, plasma and culture supernatant. Detailed instructions for use of the kit can be found here.</p>
Reagents In The Kit	<p>96 well microtiter plates x 5 Microplate adhesive sealers x 5 Coating antibody - 1vial (MCA5638KZZA) Coating Buffer - 1 vial (5 x concentrated) Detection antibody – Biotin conjugated - 1 vial (MCA5638KZZC) Streptavidin:HRP conjugate - 1 vial (MCA5638KZZD) TMB Substrate 1 vial Bovine IFN gamma standard (400ng/ml – Lyophilized) 1 vial (MCA5638KZZB)</p>
Additional Reagents Required	<p><u>The following additional reagents and Equipment are also required for successful use of this kits BUT ARE NOT CONTAINED WITHIN THIS KIT</u></p> <p>Wash buffer (available from Bio-Rad, BUF031A, or see kit insert for recipe) Blocking solution (available from Bio-Rad, Catalogue Code: BUF032A, or see kit insert for recipe) Stop Solution (see kit insert for recipe) Distilled or Deionised water Plate reader with 450nm reading capacity Pipettes for dispensing up to 250ul Tubes for preparing standard and sample dilutions.</p>
Instructions For Use	<p>Instructions for use can be found at www.bio-rad-antibodies.com/uploads/IFU/MCA5638KZZ.pdf</p>
References	<ol style="list-style-type: none"> 1. Doherty, R. <i>et al.</i> (2013) Epigenetic regulation of the innate immune response to LPS in bovine peripheral blood mononuclear cells (PBMC) Vet Immunol Immunopathol. Aug 15;154: 102-10. 2. Redondo, E. <i>et al.</i> (2014) Induction of Interleukin-8 and Interleukin-12 in Neonatal Ovine Lung Following Experimental Inoculation of Bovine Respiratory Syncytial Virus. J Comp Pathol. 150: 434-48. 3. Truong, T. <i>et al.</i> (2014) Peste des petits ruminants virus tissue tropism and pathogenesis in sheep and goats following experimental infection. PLoS One. 9: e87145. 4. Blodörn, K. <i>et al.</i> (2015) A bovine respiratory syncytial virus model with high clinical expression in calves with specific passive immunity. BMC Vet Res. 11: 76. 5. Blodörn, K. <i>et al.</i> (2014) Vaccine safety and efficacy evaluation of a recombinant bovine respiratory syncytial virus (BRSV) with deletion of the SH gene and subunit vaccines based on recombinant human RSV proteins: N-nanorings, P and M2-1, in calves with maternal antibodies. PLoS One. 9 (6): e100392. 6. Beechler, B.R. <i>et al.</i> (2017) Host immunity, nutrition and coinfection alter longitudinal infection patterns of schistosomes in a free ranging African buffalo population. PLoS Negl

[Trop Dis. 11 \(12\): e0006122.](#)

7. Takeet, M.I. *et al.* (2016) Differential IFN-Gamma (IFN- γ), Interleukin 10 (IL-10) and Cardiac Troponin I (cTnI) Responses in Natural Bovine Trypanosomosis in Nigeria [Open Journal of Veterinary Medicine. 06 \(07\): 105-111.](#)

8. Kolb, E.A. *et al.* (2019) Protection against bovine respiratory syncytial virus in calves vaccinated with adjuvanted modified live vaccine administered in the face of maternal antibody. [Vaccine. Oct 24 \[Epub ahead of print\].](#)

9. Rathogwa, N.M. *et al.* (2021) Efficacy of SAT2 Foot-and-Mouth Disease Vaccines Formulated with Montanide ISA 206B and Quil-A Saponin Adjuvants. [Vaccines \(Basel\).9 \(9\): 996.](#)

10. Perkins-Oines, S. *et al.* (2023) The effect of neonatal vaccination for bovine respiratory disease in the face of a dual challenge with bovine viral diarrhoea virus and *Mannheimia hemolytica*. [Vaccine. 41 \(19\): 3080-91.](#)

11. Palmer, M.V. *et al.* (2020) Biomarkers of cell-mediated immunity to bovine tuberculosis. [Vet Immunol Immunopathol. 220: 109988.](#)

12. Ranchod, H. *et al.* (2018) The antigenicity and cholesterol nature of mycolic acids determined by recombinant chicken antibodies. [PLoS One. 13 \(8\): e0200298.](#)

Storage

Prior to use store all kit components at +4°C. DO NOT FREEZE. Please view the handbook for further details.

Storage in frost free freezers is not recommended. This Kit contains components that are photosensitive and should be protected from light. Avoid repeated freezing and thawing as this may denature components within this kit.

The contents of this kit should be stored undiluted. Should components within this kit contain a precipitate we recommend microcentrifugation before use.

Guarantee

Guaranteed until date of expiry. Please see product label.

Health And Safety Information

Material Safety Datasheet documentation #10383 #10111 #10226 #10040 #10299 available at:

<https://www.bio-rad-antibodies.com/SDS/MCA5638KZZ>

ELISA Coating Buffer (10383)

TMB Substrate (10111)

Streptavidin Conjugated Product (10226)

Antibody (10040)

Protein (10299)

Regulatory

This kit and its components are Research Use Only. Not for Therapeutic or Diagnostic use.

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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