

Datasheet: MCA5655PE

BATCH NUMBER 0610

Description:	MOUSE ANTI BOVINE MHC CLASS II DQ:RPE
Specificity:	MHC CLASS II DQ
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	CC158
Isotype:	IgG2a
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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat

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		
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized		
Reconstitution	Reconstitute with 1.0ml distilled water		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide (NaN ₃)		
Stabilisers	1% Bovine Serum Albumin 5% Sucrose		

**External Database
Links**

UniProt:

[Q30308](#)

[Related reagents](#)

RRID

AB_11152775

Fusion Partners

Spleen cells from immunised BALB/c mice were fused with cells of the NS1 mouse myeloma cell line.

Specificity

Mouse anti Bovine MHC class II DQ antibody, clone CC158 recognises Bovine MHC Class II DQ. MHC Class II molecules are constitutively expressed on antigen presenting cells such as dendritic cells, B lymphocytes, monocytes, macrophages, activated T lymphocytes and may be induced on a range of other cell types by interferon gamma.

The major histocompatibility complex (MHC) is a cluster of genes some of which are important in the immune response to infections. In cattle, this complex is referred to as the bovine leukocyte antigen (BoLA) region. There are 2 major types of MHC class IIa molecules encoded by the BoLA which are DR and DQ each composed of an alpha and beta chain.

Flow Cytometry

Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul. .

References

1. Stephens, S.A. & Howard, C.J. (2002) Infection and transformation of dendritic cells from bovine afferent lymph by *Theileria annulata*. [Parasitology. 124 \(Pt 5\): 485-93.](#)
2. Yamakawa, Y. *et al.* (2008) Identification and functional characterization of a bovine orthologue to DC-SIGN. [J Leukoc Biol. 83 \(6\): 1396-403.](#)
3. Price, S.J. and Hope, J.C. (2009) Enhanced secretion of interferon-gamma by bovine gammadelta T cells induced by coculture with Mycobacterium bovis-infected dendritic cells: evidence for reciprocal activating signals. [Immunology. 126: 201-8.](#)
4. Van Rhijn, I. *et al.* (2007) Massive, sustained gammadelta T cell migration from the bovine skin in vivo. [J Leukoc Biol. 81: 968-73.](#)

Storage

Prior to reconstitution store at +4°C.
After reconstitution 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.

Guarantee

12 months from date of despatch

**Health And Safety
Information**

Material Safety Datasheet documentation #20487 available at:
<https://www.bio-rad-antibodies.com/SDS/MCA5655PE>

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:RPE \(MCA929PE\)](#)

Product inquiries: www.bio-rad-antibodies.com/technical-support

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

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