Datasheet: MCA1653A647

BATCH NUMBER 147548

Description:	MOUSE ANTI BOVINE CD4:Alexa Fluor® 647
Specificity:	CD4
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	CC8
Isotype:	IgG2a
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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/10

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

Target Species

Bovine

Product Form

Purified IgG conjugated to Alexa Fluor® 647 - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
Alexa Fluor®647	650	665

Preparation

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

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide
1% Bovine Serum Albumin

Approx. Protein Concentrations

IgG concentration 0.05 mg/ml

Immunogen	Bovine lymphocytes.
External Database Links	**UniProt:** A7YY52 Related reagents
RRID	AB_2077621
Fusion Partners	Spleen cells from an immunized mouse were fused with cells of the mouse NS1 myeloma cell line.
Specificity	**Mouse anti Bovine CD4 antibody, clone CC8** recognizes bovine CD4, the homolog of human CD4 and immunoprecipitates a ~50 kDa molecule. The phenotype, tissue distribution and function of T-cells expressing the bovine CD4 antigen are similar to those in other species. However, expression on macrophages has not yet been detected. Clone CC8 has been reported as being suitable for use on formalin dichromate (FD5) fixed paraffin embedded tissue with amplification and antigen retrieval techniques (Eskra *et al.* 1991). A mutation in the bovine CD4 gene resulting in an amino acid substitution at A324 T, located in the D4 domain of the CD4 gene product can occur. This mutation results in lowered binding of Mouse anti Bovine CD4 antibody, clone CC8 to CD4 in Japanese Black (JB) cattle where this mutation has been identified (Kato-Mori, *et al.*. 2020). CD4 in JB cattle can be identified using clone CACT138A (MCA6081) whose binding to bovine CD4 is unaffected by the A324T mutation (Kato-Mori, *et al.*. 2020).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.
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Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

	Storage in frost free freezers is not recommended. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of despatch
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Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA1653A647 10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL:Alexa Fluor® 647 (MCA929A647)

North & South America Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com

Worldwide Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com

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