

Datasheet: MCA6086

Description:	MOUSE ANTI BOVINE CD18
Specificity:	CD18
Other names:	ITGB2
Format:	Con S/N
Product Type:	Monoclonal Antibody
Clone:	BAQ30A
Isotype:	IgG1
Quantity:	0.1 mg

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
Functional Assays		▪		

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
Species Cross Reactivity	Reacts with: Goat, Sheep, Bison, Water Buffalo, Cat, Dog, Alpaca, Llama, Human N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.
Product Form	Concentrated tissue culture supernatant - liquid
Preparation	Concentrated tissue culture supernatant clarified by filtration through a 0.2 micrometer filter
Buffer Solution	Serum free tissue culture medium containing proprietary protein free supplement
Preservative	0.09% Sodium Azide (NaN ₃)

Stabilisers

Approx. Protein Concentrations IgG concentration 1.0 mg/ml

Immunogen Cells from multiple species

External Database Links

UniProt:

[P32592](#) [Related reagents](#)

Entrez Gene:

[281877](#) ITGB2 [Related reagents](#)

Synonyms CD18

Specificity

Mouse anti Bovine CD18, clone BAQ30A, recognizes bovine CD18 also known as ITGB2 or integrin beta-2. CD18 is a receptor for ICAM1, ICAM2, ICAM3, and ICAM4. It recognizes the G-P-R motif in the fibrinogen alpha chain and is involved in leukocyte adhesion as well as transmigration of T cells and neutrophils.

Different from other organisms, the signal peptide of ruminant CD18, the beta subunit, is not cleaved and remains intact on the mature CD18 molecule, leukotoxin from *Pasteurella haemolytica* binds to the intact signal peptide on ruminant leukocytes causing acute inflammation and lung damage ([Shanthalingam et al. 2016](#)). Holstein cattle harbor a mutation in CD18 causing bovine leukocyte adhesion deficiency (BLAD) syndrome ([Kehrli et al. 1992](#)) with decreased expression of beta 2 integrins and lowered susceptibility to cytolysis in Pasteurella infections ([Jeyaseelan et al. 2000](#)).

Flow Cytometry Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul

References

- Howard C.J. & Naessens J (1993) Summary of workshop findings for cattle (tables 1 and 2). [Vet Immunol Immunopathol. 39 \(1-3\): 25-47.](#)
 - Saalmüller A. et al. (2005) Summary of the animal homologue section of HLDA8. [Cell Immunol. 236 \(1-2\): 51-8.](#)
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Storage

Store at +4°C. DO NOT FREEZE.
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 #20389 available at:
20389: <https://www.bio-rad-antibodies.com/uploads/MSDS/20389.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
 Goat Anti Mouse IgG (STAR77...) [HRP](#)
 Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
 Rabbit Anti Mouse IgG (STAR8...) [DyLight®800](#)
 Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
 Goat Anti Mouse IgG (STAR76...) [RPE](#)
 Goat Anti Mouse IgG (STAR70...) [FITC](#)
 Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)
 Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
 Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®680](#),
[DyLight®800](#), [FITC](#), [HRP](#)

Recommended Positive Controls

[GOAT ANTI MOUSE IgG1:RPE \(STAR132PE\)](#)

Recommended Useful Reagents

[MOUSE ANTI BOVINE CD11c \(MCA6084\)](#)

[MOUSE ANTI BOVINE CD14 \(MCA6085\)](#)

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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
 'M334808:181203'

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