

Datasheet: MCA2042GA

Description:	MOUSE ANTI BOVINE CD63
Specificity:	CD63
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	CC25
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	■			1/10 - 1/25
Immunohistology - Frozen			■	
Immunohistology - Paraffin			■	
ELISA			■	
Immunoprecipitation			■	
Western Blotting			■	

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 - liquid
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 (NaN ₃)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
External Database Links	UniProt: Q9XSK2 Related reagents

Entrez Gene:

[404156](#) CD63 [Related reagents](#)

Specificity

Mouse anti Bovine CD63 antibody, clone CC25 recognizes the bovine homologue of human CD63, a 237 amino acid multipass transmembrane glycoprotein and member of the tetraspanin TM4SF protein family with a predicted molecular weight of ~26 kDa. CD63 is also known as lysosome associated membrane glycoprotein 3 or LAMP-3.

CD63 along with other TM4SF members including CD9, CD61 and CD151 can form specific interactions with phosphoinositide 4-kinase, suggesting a role for CD63 in the recruitment of phosphoinositide 4-kinase to specific membrane sites ([Yauch and Hemler 2000](#)).

CD63 is expressed on the cell surface of platelets and basophils, along with activated macrophages, monocytes and granulocytes.

Mouse anti Bovine CD63, clone CC25 acts as a specific marker for bovine lysosomes and has been used for the identification and quantitation of phagosome-lysosome fusion in models of bacterial insult ([Souza et al. 2013](#)).

Flow Cytometry

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

References

1. Brooke, G.P. *et al.* (1999) Molecular cloning of cattle CD63 and evidence for high level expression on subpopulations of dendritic cells. [Immunogenetics. 49 \(9\): 812-4.](#)
2. Colino, J. and Snapper, C.M. (2006) Exosomes from bone marrow dendritic cells pulsed with diphtheria toxoid preferentially induce type 1 antigen-specific IgG responses in naive recipients in the absence of free antigen. [J Immunol. 177: 3757-62.](#)
3. Souza, C.D. *et al.* (2007) Role of the mitogen-activated protein kinase pathway in the differential response of bovine monocytes to *Mycobacterium avium* subsp. paratuberculosis and *Mycobacterium avium* subsp. avium. [Microbes Infect. 9: 1545-52.](#)
4. Souza, C. *et al.* (2013) Mannosylated lipoarabinomannans from *Mycobacterium avium* subsp. Paratuberculosis alters the inflammatory response by bovine macrophages and suppresses killing of mycobacterium avium subsp. Avium organisms. [PLoS One 8: e75924.](#)
5. Wolf, T. *et al.* (2015) The Intestinal Transport of Bovine Milk Exosomes Is Mediated by Endocytosis in Human Colon Carcinoma Caco-2 Cells and Rat Small Intestinal IEC-6 Cells. [J Nutr. 145 \(10\): 2201-6.](#)
6. Weiss, D.J. *et al.* (2008) Bovine monocyte TLR2 receptors differentially regulate the intracellular fate of *Mycobacterium avium* subsp. paratuberculosis and *Mycobacterium avium* subsp. avium. [J Leukoc Biol. 83: 48-55.](#)
7. Mobley, C.B. *et al.* (2016) Whey protein-derived exosomes increase protein synthesis and hypertrophy in C2C12 myotubes. [Journal of Dairy Science. Oct 27 \[Epub ahead of print\]](#)
8. Kusuma, R.J. *et al.* (2016) Human vascular endothelial cells transport foreign exosomes from cow's milk by endocytosis. [Am J Physiol Cell Physiol. Mar 16: ajpcell.00169.2015. \[Epub ahead of print\]](#)
9. Carretta MD *et al.* (2016) Butyric acid stimulates bovine neutrophil functions and potentiates the effect of platelet activating factor. [Vet Immunol Immunopathol. 176: 18-27.](#)

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. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend

microcentrifugation before use.

Shelf Life	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®549 , DyLight®649 , DyLight®680 , DyLight®800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Human Anti Mouse IgG1 (HCA036...)	HRP

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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