

Datasheet: MCA2431GA

BATCH NUMBER 167892

Description:	MOUSE ANTI BOVINE CD40
Specificity:	CD40
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	IL-A156
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	▪			1/25 - 1/200
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	
Functional Assays (1)	▪			

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.

(1) **Clone IL-A156 is reported to function in *in vivo* applications, see [Haas, K. et al.](#) for details. Removal of sodium azide is recommended prior to use in functional assays.**

Target Species	Bovine
Species Cross Reactivity	<p>Reacts with: Sheep</p> <p>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.</p>

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	<p>UniProt: Q28203 Related reagents</p> <p>Entrez Gene: 286849 CD40 Related reagents</p>
Synonyms	TNFRSF5
RRID	AB_11152595
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the X63.Ag8.653 myeloma cell line
Specificity	<p>Mouse anti Bovine CD40 antibody, clone IL-A156 recognizes the bovine Tumor necrosis factor receptor superfamily member 5, also known as CD40 or B-cell surface antigen CD40. CD40 is a 260 amino acid single pass type 1 transmembrane glycoprotein with a predicted molecular mass of 31 kDa. Bovine CD40 also has an N terminal signal peptide of 20 amino acids. Bovine CD40 is expressed by B lymphocytes and a subset of T lymphocytes.</p> <p>CD40 plays an important role in the differentiation of B lymphocytes into effector cells, and is also involved in interactions between T and B lymphocytes.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 ⁶ cells in 100ul
References	<ol style="list-style-type: none"> 1. Haas, K.M. <i>et al.</i> (2001) Enhancing effects of anti-CD40 treatment on the immune response of SCID-bovine mice to <i>Trypanosoma congolense</i> infection. J Leukoc Biol. 70: 931-40. 2. Norimatsu, M. <i>et al.</i> (2003) Differential response of bovine monocyte-derived macrophages and dendritic cells to infection with <i>Salmonella typhimurium</i> in a low-dose model <i>in vitro</i>. Immunology 108: 55- 61. 3. Glew, E.J. <i>et al.</i> (2003) Differential effects of bovine viral diarrhoea virus on monocytes and dendritic cells. J Gen Virol. 84 (Pt 7): 1771-80.

4. Epardaud, M. *et al.* (2004) Enrichment for a CD26^{hi} SIRP- subset in lymph dendritic cells from the upper aero-digestive tract. [J Leukoc Biol. 76 \(3\): 553-61.](#)
5. Langelaar, M.F. *et al.* (2005) *Mycobacterium avium* ssp. *paratuberculosis* recombinant heat shock protein 70 interaction with different bovine antigen-presenting cells. [Scand J Immunol. 61 \(3\): 242-50.](#)
6. Corripio-Miyar, Y. *et al.* (2015) Phenotypic and functional analysis of monocyte populations in cattle peripheral blood identifies a subset with high endocytic and allogeneic T-cell stimulatory capacity. [Vet Res. 46: 112.](#)
7. Totté, P. *et al.* (2015) Free exopolysaccharide from *Mycoplasma mycoides* subsp. *mycoides* possesses anti-inflammatory properties. [Vet Res. 46 \(1\): 122.](#)
8. Liu, J. *et al.* (2020) *Theileria annulata*. transformation altered cell surface molecules expression and endocytic function of monocyte-derived dendritic cells. [Ticks Tick Borne Dis. 11 \(3\): 101365.](#)
9. Kornuta, C.A. *et al.* (2021) MAN α 1-2MAN decorated liposomes enhance the immunogenicity induced by a DNA vaccine against BoHV-1. [Transbound Emerg Dis. 68 \(2\): 587-97.](#)
10. Marzo, S. *et al.* (2021) Characterisation of dendritic cell frequency and phenotype in bovine afferent lymph reveals kinetic changes in costimulatory molecule expression [Vet Immunol Immunopathol. 19 Nov: 110363.](#)

Storage	<p>This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.</p>
Guarantee	12 months from date of despatch
Health And Safety Information	<p>Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA2431GA</p> <p>10040</p>
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®550 , DyLight®650 , DyLight®680 , DyLight®800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP

Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

Rabbit Anti Mouse IgG (STAR13...) [HRP](#)

Recommended Negative Controls

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

Recommended Useful Reagents

[MOUSE ANTI BOVINE CD28:RPE \(MCA5779PE\)](#)

[MOUSE ANTI BOVINE CD28:FITC \(MCA5779F\)](#)

[MOUSE ANTI BOVINE CD28 \(MCA5778\)](#)

[MOUSE ANTI BOVINE CD86:RPE \(MCA2437PE\)](#)

[MOUSE ANTI BOVINE CD86 \(MCA2437GA\)](#)

[MOUSE ANTI BOVINE CD86:FITC \(MCA2437F\)](#)

[MOUSE ANTI BOVINE CD80 \(MCA2436GA\)](#)

[MOUSE ANTI BOVINE CD80:FITC \(MCA2436F\)](#)

[MOUSE ANTI BOVINE CD80:RPE \(MCA2436PE\)](#)

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