

Datasheet: MCA2430GA

Description:	MOUSE ANTI BOVINE CD25
Specificity:	CD25
Other names:	IL-2R ALPHA CHAIN
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	IL-A111
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	■			1/50 - 1/100
Immunohistology - Frozen	■			
Immunohistology - Paraffin			■	
ELISA			■	
Immunoprecipitation	■			
Western Blotting			■	

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
Species Cross Reactivity	Reacts with: Sheep N.B. Antibody reactivity and working conditions may vary between species.
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
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml

**External Database
Links**

UniProt:

[P12342](#) [Related reagents](#)

Entrez Gene:

[281861](#) IL2RA [Related reagents](#)

Fusion Partners Spleen cells from immunised BALB/c mice were fused with cells of the X63.Ag8.653 myeloma cell line.

Specificity **Mouse anti Bovine CD25 antibody, clone IL-A111** recognizes the bovine CD25 cell surface antigen, a ~55 kDa glycoprotein also known as Interleukin-2 receptor alpha chain. Bovine CD25 is expressed by activated T cells.

Clone IL-A111 is reported to block the IL-2 driven proliferation of Con A-induced blast cells/ bovine lymphocytes ([Naessens et al. 1992](#)).

Flow Cytometry Use 10ul of the suggested working dilution to label 1x10⁶ cells in 100ul

References

1. Naessens, J. *et al.* (1992) Selection of BoCD25 monoclonal antibodies by screening mouse L cells transfected with the bovine p55-interleukin-2 (IL-2) receptor gene. [Immunology. 76 \(2\): 305-9.](#)
2. Howard, C.J. & Naessens, J. (1993) Summary of workshop findings for cattle (tables 1 and 2). [Vet Immunol Immunopathol. 39 \(1-3\): 25-47.](#)
3. Howard, C.J. *et al.* (1997) Identification of two distinct populations of dendritic cells in afferent lymph that vary in their ability to stimulate T cells. [J Immunol. 159 \(11\): 5372-82.](#)
4. Naessens, J. *et al.* (1993) Cross-reactivity of workshop antibodies with cells from domestic and wild ruminants. [Vet Immunol Immunopathol. 39 \(1-3\): 283-90.](#)
5. Evans, C.W. *et al.* (1994) Antigen recognition and activation of ovine gamma delta T cells. [Immunology. 82 \(2\): 229-37.](#)
6. Campbell, J.D. *et al.* (1998) A novel cell surface proliferation-associated marker expressed on T cells and up-regulated on germinal center B cells. [J Leukoc Biol. 63 \(5\): 567-74.](#)
7. Connelley, T. *et al.* (2011) NKp46 defines ovine cells that have characteristics corresponding to NK cells. [Vet Res. 42: 37.](#)
8. Menge, C. *et al.* (2004) Phenotypic and functional characterization of intraepithelial lymphocytes in a bovine ligated intestinal loop model of enterohaemorrhagic *Escherichia coli* infection. [J Med Microbiol. 53: 573-9.](#)
9. Rhodes, S.G. *et al.* (1999) Differential cytokine responses of CD4+ and CD8+ T cells in response to bovine viral diarrhoea virus in cattle. [J Gen Virol. 80 : 1673-9.](#)
10. Piper, E.K. *et al.* (2009) Immunological profiles of *Bos taurus* and *Bos indicus* cattle infested with the cattle tick, *Rhipicephalus (Boophilus) microplus*. [Clin Vaccine Immunol. 16: 1074-86.](#)
11. Woolums, A.R. *et al.* (2013) Effect of calf age and administration route of initial multivalent modified-live virus vaccine on humoral and cell-mediated immune responses following subsequent administration of a booster vaccination at weaning in beef calves. [Am J Vet Res. 74: 343-54.](#)
12. McInnes, E. *et al.* (1999) Phenotypic analysis of local cellular responses in calves infected with bovine respiratory syncytial virus. [Immunology. 96 \(3\): 396-403.](#)
13. Maślanka, T. *et al.* (2012) The presence of CD25 on bovine WC1+ gammadelta T cells is positively correlated with their production of IL-10 and TGF-beta, but not IFN-gamma. [Pol J Vet Sci. 15: 11-20.](#)
14. Menge, C. *et al.* (2003) Verotoxin 1 from *Escherichia coli* affects Gb3/CD77+ bovine lymphocytes independent of interleukin-2, tumor necrosis factor-alpha, and interferon-alpha. [Exp Biol Med \(Maywood\). 228: 377-86.](#)
15. Menge, C. *et al.* (1999) Shiga toxin 1 from *Escherichia coli* blocks activation and proliferation of bovine lymphocyte subpopulations *in vitro*. [Infect Immun. 67: 2209-17.](#)

16. Constantinoiu, C.C. *et al.* (2010) Local immune response against larvae of *Rhipicephalus (Boophilus) microplus* in *Bos taurus indicus* and *Bos taurus taurus* cattle. [Int J Parasitol. 40: 865-75.](#)
17. Maślanka, T. *et al.* (2012) The presence of CD25 on bovine WC1+ $\gamma\delta$ T cells is positively correlated with their production of IL-10 and TGF- β , but not IFN- γ . [Pol J Vet Sci. 15 \(1\): 11-20.](#)
18. Brodzki, P. *et al.* (2014) Phenotyping of leukocytes and granulocyte and monocyte phagocytic activity in the peripheral blood and uterus of cows with endometritis. [Theriogenology. 82 \(3\): 403-10.](#)
19. Zoldan, K. *et al.* (2014) Increase of CD25 expression on bovine neutrophils correlates with disease severity in post-partum and early lactating dairy cows. [Dev Comp Immunol. 47 \(2\): 254-63.](#)
20. Kang, H.J. *et al.* (2016) Effects of Ambient Temperature on Growth Performance, Blood Metabolites, and Immune Cell Populations in Korean Cattle Steers. [Asian-Australas J Anim Sci. 29 \(3\): 436-43.](#)
21. Schmidt, N. *et al.* (2018) Decreased STEC shedding by cattle following passive and active vaccination based on recombinant *Escherichia coli* Shiga toxoids. [Vet Res. 49 \(1\): 28.](#)

Storage	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. 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

Worldwide Tel: +44 (0)1865 852 700
Fax: +44 (0)1865 852 739

Europe Tel: +49 (0) 89 8090 95 21
Fax: +49 (0) 89 8090 95 50

'M315711:180503'

Printed on 05 May 2018