

Datasheet: MCA2430F

BATCH NUMBER 1711

Description:	MOUSE ANTI BOVINE CD25:FITC
Specificity:	CD25
Other names:	IL-2R ALPHA CHAIN
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	IL-A111
Isotype:	lgG1
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 - 1/5

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	Reacts with: Shee	ep		
Reactivity	reactivity is derive	activity and working conditied from testing within our landstance or landstance or signated in the control of t	aboratories, peer-re	viewed publications or
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid			
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm))
	FITC	490	525	
Preparation	Purified IgG prepared supernatant	ared by affinity chromatog	raphy on Protein A f	rom tissue culture

Buffer Solution	Phosphate buffered saline	
Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum Albumin	
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml	
External Database Links	UniProt: P12342 Related reagents Entrez Gene: 281861 IL2RA Related reagents	
RRID	AB_2249049	
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. Mouse anti Bovine CD25 antibody, 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 1x10 ⁶ cells in 100ul	
References	1. Naessens, J. <i>et al.</i> (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). Yet Immunol Immunopathol.39 (1-3): 25-47. 3. Howard, C.J. <i>et al.</i> (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. <i>et al.</i> (1993) Cross-reactivity of workshop antibodies with cells from domestic and wild ruminants. Yet Immunol.159 (11): 5372-82. 5. Evans, C.W. <i>et al.</i> (1994) Antigen recognition and activation of ovine gamma delta T cells. Immunology.82 (2): 229-37. 6. Campbell, J.D. <i>et al.</i> (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. <i>et al.</i> (2011) NKp46 defines ovine cells that have characteristics corresponding to NK cells. Yet Res. 42: 37 . 8. Menge, C. <i>et al.</i> (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+ $\gamma\delta$ T cells is positively correlated with their production of IL-10 and TGF- β , but not IFN- γ . Pol J Vet Sci. 15: 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 interferonalpha. 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*. <u>Infect Immun. 67: 2209-17.</u>
- 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. Maślanska, T. and Jaroszewski, J.J. (2013) In vitro effects of meloxicam on the number, Foxp3 expression, production of selected cytokines, and apoptosis of bovine CD25+CD4+ and CD25-CD4+ cells. J Vet Sci. 14 (2): 125-34.
- 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. <u>Dev Comp Immunol.</u> 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. <u>Asian-Australas</u> 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. <u>Vet Res. 49 (1): 28.</u>
- 22. Higgins, J.L. *et al.* (2018) Cell mediated immune response in goats after experimental challenge with the virulent *Brucella melitensis* strain 16M and the reduced virulence strain Rev. 1. <u>Vet Immunol Immunopathol. 202: 74-84.</u>
- 23. Brodzki, P. *et al.* (2019) Selected leukocyte subpopulations in peripheral blood and uterine washings in cows before and after intrauterine administration of cefapirin and methisoprinol. Anim Sci J. Nov 06 [Epub ahead of print].

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. 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
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA2430F 10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

North & South Tel: +1 800 265 7376 America

Worldwide Tel: +44 (0)1865 852 700 Europe

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

Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Email: antibody_sales_uk@bio-rad.com

Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M366893:200529'

Fax: +44 (0)1865 852 739

Printed on 16 Feb 2024

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint