

Datasheet: MCA2430PE

BATCH NUMBER INN1801

Description:	MOUSE ANTI BOVINE CD25:RPE	
Specificity:	CD25	
Other names:	IL-2R ALPHA CHAIN	
Format:	RPE	
Product Type:	Monoclonal Antibody	
Clone:	IL-A111	
Isotype:	lgG1	
Quantity:	100 TESTS	

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

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: Sheep				
Reactivity	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	Purified IgG conjugat	ed to R. Phycoerythrin	(RPE) - lyophilized		
Reconstitution	Reconstitute with 1 m	nl distilled water			
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)		

supernatant.

Buffer Solution	Phosphate buffered saline
Preservative	0.09% Sodium Azide
Stabilisers	1% Bovine Serum Albumin
	5% Sucrose
	370 Sucrose
External Database	
Links	UniProt:
	P12342 Related reagents
	Entrez Gene:
	281861 IL2RA Related reagents
RRID	AB_931692
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. 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.
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	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. <u>J Immunol. 159 (11): 5372-82.</u>
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	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. <u>Immunology. 82 (2): 229-37.</u>
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	expressed on T cells and up-regulated on germinal center B cells. <u>J Leukoc Biol. 63 (5):</u>
	567-74.
	7. Connelley, T. et al. (2011) NKp46 defines ovine cells that have characteristics
	corresponding to NK cells. <u>Vet Res. 42: 37.</u>
	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. <u>J Med Microbiol. 53: 573-9.</u>

- 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.
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- 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+ γδ T cells is positively correlated with their production of IL-10 and TGF-β, but not IFN-γ. <u>Pol J Vet Sci.</u> 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*. 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. 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].
- 24. Risalde, M.A. *et al.* (2020) BVDV permissiveness and lack of expression of co-stimulatory molecules on PBMCs from calves pre-infected with BVDV. <u>Comp Immunol Microbiol Infect Dis. 68: 101388.</u>
- 25. de Araújo, F.F. et al. (2019) Distinct immune response profile during Rhipicephalus

(Boophilus) microplus. infestations of guzerat dairy herd according to the maternal lineage ancestry (mitochondrial DNA). Vet Parasitol. 273: 36-44.

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27. Tucker, N. *et al.* (2023) Bovine blood and milk T-cell subsets in distinct states of activation and differentiation during subclinical *Staphylococcus aureus* mastitis. <u>J Reprod Immunol</u>. 156: 103826.

Storage Prior to reconstitution store at +4°C.

Following reconstitution store at +4°C.

DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee 12 months from date of despatch

Health And Safety Material Safety Datasheet documentation #20487 available at:

 $\underline{\text{https://www.bio-rad-antibodies.com/SDS/MCA2430PE}}$

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Regulatory For research purposes only

Related Products

North & South Tel: +1 800 265 7376

Information

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:RPE (MCA928PE)

Email: antibody_sales_us@bio-rad.com

America 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

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

Email: antibody_sales_uk@bio-rad.com

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