

Datasheet: MCA2430PE

Description:	MOUSE ANTI BOVINE CD25:RPE
Specificity:	CD25
Other names:	IL-2R ALPHA CHAIN
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	IL-A111
Isotype:	IgG1
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 Reactivity	Reacts with: Sheep N.B. Antibody reactivity and working conditions may vary between species.		
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized		
Reconstitution	Reconstitute with 1 ml distilled water		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant.		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide		
Stabilisers	1%	Bovine Serum Albumin	
	5%	Sucrose	
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 <i>et al.</i> 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). Vet 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. Vet Immunol Immunopathol. 39 (1-3): 283-90. 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. Vet 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. <i>et al.</i> (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. <i>et al.</i> (2009) Immunological profiles of <i>Bos taurus</i> and <i>Bos indicus</i> cattle infested with the cattle tick, <i>Rhipicephalus (Boophilus) microplus</i>. Clin Vaccine Immunol. 16: 1074-86. 11. Woolums, A.R. <i>et al.</i> (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. <i>et al.</i> (1999) Phenotypic analysis of local cellular responses in calves infected with bovine respiratory syncytial virus. Immunology. 96 (3): 396-403. 13. Maślanka, T. <i>et al.</i> (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. <i>et al.</i> (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. <i>et al.</i> (1999) Shiga toxin 1 from <i>Escherichia coli</i> blocks activation and proliferation of bovine lymphocyte subpopulations <i>in vitro</i>. Infect Immun. 67: 2209-17. 16. Constantinoiu, C.C. <i>et al.</i> (2010) Local immune response against larvae of <i>Rhipicephalus (Boophilus) microplus</i> in <i>Bos taurus indicus</i> and <i>Bos taurus taurus</i> 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	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.
Shelf Life	12 months from date of reconstitution.
Health And Safety Information	Material Safety Datasheet documentation #10075 available at: 10075: https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

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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