

## Datasheet: MCA2430PE BATCH NUMBER INN0414

Description:	MOUSE ANTI BOVINE CD25:RPE		
Specificity:	CD25		
Other names:	IL-2R ALPHA CHAIN		
Format:	RPE		
Product Type:	Monoclonal Antibody		
Clone:	IL-A111		
lsotype:	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 <u>www.bio-rad-antibodies.com/protocols</u> .						
		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 <b>N.B.</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 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 Stabilisers	<ul><li>0.09% Sodium Azide</li><li>1% Bovine Serum Albumin</li><li>5% Sucrose</li></ul>
External Database Links	UniProt: <u>P12342</u> <u>Related reagents</u> Entrez Gene: <u>281861</u> IL2RA <u>Related reagents</u>
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the X63.Ag8.653 myeloma cell line.
Specificity	<ul> <li>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.</li> <li>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).</li> </ul>
Flow Cytometry	Use 10ul of the suggested working dilution to label $1 \times 10^6$ cells in 100ul
References	<ol> <li>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.</li> <li>Howard, C.J. &amp; Naessens, J. (1993) Summary of workshop findings for cattle (tables 1 and 2). Vet Immunol Immunopathol. 39 (1-3): 25-47.</li> <li>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.</li> <li>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.</li> <li>Evans, C.W. <i>et al.</i> (1994) Antigen recognition and activation of ovine gamma delta T cells. Immunology. 82 (2): 229-37.</li> <li>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.</li> <li>Connelley, T. <i>et al.</i> (2011) NKp46 defines ovine cells that have characteristics corresponding to NK cells. Vet Res. 42: 37.</li> <li>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.</li> <li>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.</li> </ol>

	<ol> <li>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</i> (<i>Boophilus</i>) <i>microplus</i>. <u>Clin Vaccine Immunol.</u> <u>16:1074-86</u>.</li> <li>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.</li> <li>Mcinnes, E. <i>et al.</i> (1999) Phenotypic analysis of local cellular responses in calves infected with bovine respiratory syncytial virus. <u>Immunology</u>. 96 (3): 396-403.</li> <li>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.</li> <li>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. <u>Exp Biol Med (Maywood)</u>. 228: 377-86.</li> <li>Menge, C. <i>et al.</i> (2019) Shiga toxin 1 from <i>Escherichia coli</i> blocks activation and proliferation of bovine lymphocyte subpopulations <i>in vitro</i>. <u>Infect Immun. 67: 2209-17.</u></li> <li>Constantinoiu, C.C. <i>et al.</i> (2010) Local immune response against larvae of <i>Rhipicephalus</i> (<i>Boophilus</i>) <i>microplus</i> in <i>Bos taurus indicus</i> and <i>Bos taurus</i> cattle. Int J Parasitol. 40: 865-75.</li> <li>Maślanka, T. <i>et al.</i> (2014) 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. Pol J Vet Sci. <u>15(1): 11-20.</u></li> <li>Brodzki, P. <i>et al.</i> (2014) Phenotyping of leukocytes and granulocyte and monocyte phagocytic activity in the peripheral blood and uterus of cows with endometritis. <u>Theriogenology. 82 (3): 403-10.</u></li> <li>Zoldan, K. <i>et al.</i> (2014) Increase of CD25 expression on bovine neutrophils corre</li></ol>
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 reconstitution.
Health And Safety Information	Material Safety Datasheet documentation #10075 available at: https://www.bio-rad-antibodies.com/SDS/MCA2430PE 10075

## **Related Products**

### **Recommended Negative Controls**

### MOUSE IgG1 NEGATIVE CONTROL:RPE (MCA928PE)

North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@t	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 'M300766:170106'

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