

# Datasheet: MCA2430F

**BATCH NUMBER 1610**

<b>Description:</b>	MOUSE ANTI BOVINE CD25:FITC
<b>Specificity:</b>	CD25
<b>Other names:</b>	IL-2R ALPHA CHAIN
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	IL-A111
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://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.

<b>Target Species</b>	Bovine
<b>Species Cross Reactivity</b>	<p>Reacts with: Sheep</p> <p><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.</p>
<b>Product Form</b>	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative</b>	0.09% Sodium Azide

Stabilisers	1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
External Database Links	<p><b>UniProt:</b></p> <p><a href="#">P12342</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b></p> <p><a href="#">281861</a> IL2RA    <a href="#">Related reagents</a></p>
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the X63.Ag8.653 myeloma cell line.
Specificity	<p><b>Mouse anti Bovine CD25 antibody, clone IL-A111</b> 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.</p> <p>Clone IL-A111 is reported to block the IL-2 driven proliferation of Con A-induced blast cells/ bovine lymphocytes (<a href="#">Naessens et al. 1992</a>).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label $1 \times 10^6$ cells in 100ul
References	<ol style="list-style-type: none"> <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. <a href="#">Immunology 76: 305-309.</a></li> <li>Howard, C.J. <i>et al.</i> (1993) Summary of workshop findings for cattle (Tables 1 and 2). <a href="#">Vet Immunol. Immunopathol. 39:25-48.</a></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. <a href="#">J. Immunol. 159: 5372-7382.</a></li> <li>Naessens, J. <i>et al.</i> (1993) Cross-reactivity of workshop antibodies with cells from domestic and wild ruminants. <a href="#">Vet. Immunol. Immunopathol. 39: 283-290.</a></li> <li>Evans, C.W. <i>et al.</i> (1994) Antigen recognition and activation of ovine gamma delta T cells. <a href="#">Immunology. 82: 229-237.</a></li> <li>Campbell, J.D.M. <i>et al.</i> (1998) A novel cell surface proliferation- associated marker expressed on T cells and up-regulated on germinal center B cells. <a href="#">J. Leukoc. Biol. 63: 567-574.</a></li> <li>Connelley, T. <i>et al.</i> (2011) NKp46 defines ovine cells that have characteristics corresponding to NK cells. <a href="#">Vet Res. Feb 42: 37.</a></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. <a href="#">J Med Microbiol. 53: 573-9.</a></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. <a href="#">J Gen Virol. 80 : 1673-9.</a></li> <li>Piper, E.K. <i>et al.</i> (2009) Immunological profiles of Bos taurus and Bos indicus cattle infested with the cattle tick, Rhipicephalus (Boophilus) microplus. <a href="#">Clin Vaccine Immunol. 16: 1074-86.</a></li> </ol>

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: 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- $\beta$ , but not IFN- $\gamma$ . [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.](#)

<b>Storage</b>	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. This product is photosensitive and should be protected from light.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
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<b>Guarantee</b>	18 months from date of despatch.
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<b>Health And Safety Information</b>	<p>Material Safety Datasheet documentation available at:  <a href="https://www.bio-rad-antibodies.com/SDS/MCA2430F">https://www.bio-rad-antibodies.com/SDS/MCA2430F</a></p> <p>Material Safety Datasheet Documentation #10041 available at:  <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf</a></p>
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<b>Regulatory</b>	For research purposes only
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## Related Products

## Recommended Negative Controls

### MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)

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