

Datasheet: MCA1736GA

BATCH NUMBER 150161

Description:	MOUSE ANTI PIG CD25
Specificity:	CD25
Other names:	IL-2R ALPHA CHAIN
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	K231.3B2
Isotype:	IgG1
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	▪			1/25 - 1/200
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	

Where this product 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 product for use in their own system using appropriate negative/positive controls.

Target Species	Pig
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)

Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Con A activated porcine peripheral blood lymphocytes.
External Database Links	<p>UniProt: O02733 Related reagents</p> <p>Entrez Gene: 396814 IL2RA Related reagents</p>
Fusion Partners	Spleen cells from immunised mice were fused with cells of the mouse P3-X63-Ag.8.653 myeloma cell line.
Specificity	<p>Mouse anti Pig CD25, clone K231.3B2 recognizes porcine CD25, the alpha chain of the interleukin 2 receptor (IL-2Rα), also known as the low affinity Interleukin 2 receptor. The IL-2 receptor exists in three forms, the high affinity heterodimer, the intermediate affinity β monomer and the low affinity α monomer configurations. Clone K231.3B2 was clustered as CD25 at the First International Workshop to Define Swine Cluster of Differentiation (CD) Antigens (Lunney et al. 1994).</p> <p>Mouse anti pig CD25, clone K231.3B2 immunoprecipitates a protein of ~65-70 kDa from activated lymphocyte preparations (Bailey et al. 1992).</p> <p>CD25 is a 270 amino acid single pass type I transmembrane glycoprotein containing 2 Sushi domains. Low expression of CD25 is seen on resting peripheral blood mononuclear cells, rapidly up-regulated following stimulation by concanavalin A and phorbol myristate acetate, indicative of its role as an activation antigen (Bullido et al. 1999).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 ⁶ cells in 100ul
References	<ol style="list-style-type: none"> Bailey, M. <i>et al.</i> (1992) A monoclonal antibody recognising an epitope associated with pig interleukin-2 receptors. J Immunol Methods. 153 (1-2): 85-91. Silva-Campa, E. <i>et al.</i> (2010) European genotype of porcine reproductive and respiratory syndrome (PRRSV) infects monocyte-derived dendritic cells but does not induce Treg cells. Virology. 396 (2): 264-71. Kick, A.R. <i>et al.</i> (2011) Evaluation of peripheral lymphocytes after weaning and vaccination for <i>Mycoplasma hyopneumoniae</i>. Res Vet Sci. 91 (3): e68-72. Silva-Campa, E. <i>et al.</i> (2009) Induction of T helper 3 regulatory cells by dendritic cells infected with porcine reproductive and respiratory syndrome virus. Virology. 387: 373-9. Leroith, T. <i>et al.</i> (2011) A modified live PRRSV vaccine and the pathogenic parent strain induce regulatory T cells in pigs naturally infected with <i>Mycoplasma hyopneumoniae</i>. Vet Immunol Immunopathol. 140: 312-6. Barker, E. <i>et al.</i> (2006) The larynx as an immunological organ: immunological architecture in the pig as a large animal model. Clin Exp Immunol. 143: 6-14.

7. Kuo, Y.R. *et al.* (2011) Prolongation of composite tissue allotransplant survival by treatment with bone marrow mesenchymal stem cells is correlated with T-cell regulation in a swine hind-limb model. [Plast Reconstr Surg. 127: 569-79.](#)
8. Young, D. *et al.* (2012) Soy-derived di- and tripeptides alleviate colon and ileum inflammation in pigs with dextran sodium sulfate-induced colitis. [J Nutr. 142: 363-8.](#)
9. Chattha, K.S. *et al.* (2013) Divergent immunomodulating effects of probiotics on T cell responses to oral attenuated human rotavirus vaccine and virulent human rotavirus infection in a neonatal gnotobiotic piglet disease model. [J Immunol. 191: 2446-56.](#)
10. Fan, B. *et al.* (2015) The 15N and 46R Residues of Highly Pathogenic Porcine Reproductive and Respiratory Syndrome Virus Nucleocapsid Protein Enhance Regulatory T Lymphocytes Proliferation. [PLoS One. 10 \(9\): e0138772.](#)
11. Williams, A.R. *et al.* (2016) Polymerization-dependent activation of porcine $\gamma\delta$ T-cells by proanthocyanidins. [Res Vet Sci. 105: 209-15.](#)
12. Suradhat, S. *et al.* (2016) Transdermal delivery of plasmid encoding truncated nucleocapsid protein enhanced PRRSV-specific immune responses. [Vaccine. 34 \(5\): 609-15.](#)
13. Pan, H. *et al.* (2016) Lymphodepletive effects of rabbit anti-pig thymocyte globulin in neonatal swines. [Transpl Immunol. 39: 74-83.](#)
14. Ferrari, L. *et al.* (2016) Phenotypic modulation of porcine CD14+ monocytes, natural killer/natural killer T cells and CD8 $\alpha\beta$ + T cell subsets by an antibody-derived killer peptide (KP). [Res Vet Sci. 109: 29-39.](#)
15. Sirisereewan, C. *et al.* (2017) Positive immunomodulatory effects of heterologous DNA vaccine- modified live vaccine, prime-boost immunization, against the highly-pathogenic PRRSV infection. [Vet Immunol Immunopathol. 183: 7-15.](#)
16. Singleton, H. *et al.* (2016) Establishing Porcine Monocyte-Derived Macrophage and Dendritic Cell Systems for Studying the Interaction with PRRSV-1. [Front Microbiol. 7: 832.](#)
17. An, C.H. *et al.* (2018) Plant synthetic GP4 and GP5 proteins from porcine reproductive and respiratory syndrome virus elicit immune responses in pigs. [Planta. 247 \(4\): 973-85.](#)
18. Nedumpun, T. *et al.* (2019) Negative Immunomodulatory Effects of Type 2 Porcine Reproductive and Respiratory Syndrome Virus-Induced Interleukin-1 Receptor Antagonist on Porcine Innate and Adaptive Immune Functions. [Front Immunol. 10: 579.](#)

Further Reading	1. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. Vet Res. 39: 54.
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. 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 #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA1736GA 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight@488 , DyLight@550 , DyLight@650 , DyLight@680 , DyLight@800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

Recommended Useful Reagents

[MOUSE ANTI PIG CD4 ALPHA:FITC \(MCA1749F\)](#)
[MOUSE ANTI PIG CD14:FITC \(MCA1218F\)](#)
[MOUSE ANTI PIG CD4 ALPHA:RPE \(MCA1749PE\)](#)
[MOUSE ANTI PIG wCD8 ALPHA:FITC \(MCA1223F\)](#)
[MOUSE ANTI PIG wCD8 ALPHA:RPE \(MCA1223PE\)](#)
[MOUSE ANTI PIG CD45:Alexa Fluor® 647 \(MCA1222A647\)](#)

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
----------------------------------	---	------------------	---	---------------	---

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

'M365636:200529'

Printed on 25 Mar 2023