

## Datasheet: MCA1736GA

**BATCH NUMBER 161424**

<b>Description:</b>	MOUSE ANTI PIG CD25
<b>Specificity:</b>	CD25
<b>Other names:</b>	IL-2R ALPHA CHAIN
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	K231.3B2
<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	▪			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.

<b>Target Species</b>	Pig
<b>Product Form</b>	Purified IgG - 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 Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )

<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Con A activated porcine peripheral blood lymphocytes.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">O02733</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">396814</a>    IL2RA    <a href="#">Related reagents</a></p>
<b>Fusion Partners</b>	Spleen cells from immunised mice were fused with cells of the mouse P3-X63-Ag.8.653 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Pig CD25, clone K231.3B2</b> recognizes porcine CD25, the alpha chain of the interleukin 2 receptor (IL-2R<math>\alpha</math>), also known as the low affinity Interleukin 2 receptor. The IL-2 receptor exists in three forms, the high affinity heterodimer, the intermediate affinity <math>\beta</math> monomer and the low affinity <math>\alpha</math> monomer configurations. Clone K231.3B2 was clustered as CD25 at the First International Workshop to Define Swine Cluster of Differentiation (CD) Antigens (<a href="#">Lunney et al. 1994</a>).</p> <p>Mouse anti pig CD25, clone K231.3B2 immunoprecipitates a protein of ~65-70 kDa from activated lymphocyte preparations (<a href="#">Bailey et al. 1992</a>).</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 (<a href="#">Bullido et al. 1999</a>).</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label $1 \times 10^6$ cells in 100ul
<b>References</b>	<ol style="list-style-type: none"> <li>Bailey, M. <i>et al.</i> (1992) A monoclonal antibody recognising an epitope associated with pig interleukin-2 receptors. <a href="#">J Immunol Methods. 153 (1-2): 85-91.</a></li> <li>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. <a href="#">Virology. 396 (2): 264-71.</a></li> <li>Kick, A.R. <i>et al.</i> (2011) Evaluation of peripheral lymphocytes after weaning and vaccination for <i>Mycoplasma hyopneumoniae</i>. <a href="#">Res Vet Sci. 91 (3): e68-72.</a></li> <li>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. <a href="#">Virology. 387: 373-9.</a></li> <li>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>. <a href="#">Vet Immunol Immunopathol. 140: 312-6.</a></li> <li>Barker, E. <i>et al.</i> (2006) The larynx as an immunological organ: immunological architecture in the pig as a large animal model. <a href="#">Clin Exp Immunol. 143: 6-14.</a></li> </ol>

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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.](#)
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13. Pan, H. *et al.* (2016) Lymphodepletive effects of rabbit anti-pig thymocyte globulin in neonatal swines. [Transpl Immunol. 39: 74-83.](#)
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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.](#)
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19. Christoforidou, Z. *et al.* (2019) Sexual Dimorphism in Immune Development and in Response to Nutritional Intervention in Neonatal Piglets. [Front Immunol. 10: 2705.](#)
20. Uehlein, S. *et al.* (2021) Human-like Response of Pig T Cells to Superagonistic Anti-CD28 Monoclonal Antibodies. [J Immunol .ji2100174.](#)
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22. Maciag, S.S. *et al.* (2022) The influence of source of porcine colostrum in development of early immune ontogeny in the piglet [Ses Sq. Mar 24 \[Epub ahead of print\].](#)

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**Further Reading**

1. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. [Vet Res. 39: 54.](#)

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**Storage**

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

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<b>Guarantee</b>	12 months from date of despatch
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1736GA">https://www.bio-rad-antibodies.com/SDS/MCA1736GA</a> 10040
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">Alk. Phos.</a> , <a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>

### 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 \(MCA1222A647\)](#)

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