Datasheet: MCA1736A647

Description:	MOUSE ANTI PIG CD25:Alexa Fluor® 647
Specificity:	CD25
Other names:	IL-2R ALPHA CHAIN
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	K231.3B2
Isotype:	IgG1
Quantity:	100 TESTS/1ml

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 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 conjugated to Alexa Fluorr® 647 - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
Alexa Fluor®647	650	665

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)
1% bovine serum albumin

Approx. Protein Concentrations

IgG concentration 0.05 mg/ml

Immunogen	Con A activated porcine peripheral blood lymphocytes.
External Database Links	**UniProt:** O02733 Related reagents **Entrez Gene:** 396814 IL2RA Related reagents
Fusion Partners	Spleen cells from immunized mice were fused with cells of the mouse P3-X63-Ag.8.653 myeloma cell line.
Specificity	**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). Mouse anti pig CD25, clone K231.3B2 immunoprecipitates a protein of ~65-70 kDa from activated lymphocyte preparations (Bailey *et al.* 1992). 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).
Flow Cytometry	Use 10µl of the suggested working dilution to label 1x10^6 cells in 100µl
References	1. Bailey, M. *et al.* (1992) A monoclonal antibody recognising an epitope associated with pig interleukin-2 receptors. J Immunol Methods. 153 (1-2): 85-91. 2. Barker, E. *et al.* (2006) The larynx as an immunological organ: immunological architecture in the pig as a large animal model. Clin Exp Immunol. 143: 6-14. 3. Silva-Campa, E. *et al.* (2009) Induction of T helper 3 regulatory cells by dendritic cells infected with porcine reproductive and respiratory syndrome virus. Virology. 387: 373-9. 4. Silva-Campa, E. *et al.* (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. 5. Kick, A.R. *et al.* (2011) Evaluation of peripheral lymphocytes after weaning and vaccination for *Mycoplasma hyopneumoniae*. Res Vet Sci. 91 (3): e68-72. 6. LeRoith, T. *et al.* (2011) A modified live PRRSV vaccine and the pathogenic parent strain induce regulatory T cells in pigs naturally infected with *Mycoplasma hyopneumoniae*. Vet Immunol Immunopathol. 140 (3-4): 312-6. 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.

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animal feed enhances immune response and improves intestinal microflora in pigs. Anim Sci J. 90 (9): 1248-60.
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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.
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.
Guarantee	12 months from date of despatch
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Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA1736A647 10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 (MCA928A647)

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

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