

Datasheet: MCA6406GA

Description:	MOUSE ANTI PIG CD28
Specificity:	CD28
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	3D11
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 - 1/50

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 supernatant	from tissue culture
Buffer Solution	Phosphate buffered saline	
Preservative Stabilisers	0.09% Sodium Azide	
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml	
Immunogen	A20J cells expressing pig CD28	
External Database Links	UniProt:	

Specificity

Mouse anti Pig CD28 antibody, clone 3D11 recognizes pig CD28.

CD28 is a co-stimulatory cell surface molecule expressed by T cell subsets. CD28 is the receptor for CD80 (B7.1) and CD86 (B7.2). Analogous to humans, CD28 is expressed on naive CD4+ and CD8+ T cells and nearly all CD4+ T cells with a central memory phenotype (CD8a+ CD27+ in pigs) with the latter expressing higher levels of CD28 than naive T cells. Approximately 50% of CD4+ effector memory T cells bear CD28; at levels similar to central memory CD4+ T cells.

Mouse anti Pig CD28 antibody, clone 3D11, has been shown to be able to detect CD28 on CD8+ and CD4+ $\alpha\beta$ T-cells (<u>Uehlein et al. 2021</u>). Among $\gamma\delta$ T cells, a small CD2+ subpopulation of phenotypically naive cells express CD28. *In vitro*, clone 3D11 can co-stimulate porcine T cells, inducing increased proliferation and cytokine secretion.

Flow Cytometry

Use 10ul of the suggested working dilution to label 1x10⁶ cells in 100ul

References

- 1. Hoog, A. *et al.* (2022) Identification of CD4(+) T cells with T follicular helper cell characteristics in the pig. <u>Dev Comp Immunol</u>. 134: 104462.
- 2. Vatzia, E. *et al.* (2019) Deoxynivalenol Affects Proliferation and Expression of Activation-Related Molecules in Major Porcine T-Cell Subsets. <u>Toxins (Basel). 11 (11):</u> 644.
- 3. Li, Y. *et al.* (2022) Systemic CD4 cytotoxic T cells improve protection against PRRSV-1 transplacental infection. <u>Front Immunol. 13: 1020227.</u>

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

Health And Safety Information

Material Safety Datasheet documentation #10040 available at:

https://www.bio-rad-antibodies.com/SDS/MCA6406GA

10040

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)

RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)

RPE
Goat Anti Mouse IgG (STAR76...)

RPE

Goat Anti Mouse IgG (STAR70...) FITC

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
Goat Anti Mouse IgG (STAR77...) HRP

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

 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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M426747:240228'

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