Datasheet: MCA5973GA

Description:	MOUSE ANTI PIG CD27
Specificity:	CD27
Other names:	SWC2
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	B30C7
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	Porcine peripheral blood monocytes.

External Database Links	**UniProt:** F1SL30 Related reagents
Fusion Partners	Spleen cells from immunized Balb/c mice were fused with cells of the SP2/0-Ag14 myeloma cell line
Specificity	**Mouse anti Pig CD27 antibody, clone B30C7** recognizes the porcine homologue of human CD27, previously known as Swine Workshop Cluster 2 (SWC2), a T-cell co-stimulatory molecule belonging to the TNF receptor family. In humans the CD27 antigen is expressed by discrete populations of T- and B-cells where it functions in a co-stimulatory role to induce proliferation of T-cells and B-cells, however studies undertaken using the B30C7 clone have been unable to detect expression of CD27 on porcine B-cells (Reutner *et al.* 2012). Studies in humans have demonstrated CD27 to be involved in apoptosis, research in swine has shown that porcine CD27 is expressed by all naïve $CD8a^{-ve}$ T-helper cells and a sub-population of $CD8a^{+ve}$ cells (Reutner *et al.* 2012). Monoclonal antibodies to CD27 have previously been used to differentiate between subsets of NK cells and research utilizing clone B30C7 has shown that this monoclonal antibody may be used to differentiate between subsets of pig NK cells (Mair *et al.* 2013).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul
References	1. Reutner, K. *et al.* (2012) Porcine CD27: identification, expression and functional aspects in lymphocyte subsets in swine. Dev Comp Immunol. 38: 321-31. 2. Reutner, K. *et al.* (2013) CD27 expression discriminates porcine T helper cells with functionally distinct properties. Vet Res. 44: 18. 3. Franzoni, G. *et al.* (2013) Assessment of the Phenotype and Functionality of Porcine CD8 T Cell Responses following Vaccination with Live Attenuated Classical Swine Fever Virus (CSFV) and Virulent CSFV Challenge. Clin Vaccine Immunol. 20: 1604-16. 4. Mair, K.H. *et al.* (2013) Porcine CD8αdim/-NKp46high NK cells are in a highly activated state. Vet Res. 44: 13.
Storage	Store at +4°C or at -20°C if preferred. This product should be stored undiluted. Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Shelf Life	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (H/L) (STAR117...)	DyLight®405, DyLight®488, DyLight®549, DyLight®649, DyLight®800, FITC

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

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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Printed on 05 May 2018