

## Datasheet: MCA5973PE

<b>Description:</b>	MOUSE ANTI PIG CD27:RPE
<b>Specificity:</b>	CD27
<b>Other names:</b>	SWC2
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	B30C7
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	100 TESTS

### 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	▪			Neat

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 conjugated to R. Phycoerythrin (RPE) - lyophilized		
<b>Reconstitution</b>	Reconstitute with 1ml distilled water		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	RPE 488nm laser	496	578
<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</b>	0.09% Sodium Azide (NaN <sub>3</sub> )		
<b>Stabilisers</b>	1% Bovine Serum Albumin		
	5% Sucrose		

<b>Immunogen</b>	Porcine peripheral blood monocytes.
<b>External Database Links</b>	<b>UniProt:</b> <a href="#">F1SL30</a> <a href="#">Related reagents</a>
<b>Fusion Partners</b>	Spleen cells from immunized Balb/c mice were fused with cells of the SP2/0-Ag14 myeloma cell line
<b>Specificity</b>	<p><b>Mouse anti Pig CD27 antibody, clone B30C7</b> 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, using the B30C7 clone, expression of CD27 on porcine B-cells appears undetectable (<a href="#">Reutner et al. 2012</a>).</p> <p>Porcine CD27 is expressed by all naïve CD8a<sup>-ve</sup> T-helper cells and a sub-population of CD8a<sup>+ve</sup> cells (<a href="#">Reutner et al. 2012</a>).</p> <p>Monoclonal antibodies to CD27 have previously been used to differentiate between subsets of NK cells and clone B30C7 may be used to differentiate between subsets of pig NK cells (<a href="#">Mair et al. 2013</a>).</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul
<b>References</b>	<ol style="list-style-type: none"> <li>1. Reutner, K. <i>et al.</i> (2012) Porcine CD27: identification, expression and functional aspects in lymphocyte subsets in swine. <a href="#">Dev Comp Immunol. 38: 321-31.</a></li> <li>2. Reutner, K. <i>et al.</i> (2013) CD27 expression discriminates porcine T helper cells with functionally distinct properties. <a href="#">Vet Res. 44: 18.</a></li> <li>3. Franzoni, G. <i>et al.</i> (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. <a href="#">Clin Vaccine Immunol. 20: 1604-16.</a></li> <li>4. Mair, K.H. <i>et al.</i> (2013) Porcine CD8αdim/-NKp46high NK cells are in a highly activated state. <a href="#">Vet Res. 44: 13.</a></li> <li>5. López, E. <i>et al.</i> (2019) Identification of very early inflammatory markers in a porcine myocardial infarction model. <a href="#">BMC Vet Res. 15 (1): 91.</a></li> <li>6. Maciag, S.S. <i>et al.</i> (2022) The influence of source of porcine colostrum in development of early immune ontogeny in the piglet <a href="#">Res Sq. Mar 24 [Epub ahead of print].</a></li> </ol>
<b>Storage</b>	<p>Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.</p> <p>DO NOT FREEZE.</p> <p>This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
<b>Guarantee</b>	12 months from date of despatch

---

**Health And Safety Information**      Material Safety Datasheet documentation #20487 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA5973PE>  
20487

---

**Regulatory**                      For research purposes only

---

## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

**North & South**      Tel: +1 800 265 7376

**America**              Fax: +1 919 878 3751

                            Email: [antibody\\_sales\\_us@bio-rad.com](mailto: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](mailto: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](mailto: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](https://www.bio-rad-antibodies.com/datasheets)

'M375620:210104'

**Printed on 25 Mar 2023**

---

© 2023 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)