

# Datasheet: MCA1751PE

**BATCH NUMBER 167634**

<b>Description:</b>	MOUSE ANTI PIG CD45RA:RPE
<b>Specificity:</b>	CD45RA
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MIL13
<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 antibody 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 antibody 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 1.0 ml 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 from tissue culture supernatant		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative Stabilisers</b>	0.09% sodium azide (NaN <sub>3</sub> )		
	1% bovine serum albumin		
	5% sucrose		

<b>Immunogen</b>	Cells isolated from porcine mesenteric lymph node
<b>RRID</b>	AB_323626
<b>Specificity</b>	<p><b>Mouse anti Pig CD45RA, clone MIL13</b>, recognizes an epitope contained in the portion of porcine CD45 encoded by exon A, CD45RA (<a href="#">Lunney et al. 2007</a>).</p> <p>Mouse anti pig CD45RA, clone MIL13 recognizes both the 210 kDa RA CD45 isoform and the 226 kDa RAC isoform (<a href="#">Zuckermann et al. 2001</a>). Clone MIL13 does not recognize the CD45RC or CD45RO isoforms.</p>
<b>Flow Cytometry</b>	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl
<b>References</b>	<ol style="list-style-type: none"> <li>1. Pakkanen, T.M. et al. (2000) Periadventitial lacZ gene transfer to pig carotid arteries using a biodegradable collagen collar or a wrap of collagen sheet with adenoviruses and plasmid-liposome complexes. <a href="#">J Gene Med. 2: 52-60.</a></li> <li>2. Terzic, S. et al. (2002) Immunophenotyping of leukocyte subsets in peripheral blood and palatine tonsils of prefattening pigs. <a href="#">Vet Res Commun. 26: 273-83.</a></li> <li>3. Bozić F et al. (2002) Recruitment of intestinal CD45RA+ and CD45RC+ cells induced by a candidate oral vaccine against porcine post-weaning colibacillosis. <a href="#">Vet Immunol Immunopathol. 86 (3-4): 137-46.</a></li> <li>4. Schierack, P. et al. (2009) Effects of <i>Bacillus cereus</i> var. <i>toyoi</i> on immune parameters of pregnant sows. <a href="#">Vet Immunol Immunopathol. 127: 26-37.</a></li> <li>5. Thierry, A. et al. (2012) Identification of invariant natural killer T cells in porcine peripheral blood. <a href="#">Vet Immunol Immunopathol. 149 (3-4): 272-9.</a></li> <li>6. Suzuki, S. et al. (2016) Generation and characterization of RAG2 knockout pigs as animal model for severe combined immunodeficiency. <a href="#">Vet Immunol Immunopathol. 178: 37-49.</a></li> <li>7. López, E. et al. (2019) Identification of very early inflammatory markers in a porcine myocardial infarction model. <a href="#">BMC Vet Res. 15 (1): 91.</a></li> <li>8. Li, K. et al. (2019) Generation of porcine monoclonal antibodies based on single cell technologies. <a href="#">Vet Immunol Immunopathol. 215: 109913.</a></li> <li>9. Forner, R. et al. (2021) Distribution difference of colostrum-derived B and T cells subsets in gilts and sows. <a href="#">PLoS One. 16 (5): e0249366.</a></li> <li>10. Ogihara, K. et al. (2022) A porcine lymphoma-derived cell line co-expressing IgM, IgG and IgA. <a href="#">J Vet Med Sci. 84 (6): 760-5.</a></li> <li>11. Zhao, H. et al. (2022) Development of <i>RAG2</i><sup>-/-</sup> <i>IL2Rγ</i><sup>-/-</sup> immune deficient FAH-knockout miniature pig. <a href="#">Front Immunol. 13: 950194.</a></li> <li>12. Haach, V. et al. (2023) A polyvalent virosomal influenza vaccine induces broad cellular and humoral immunity in pigs. <a href="#">Virol J. 20 (1): 181.</a></li> <li>13. Li, J. et al. (2024) Single-cell transcriptomic analysis reveals transcriptional and cell subpopulation differences between human and pig immune cells. <a href="#">Genes Genomics. 46 (3): 303-22.</a></li> </ol>
<b>Further Reading</b>	1. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. <a href="#">Vet Res. 39: 54.</a>
<b>Storage</b>	Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.

DO NOT FREEZE.

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.

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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 #20487 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1751PE">https://www.bio-rad-antibodies.com/SDS/MCA1751PE</a> 20487
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Negative Controls

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

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)  
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