

Datasheet: MCA1222PB

Description:	MOUSE ANTI PIG CD45:Pacific Blue®
Specificity:	CD45
Other names:	LCA
Format:	Pacific Blue®
Product Type:	Monoclonal Antibody
Clone:	K252.1E4
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 - 1/5

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 Pacific Blue - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Pacific Blue®	410	455
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	Porcine peripheral blood lymphocytes.
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the P3 - X63 - Ag.653 myeloma cell line.
Specificity	<p>Mouse anti Pig CD45, clone K252.1E4 recognizes an epitope common to all porcine CD45 isoforms (Schnitzlein et al. 1998). CD45 is also known as leukocyte common antigen (LCA).</p> <p>Mouse anti Pig CD45, clone K252.1E4 immunoprecipitates three polypeptides of 226, 210 and 190 kDa from preparations of porcine peripheral blood mononuclear cells and shows a broad reactivity pattern with both lymphoid and myeloid cells (Zuckermann et al. 1994).</p>
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 ⁶ cells in 100µl
References	<ol style="list-style-type: none"> 1. Terzic, S. <i>et al.</i> (2002) Immunophenotyping of leukocyte subsets in peripheral blood and palatine tonsils of prefattening pigs. Vet Res Commun. 26: 273-83. 2. Barker, E. <i>et al.</i> (2006) The larynx as an immunological organ: immunological architecture in the pig as a large animal model. Clin Exp Immunol. 143: 6-14. 3. Vilahur, G. <i>et al.</i> (2015) Roflumilast-induced Local Vascular Injury Is Associated with a Coordinated Proteome and Microparticle Change in the Systemic Circulation in Pigs. Toxicol Pathol. 43 (4): 569-80. 4. O'Leary, S. <i>et al.</i> (2004) Seminal plasma regulates endometrial cytokine expression, leukocyte recruitment and embryo development in the pig. Reproduction. 128: 237-47. 5. Zelnickova, P. <i>et al.</i> (2006) Postnatal functional maturation of blood phagocytes in pig. Vet Immunol Immunopathol. 113: 383-91. 6. Bimczok, D. <i>et al.</i> (2006) Phenotype and distribution of dendritic cells in the porcine small intestinal and tracheal mucosa and their spatial relationship to epithelial cells. Cell Tissue Res. 325: 461-8. 7. Nochi, T. <i>et al.</i> (2004) Biological role of Ep-CAM in the physical interaction between epithelial cells and lymphocytes in intestinal epithelium. Clin Immunol. 113: 326-39. 8. Bimczok, D. <i>et al.</i> (2010) Primary porcine CD11R1+ antigen-presenting cells isolated from small intestinal mucosa mature but lose their T cell stimulatory function in response to cholera toxin treatment. Vet Immunol Immunopathol. 134: 239-48. 9. Ebdrup, L. <i>et al.</i> (2008) Dynamic expression of the signal regulatory protein alpha and CD18 on porcine PBMC during acute endotoxaemia. Scand J Immunol. 68: 430-7. 10. Plánka, L. <i>et al.</i> (2009) Use of allogenic stem cells for the prevention of bone bridge formation in miniature pigs. Physiol Res. 58: 885-93. 11. Plánka, L. <i>et al.</i> (2009) Comparison of Preventive and Therapeutic Transplantations of Allogeneic Mesenchymal Stem Cells in Healing of the Distal Femoral Growth Plate Cartilage Defects in Miniature Pigs. Acta Vet. Brno 78: 293-302. 12. Plánka, L. <i>et al.</i> (2008) New options for management of posttraumatic articular cartilage defects. Rozhl Chir. 87: 42-5. 13. Splíchal, I. <i>et al.</i> (2002) <i>Escherichia coli</i> Administered into Pig Amniotic Cavity Appear in Fetal Airways and Attract Macrophages into Fetal Lungs. Physiol Res. 51: 523-8. 14. Juhássová, J. <i>et al.</i> (2011) Osteogenic differentiation of miniature pig mesenchymal stem cells in 2D and 3D environment. Physiol Res. 60: 559-71. 15. Heino, T.J. <i>et al.</i> (2012) Comparison of the osteogenic capacity of minipig and human

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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.](#)
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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/MCA1222PB>
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Regulatory For research purposes only

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Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Pacific Blue® \(MCA928PB\)](#)

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