

Datasheet: MCA1222GA

Description:	MOUSE ANTI PIG CD45
Specificity:	CD45
Other names:	LCA
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	K252.1E4
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			■	
Immunofluorescence	■			

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 1.0mg/ml
Immunogen	Porcine Peripheral Blood Lymphocytes.

Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the P3 - X63 - Ag.653 myeloma cell line.
Specificity	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). 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).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	1. Yang, P. <i>et al.</i> (2002) Immune cells in the porcine retina: distribution, characterization and morphological features. Invest Ophthalmol Vis Sci. 43 (5): 1488-92. 2. 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. 3. 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. 4. 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. 5. 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. 6. Zelnickova, P. <i>et al.</i> (2006) Postnatal functional maturation of blood phagocytes in pig. Vet Immunol Immunopathol. 113: 383-91. 7. 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. 8. 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. 9. 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. 10. 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. 11. 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. 12. 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. 13. Plánka, L. <i>et al.</i> (2008) New options for management of posttraumatic articular cartilage defects. Rozhl Chir. 87: 42-5. 14. 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. 15. Juhászová, J. <i>et al.</i> (2011) Osteogenic differentiation of miniature pig mesenchymal stem cells in 2D and 3D environment. Physiol Res. 60: 559-71. 16. Heino, T.J. <i>et al.</i> (2012) Comparison of the osteogenic capacity of minipig and human bone marrow-derived mesenchymal stem cells. J Orthop Res. 30: 1019-25. 17. Stepanova, H. <i>et al.</i> (2012) CD4+ and γδTCR+ T lymphocytes are sources of interleukin-17 in swine. Cytokine. 58: 152-7. 18. Hester, S.N. <i>et al.</i> (2012) Intestinal and systemic immune development and response to vaccination are unaffected by dietary (1,3/1,6)-β-D-glucan supplementation in neonatal piglets. Clin Vaccine Immunol. 19: 1499-508.

19. Noort, W.A. *et al.* (2011) Human versus porcine mesenchymal stromal cells: phenotype, differentiation potential, immunomodulation and cardiac improvement after transplantation. [J Cell Mol Med. 16: 1827-39.](#)
20. Thorum, S.C. *et al.* (2013) Impact of diet on development of bronchial-associated immunity in the neonatal piglet. [Vet Immunol Immunopathol. 151: 63-72.](#)
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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.
Storage	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. 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

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Human Anti Mouse IgG1 (HCA036...)	HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®549 , DyLight®649 , DyLight®680 , DyLight®800 , FITC , HRP

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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