

Datasheet: MCA1447GA

Description:	MOUSE ANTI PIG CD45 ALLOTYPIC VARIANT
Specificity:	CD45 ALLOTYPIC VARIANT
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	MAC323
Isotype:	IgG2a
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 - 1/100
Immunohistology - Frozen	▪			1/10
Immunohistology - Paraffin	▪			1/10
Immunohistology - Resin (1)	▪			1/10
Immunoprecipitation	▪			

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.

(1) This product requires antigen retrieval using heat treatment of resin sections. This product does not require antigen retrieval prior to staining paraffin sections.

Target Species	Pig
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A
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 lymphocytes

Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the mouse NS1 myeloma cell line
Specificity	Mouse anti Pig CD45 allotypic variant antibody, clone MAC323 recognizes an allotypic determinant of porcine CD45, also known as the leucocyte common antigen (LCA). The antibody has been shown to recognize CD45 in pigs of the Large White and German Landrace strains. Another antibody, clone K252.1E4 , recognizes a monomorphic determinant on porcine CD45. When K252.1E4 is used in conjunction with MAC323, it can be shown that MAC323 stains a subset of the leukocytes that are detected by K252.1E4; indicating a loss of the epitope in MAC323 ^{-ve} animals rather than loss of the CD45 antigen. Cross-breeding studies in positive vs. negative animals indicate that the MAC323 gene is inherited in a simple Mendelian autosomal dominant pattern (Binns et al. 1995).
References	<ol style="list-style-type: none"> 1. Binns, R.M. <i>et al.</i> (1995) Genetically determined CD45 variant of value in leucocyte tracing <i>in vivo</i> in the pig. Immunology 86: 25-33. 2. Goodchild, T. <i>et al.</i> (2006) Safety of intramyocardial injection of autologous bone marrow cells to treat myocardial ischemia in pigs. Cardiovasc Revasc Med. 7: 136-45. 3. Anttila, A. <i>et al.</i> (2003) T-cell-mediated mucosal immunity is attenuated in experimental necrotizing enterocolitis. Pediatr Surg Int. 19: 326-30. 4. Richter, Y. <i>et al.</i> (2004) Dynamic flow alterations dictate leukocyte adhesion and response to endovascular interventions. J Clin Invest. 113: 1607-14. 5. Kozian, A. <i>et al.</i> (2010) Increased alveolar damage after mechanical ventilation in a porcine model of thoracic surgery. J Cardiothorac Vasc Anesth. 24 (4): 617-23. 6. Nugent, H.M. <i>et al.</i> (2012) Ultrasound-guided percutaneous delivery of tissue-engineered endothelial cells to the adventitia of stented arteries controls the response to vascular injury in a porcine model. J Vasc Surg. 56 (4): 1078-88. 7. VanDitzhuijzen, N.S. <i>et al.</i> (2017) Neoatherosclerosis development following bioresorbable vascular scaffold implantation in diabetic and non-diabetic swine. PLoS One. 12 (9): e0183419.
Further Reading	1. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. Vet Res. 39: 54.
Storage	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>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.</p>
Guarantee	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 IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)

Goat Anti Mouse IgG (STAR77...) [HRP](#)

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)

Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Human Anti Mouse IgG2a (HCA037...)	FITC , 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 IgG2a NEGATIVE CONTROL \(MCA929\)](#)

Recommended Useful Reagents

[MOUSE ANTI PIG CD3:FITC \(MCA5951F\)](#)

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