Datasheet: MCA637GA

BATCH NUMBER 147843

Description:	MOUSE ANTI PIG IgM
Specificity:	IgM
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	K52 1C3
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	▪			
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA	▪			1/5000 - 1/100,000
Immunoprecipitation			▪	
Western Blotting			▪	

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 1.0 mg/ml
Immunogen	Porcine IgM
Fusion Partners	Spleen cells of immunised mice were fused with cells of the P3 - X63 - Ag 8.653 mouse myeloma line.
Specificity	**Mouse anti Pig IgM antibody, clone K52 1C3** recognizes porcine IgM heavy chain. No cross-reactivity with porcine IgA and IgG is seen in ELISA.
Flow Cytometry	Use 10ul of the suggested working dilution to label $1x10^6$ cells in 100ul
References	1. Leitão, A. *et al.* (2001) The non-haemadsorbing African swine fever virus isolate ASFV/NH/P68 provides a model for defining the protective anti-virus immune response. J Gen Virol. 82 (Pt 3): 513-23. 2. Baltes, N. *et al.* (2001) Actinobacillus pleuropneumoniae iron transport and urease activity: effects on bacterial virulence and host immune response. Infect Immun. 69 (1): 472-8. 3. Hamano, M. *et al.* (2007) Detection of antibodies to Japanese encephalitis virus in the wild boars in Hiroshima prefecture, Japan. Epidemiol Infect. 135: 974-7. 4. Andersen, J.K. *et al.* (1999) Systematic characterization of porcine ileal Peyer's patch, I. apoptosis-sensitive immature B cells are the predominant cell type. Immunology. 98 (4): 612-21. 5. Bailey, M. (2004) Effects of infection with transmissible gastroenteritis virus on concomitant immune responses to dietary and injected antigens. Clin Diagn Lab Immunol. 11: 337-43. 6. Pasternak, J.A. *et al.* (2015) Oral antigen exposure in newborn piglets circumvents induction of oral tolerance in response to intraperitoneal vaccination in later life. BMC Vet Res. 11: 350. 7. Seele, J. *et al.* (2015) The immunoglobulin M-degrading enzyme of Streptococcus suis, IdeSsuis, is a highly protective antigen against serotype 2. Vaccine. 33 (19): 2207-12. 8. Stepanova, H. *et al.* (2011) Association of attenuated mutants of *Salmonella enterica* serovar Enteritidis with porcine peripheral blood leukocytes. FEMS Microbiol Lett. 321: 37-42. 9. Laycock, G. *et al.* (2012) A defined intestinal colonization microbiota for gnotobiotic pigs. Vet Immunol Immunopathol. 149: 216-24. 10. Lewis MC *et al.* (2013) Dietary supplementation with Bifidobacterium lactis NCC2818 from weaning reduces local immunoglobulin production in lymphoid-associated tissues but increases systemic antibodies in healthy neonates. Br J Nutr. 110: 1243-52. 11. Chen, F. *et al.* (2015) Generation of B Cell-Deficient Pigs by Highly Efficient CRISPR/Cas9-Mediated Gene Targeting. J Genet Genomics. 42 (8): 437-44. 12. Rahe, M.C. & Murtaugh, M.P. (2017) Interleukin-21 Drives Proliferation and Differentiation of Porcine Memory B Cells into Antibody Secreting Cells. PLoS One. 12 (1): e0171171. 13. Buermann, A. *et al.* (2018) Pigs expressing the human inhibitory ligand PD-L1 (CD 274) provide a new source of xenogeneic cells and tissues with low immunogenic properties. Xenotransplantation. 25 (5): e12387.

14. Corsaut, L. *et al.* (2020) Field Study on the Immunological Response and Protective Effect of a Licensed Autogenous Vaccine to Control *Streptococcus suis* Infections in Post-Weaned Piglets. Vaccines (Basel). 8 (3): 384.

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.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA637GA 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

'M368744:200529'

Printed on 18 Jan 2024