Datasheet: MCA635GA

BATCH NUMBER 171441

Description:	MOUSE ANTI PIG IgG1
Specificity:	IgG1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	K139 3C8
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		▪		
Immunohistology - Resin		▪		
ELISA	▪			1/50 - 1/5000
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 IgG1.
Fusion Partners	Spleen cells from immunised mice were fused with cells of the mouse P3-X63-Ag8.653 myeloma cell line.
Specificity	**Mouse anti Pig IgG1, clone K139 3C8** recognizes porcine IgG1 and no cross-reaction has been observed with porcine IgA, IgG2 or IgM. IgG1, along with IgG2 (IgG2a and IgG2b), IgG3 and IgG4 comprise the major known subclasses of IgG in swine. Combined, the various subclasses of IgG comprise approximately 85% of immunoglobulin in porcine serum. In addition to clone K139 3C8, a range of monoclonal antibodies recognizing other porcine IgG subclasses and immunoglobulins are available.
References	1. Rivera, E. *et al*. (2003) Ginseng extract in aluminium hydroxide adjuvanted vaccines improves the antibody response of pigs to porcine parvovirus and *Erysipelothrix rhusiopathiae*. Vet. Immunol. Immunopathol. 91; 19 - 27. 2. Weber, T.E. and Spurlock, M.E. (2004) Leptin alters antibody isotype in the pig *in vivo*, but does not regulate cytokine expression or stimulate STAT3 signaling in peripheral blood monocytes *in vitro*. J Anim Sci. 82: 1630-40. 3. Bailey, M. *et al.* (2004) Effects of infection with transmissible gastroenteritis virus on concomitant immune responses to dietary and injected antigens. Clin Diagn Lab Immunol. 11: 337-43. 4. Nejsum, P. *et al.* (2009) Population dynamics of *Trichuris suis* in trickle-infected pigs. Parasitology. 136: 691-7. 5. Baums, C.G. *et al.* (2010) Immunogenicity of an autogenous Streptococcus suis bacterin in preparturient sows and their piglets in relation to protection after weaning. Clin Vaccine Immunol. 17: 1589-97. 6. Rodríguez-Calvo, T. *et al.* (2010) New vaccine design based on defective genomes that combines features of attenuated and inactivated vaccines. PLoS One. 5: e10414. 7. Tian, F. *et al.* (2010) Immune Events Associated with High Level Protection against *Schistosoma japonicum* Infection in Pigs Immunized with UV-Attenuated Cercariae. PLoS One. 5(10): e13408. 8. Lin, D. *et al.* (2011) Multiple vaccinations with UV- attenuated cercariae in pig enhance protective immunity against *Schistosoma japonicum* infection as compared to single vaccination. Parasit Vectors. 4:103. 9. Jayashi, C.M. *et al.* (2012) Characterisation of antibody responses in pigs induced by recombinant oncosphere antigens from *Taenia solium*. Vaccine. 30 (52): 7475-80. 10. Schmied, J. *et al.* (2012) Effect of Heat-Killed Escherichia coli, Lipopolysaccharide, and Muramyl Dipeptide Treatments on the Immune Response Phenotype and Allergy in Neonatal Pigs Sensitized to the Egg White Protein Ovomucoid. Clin Vaccine Immunol. 19: 1955-64.

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12. Pasternak JA *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 (1): 350.
13. Blanco, E. *et al.* (2016) Full protection of swine against foot-and-mouth disease by a bivalent B-cell epitope dendrimer peptide. Antiviral Res. 129: 74-80.
14. Williams, A.R. *et al.* (2017) Dietary cinnamaldehyde enhances acquisition of specific antibodies following helminth infection in pigs. Vet Immunol Immunopathol. 189: 43-52.
15. Williams, A.R. *et al.* (2017) A polyphenol-enriched diet and Ascaris suum infection modulate mucosal immune responses and gut microbiota composition in pigs. PLoS One. 12 (10): e0186546.
16. Grodeland, G. *et al.* (2020) Targeting of HA to chemokine receptors induces strong and cross-reactive T cell responses after DNA vaccination in pigs. Vaccine. 38 (6): 1280-5.
17. Cañas-Arranz, R. *et al.* (2020) A bivalent B-cell epitope dendrimer peptide can confer long-lasting immunity in swine against foot-and-mouth disease. Transbound Emerg Dis. 67 (4): 1614-1622.
18. Urbano, A.C. *et al.* (2023) Targeted mutagenesis of the β-strand DNA binding region of African swine fever virus histone-like protein (pA104R) impairs DNA-binding activity and antibody recognition. Antiviral Res. : 105784.

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
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA635GA
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
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC

Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

Recommended Useful Reagents

MOUSE ANTI PIG IgG2 (MCA636GA)
MOUSE ANTI PIG IgA (MCA638GA)

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M383702:210513'

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