

## Datasheet: MCA636GA

**BATCH NUMBER 167679**

<b>Description:</b>	MOUSE ANTI PIG IgG2
<b>Specificity:</b>	IgG2
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	K68 Ig2
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			1/1000 - 1/50,000
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.

<b>Target Species</b>	Pig
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Carrier Free</b>	Yes

<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Porcine IgG2
<b>Fusion Partners</b>	Spleen cells from immunised mice were fused with cells of the mouse P3-X63-Ag8.653 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Pig IgG2, clone K68 Ig2</b> recognizes porcine IgG2 and shows no cross-reactivity with IgG1, IgA or IgM. IgG2 (IgG2a and IgG2b), along with IgG1, 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.</p> <p>Porcine IgG2 and Ifn-<math>\gamma</math> levels are significantly elevated in parasite infections by worm species such as <i>Schistosoma japonicum</i> (Tian, F. <i>et al.</i> 2010). Antibodies recognizing porcine immunoglobulins such as clone K68 Ig2 have potential use in porcine vaccine development assays (Rodríguez-Calvo <i>et al.</i> 2010).</p> <p>Clone K68 Ig2 forms part of a range of monoclonal antibodies specific for porcine immunoglobulins and immunoglobulin subclasses available from Bio-Rad.</p>

**References**

- 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 \(1\): 19-27.](#)
- Nejsum, P. *et al.* (2009) Population dynamics of *Trichuris suis* in trickle-infected pigs. [Parasitology. 136:691-7.](#)
- 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. 2010 Oct 15;5\(10\):e13408.](#)
- 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.](#)
- 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.](#)
- Lefevre, E.A. *et al.* (2012) Immune responses in pigs vaccinated with adjuvanted and non-adjuvanted A(H1N1)pdm/09 influenza vaccines used in human immunization programmes. [PLoS One. 7: e32400.](#)
- Baums CG *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 \(10\): 1589-97.](#)
- 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.](#)
- 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.](#)
- 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 Ovomuroid. [Clin Vaccine Immunol.](#)

[19:1955-64.](#)

11. 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.](#)

12. 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 \(1\): 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. Mar 5. pii: S0166-3542\(16\)30132-2. \[Epub ahead of print\]](#)

14. Goyette-Desjardins G *et al.* (2016) Protection against *Streptococcus suis* Serotype 2 Infection Using a Capsular Polysaccharide Glycoconjugate Vaccine. [Infect Immun. 84 \(7\): 2059-75.](#)

15. Williams, A.R. *et al.* (2017) Dietary cinnamaldehyde enhances acquisition of specific antibodies following helminth infection in pigs. [Vet Immunol Immunopathol. 189: 43-52.](#)

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 \(4\): 1614-22.](#)

18. Urbano, A.C. *et al.* (2023) Targeted mutagenesis of the  $\beta$ -strand DNA binding region of African swine fever virus histone-like protein (pA104R) impairs DNA-binding activity and antibody recognition. [Antiviral Res. : 105784.](#)

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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.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information**

Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA636GA>  
10040

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**Regulatory**

For research purposes only

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## 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 \(MCA928\)](#)

### **Recommended Useful Reagents**

[MOUSE ANTI PIG IgG1 \(MCA635GA\)](#)

[MOUSE ANTI PIG IgA \(MCA638GA\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)

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