

Datasheet: MCA1335GA

## **BATCH NUMBER 1808**

MOUSE ANTI PIG SLA CLASS II DQ
SLA CLASS II DQ
Purified
Monoclonal Antibody
K274.3G8
lgG1
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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	•			1/10 - 1/100
Immunohistology - Frozen	•			
Immunohistology - Paraffin	•			
ELISA				
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
Species Cross Reactivity	Reacts with: Bovine <b>N.B.</b> Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.
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 <sub>3</sub> )
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Porcine peripheral blood lymphocytes
Fusion Partners	Spleen cells from immunized mice were fused with cells of the P3-X63-Ag.653 myeloma cell line
Specificity	Mouse anti Pig SLA Class II DQ antibody, clone K274.3G8 recognizes SLA DQ molecules which are expressed on all B cells, antigen presenting cells and on certain subsets of resting and activated T cells. The major histocompatibility complex (MHC) is a cluster of genes that are important in the immune response to infections. In pigs, this is referred to as the swine leukocyte antigen (SLA) region. There are 3 major MHC class II proteins encoded by the SLA which are SLA DP, SLA DQ and SLA DR.
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul
References	1. Lunney, J.K. (1993) Characterization of swine leukocyte differentiation antigens. Immunol Today 14: 147-8.  2. Brodersen, R. et al. (1998) Analysis of the immunological cross reactivities of 213 well characterized monoclonal antibodies with specificities against various leucocyte surface antigens of human and 11 animal species. Vet Immunol Immunopathol. 64: 1-13.  3. Sarradell, J. et al. (2003) A morphologic and immunohistochemical study of the bronchus-associated lymphoid tissue of pigs naturally infected with Mycoplasma hyopneumoniae. Vet Pathol. 40: 395-404.  4. Inman, C.F. et al. (2010) Dendritic cells interact with CD4 T cells in intestinal mucosa. J Leukoc Biol. 88: 571-8.  5. Faure, J.P. et al. (2002) Polyethylene glycol reduces early and long-term cold ischemia-reperfusion and renal medulla injury. J Pharmacol Exp Ther. 302: 861-70.  6. Hauet, T. et al. (2002) Polyethylene glycol reduces the inflammatory injury due to cold ischemia/reperfusion in autotransplanted pig kidneys. Kidney Int. 62: 654-67.  7. Paillot, R. et al. (2001) Functional and phenotypic characterization of distinct porcine dendritic cells derived from peripheral blood monocytes. Immunology 102: 396-404.  8. Yang, P. et al. (2002) Immune cells in the porcine retina: distribution, characterization and morphological features. Invest Ophthalmol Vis Sci. 43: 1488-92.  9. Jayle, C. et al. (2007) Comparison of protective effects of trimetazidine against experimental warm ischemia of different durations: early and long-term effects in a pig kidney model. Am J Physiol Renal Physiol. 292: F1082-93.  10. Park, J.Y. et al. (2008) Characterization of interaction between porcine reproductive and respiratory syndrome virus and porcine dendritic cells. J Microbiol Biotechnol. 18: 1709-16.

- 11. Maasilta, P.K. *et al.* (2005) Immune cells in a heterotopic lamb-to-pig bronchial xenograft model. Transpl Int. 18: 1100-8.
- 12. Weesendorp E *et al.* (2013) Phenotypic modulation and cytokine profiles of antigen presenting cells by European subtype 1 and 3 porcine reproductive and respiratory syndrome virus strains *in vitro* and *in vivo*. <u>Vet Microbiol. 167 (3-4): 638-50.</u>
- 13. Makala, L.H. *et al.* (2001) Ontogeny of pig discrete Peyer's patches: expression of surface antigens. J Vet Med Sci. 63 (6): 625-36.
- 14. Facci, M.R. *et al.* (2010) A comparison between isolated blood dendritic cells and monocyte-derived dendritic cells in pigs. <u>Immunology</u>. 129 (3): 396-405.
- 15. Edamura, K. *et al.* (2005) Effect of long-term culture on the expression of antigens and adhesion molecule in single porcine pancreatic endocrine cells. <u>Xenotransplantation. 12</u> (4): 327-32.
- 16. Debeer, S. *et al.* (2013) Comparative histology and immunohistochemistry of porcine versus human skin. Eur J Dermatol. 23 (4): 456-66.
- 17. Loss, H. *et al.* (2018) Effects of a pathogenic ETEC strain and a probiotic *Enterococcus faecium* strain on the inflammasome response in porcine dendritic cells. <u>Vet Immunol Immunopathol.</u> 203: 78-87.
- 18. Vreman, S. *et al.* (2018) Neonatal porcine blood derived dendritic cell subsets show activation after TLR2 or TLR9 stimulation. <u>Dev Comp Immunol</u>. 84: 361-70.
- 19. LeLuduec, J.B. *et al.* (2016) Intradermal vaccination with un-adjuvanted sub-unit vaccines triggers skin innate immunity and confers protective respiratory immunity in domestic swine. Vaccine. 34 (7): 914-22.

#### **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.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1335GA">https://www.bio-rad-antibodies.com/SDS/MCA1335GA</a> 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...)

Goat Anti Mouse IgG (STAR70...) FITC

Rabbit Anti Mouse IgG (STAR13...) <u>HRP</u>
Goat Anti Mouse IgG (Fc) (STAR120...) <u>FITC, HRP</u>

Rabbit Anti Mouse IgG (STAR9...) FITC

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550,

DyLight®650, DyLight®680, DyLight®800,

FITC, HRP

**HRP** 

# **Recommended Negative Controls**

Goat Anti Mouse IgG (STAR77...)

### MOUSE IgG1 NEGATIVE CONTROL (MCA928)

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M365171:200529'

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