

Datasheet: MCA2314F

Description:	MOUSE ANTI PIG SLA CLASS II DR:FITC
Specificity:	SLA CLASS II DR
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	2E9/13
Isotype:	IgG2b
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	▪			Neat

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

Target Species

Pig

Species Cross Reactivity

Reacts with: Bovine

N.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 conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525

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

1% Bovine Serum Albumin

Approx. Protein Concentrations

IgG concentration 0.1 mg/ml

Immunogen

Porcine monocytes.

External Database Links**UniProt:**

[Q85ZW4](#)

[Related reagents](#)

RRID

AB_567376

Fusion Partners

Spleen cells from immunised BALB/c mice were fused with cells of the mouse X63-Ag.8.653 myeloma cell line.

Specificity

Mouse anti Pig SLA Class II DR antibody, clone 2E9/13 recognizes SLA DR molecules which are expressed on all B cells, antigen presenting cells and on certain subsets of resting and activated T cells. Mouse anti Pig SLA Class II DR antibody, clone 289/13 reacts with lymphocytes from all outbred and miniature pigs so far tested, suggesting that it recognizes a monomorphic determinant of porcine SLA DR.

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.

Mouse anti pig SLA class II DR, clone 2E9/13 immunoprecipitates a heterodimer composed of two polypeptides of ~28 and ~35 kDa from NP-40 extracts of biotin surface-labeled porcine peripheral blood mononuclear cells. Mouse anti Pig SLA Class II DR antibody, clone 289/13 is reported to inhibit the mixed lymphocyte reaction and T cell stimulation induced by African swine fever virus and staphylococcal enterotoxin B ([Bullido *et al.* 1997](#)).

Flow Cytometry

Use 10ul of the suggested working dilution to 1×10^6 cells in 100ul.

References

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2. Jeong, H.J. *et al.* (2010) Comparative measurement of cell-mediated immune responses of swine to the M and N proteins of porcine reproductive and respiratory syndrome virus. [Clin Vaccine Immunol. 17: 503-12.](#)
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4. Wang, Y. *et al.* (2016) Genipin crosslinking reduced the immunogenicity of xenogeneic decellularized porcine whole-liver matrices through regulation of immune cell proliferation and polarization. [Sci Rep. 6: 24779.](#)

5. Park KM *et al.* (2013) Generation of porcine induced pluripotent stem cells and evaluation of their major histocompatibility complex protein expression in vitro. [Vet Res Commun. 37 \(4\): 293-301.](#)
6. Iwase H *et al.* (2015) Initial *in vivo* experience of pig artery patch transplantation in baboons using mutant MHC (CIITA-DN) pigs. [Transpl Immunol. 32 \(2\): 99-108.](#)
7. Singleton, H. *et al.* (2016) Establishing Porcine Monocyte-Derived Macrophage and Dendritic Cell Systems for Studying the Interaction with PRRSV-1. [Front Microbiol. 7: 832.](#)
8. Zanotti, C. *et al.* (2015) Differential Biological Activities of Swine Interferon- α Subtypes. [J Interferon Cytokine Res. 35 \(12\): 990-1002.](#)
9. Rayat GR *et al.* (2016) First update of the International Xenotransplantation Association consensus statement on conditions for undertaking clinical trials of porcine islet products in type 1 diabetes - Chapter 3: Porcine islet product manufacturing and release testing criteria. [Xenotransplantation. 23 \(1\): 38-45.](#)
10. Mašek J *et al.* (2016) Multi-layered nanofibrous mucoadhesive films for buccal and sublingual administration of drug-delivery and vaccination nanoparticles - important step towards effective mucosal vaccines. [J Control Release. Jul 25. pii: S0168-3659\(16\)30471-0 \[Epub ahead of print\]](#)
11. Gardner, D.S. *et al.* (2016) Remote effects of acute kidney injury in a porcine model. [Am J Physiol Renal Physiol. 310 \(4\): F259-71.](#)
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. López, E. *et al.* (2019) Identification of very early inflammatory markers in a porcine myocardial infarction model. [BMC Vet Res. 15 \(1\): 91.](#)
14. Yang, N. *et al.* (2018) Reduced antigen presentation capability and modified inflammatory/immunosuppressive cytokine expression of induced monocyte-derived dendritic cells from peripheral blood of piglets infected with porcine circovirus type 2. [Arch Virol. 163 \(5\): 1231-9.](#)
15. Liu, S. *et al.* (2019) Endothelial IL-8 induced by porcine circovirus type 2 affects dendritic cell maturation and antigen-presenting function. [Virology. 16 \(1\): 154.](#)
16. Radlowski, E.C. *et al.* (2021) Combination-Feeding Causes Differences in Aspects of Systemic and Mucosal Immune Cell Phenotypes and Functions Compared to Exclusive Sow-Rearing or Formula-Feeding in Piglets. [Nutrients. 13\(4\):1097.](#)
17. Franzoni, G. *et al.* (2022) Analyses of the Impact of Immunosuppressive Cytokines on Porcine Macrophage Responses and Susceptibility to Infection to African Swine Fever Viruses. [Pathogens. 11 \(2\): 166.](#)

Further Reading

1. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. [Vet Res. 39: 54.](#)

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. This product is photosensitive and should be protected from light.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10041 available at:
10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL:FITC \(MCA691F\)](#)

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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://www.bio-rad-antibodies.com/datasheets)

'M385154:210513'

Printed on 17 May 2022

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