

Datasheet: MCA2307F

Description:	MOUSE ANTI PIG CD5:FITC
Specificity:	CD5
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	1H6/8
Isotype:	lgG2a
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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	-			Neat - 1/10
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 conjugate	ed to Fluorescein Isoth	niocyanate Isomer	1 (FITC) - liquid
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm	1)
	FITC	490	525	
Preparation	Purified IgG prepared supernatant	by affinity chromatog	raphy on Protein G	from tissue culture
Buffer Solution	Phosphate buffered sa	aline		
Preservative	0.09% sodium azide (	NaN <sub>3</sub> )		
Stabilisers	1% bovine serum albu	umin		
Approx. Protein Concentrations	IgG concentration 0.1	mg/ml		

Immunogen	ConA/PMA activated porcine peripheral blood cells.
External Database Links	UniProt:  Q9GMA0 Related reagents
RRID	AB_566839
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the mouse X63-Ag.8.653 myeloma cell line.
Specificity	Mouse anti Pig CD5 antibody, clone 1H6/8 recognizes pig CD5. Clone 1H6/8 was clustered as CD5a at the Second International Swine CD antigen Workshop (Saalmuller et al. 1998), based on its cellular distribution, ability to completely inhibit the binding of monoclonal antibody clone b53b7, the internal control for the second workshop and the immunoprecipitation of the same 55 kDa + 60 kDa doublet as the control antibody (Pescowitz et al. 1998). Porcine CD5 is expressed by all circulating peripheral blood T lymphocytes and some B cells. CD5 is not expressed by porcine γ/δ T cells (Saalmuller et al. 1994) and can hence be used for the discrimination between NK cells (CD4- CD8+ CD5-) and MHC-restricted cytotoxic T cells (CD4- CD8+ CD5+).
	No reactivity of Mouse anti Pig CD5 antibody, clone 1H6/8 was noted with canine, bovine, equine or human tissue samples ( <u>Doménech et al. 2003</u> ).
Flow Cytometry	Use 10μl of the suggested working dilution to 1x10 <sup>6</sup> cells in 100μl
References	1. Pescovitz, M.D. <i>et al.</i> (1998) Analyses of monoclonal antibodies reacting with porcine CD5: results from the Second International Swine CD Workshop. <u>Vet Immunol Immunopathol. 60 (3-4): 269-73.</u>
	2. Saalmüller, A. <i>et al.</i> (1998) Overview of the Second International Workshop to define swine cluster of differentiation (CD) antigens. <u>Vet Immunol Immunopathol. 60 (3-4):</u> 207-28.
	3. Doménech, N. <i>et al.</i> (2003) A new epitope on swine CD5 molecule detected by monoclonal antibody 5F12/9. <u>Hybrid Hybridomics. 22 (3): 179-82.</u>
	<ol> <li>Sánchez-Torres, C. et al. (2003) Expression of porcine CD163 on monocytes/macrophages correlates with permissiveness to African swine fever infection. <u>Arch Virol. 148 (12): 2307-23.</u></li> </ol>
	5. Thierry, A. <i>et al.</i> (2012) Identification of invariant natural killer T cells in porcine
	peripheral blood. <u>Vet Immunol Immunopathol. 149 (3-4): 272-9.</u> 6. Skovdal, S.M. <i>et al.</i> (2019) Inhaled nebulized glatiramer acetate against Gram-negative bacteria is not associated with adverse pulmonary reactions in healthy, young adult female pigs. <u>PLoS One. 14 (10): e0223647.</u>
	7. Forner, R. <i>et al.</i> (2021) Distribution difference of colostrum-derived B and T cells subsets in gilts and sows. <u>PLoS One. 16 (5): e0249366.</u>
	8. Jarosz, Ł. <i>et al.</i> (2021) The Effect of Feed Supplementation with EM Bokashi <sup>®</sup> Multimicrobial Probiotic Preparation on Selected Parameters of Sow Colostrum and Milk as Indicators of the Specific and Nonspecific Immune Response. Probiotics Antimicrob

Proteins. Oct 01 [Epub ahead of print].

9. Haach, V. et al. (2023) A polyvalent virosomal influenza vaccine induces broad cellular
and humoral immunity in pigs. Virol J. 20 (1): 181.
10. Maciag, S. et al. (2022) Effects of freezing storage on the stability of maternal cellular
and humoral immune components in porcine colostrum. Vet Immunol Immunopathol. 254:
110520.

### **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: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2307F">https://www.bio-rad-antibodies.com/SDS/MCA2307F</a> 10041	
Regulatory	For research purposes only	

# Related Products

## **Recommended Negative Controls**

MOUSE IgG2a NEGATIVE CONTROL:FITC (MCA929F)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Worldwide

Tel: +44 (0)1865 852 700

Europe

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50

Email: antibody\_sales\_us@bio-rad.com

Fax: +44 (0)1865 852 739
Email: antibody\_sales\_uk@bio-rad.com

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 'M414369:221206'

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