

Datasheet: MCA5974F

Description:	MOUSE ANTI PIG CD52:FITC
Specificity:	CD52
Other names:	SWC1
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	11/305/44
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 - 1/10
Immunofluorescence			■	

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 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	0.09% Sodium Azide (NaN ₃)		
Stabilisers	1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml		
Immunogen	Porcine thymocytes		
External Database Links	UniProt: H8ZRT6 Related reagents		

Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the SP2/0-Ag14 myeloma cell line
Specificity	Mouse anti Pig CD52, clone 11/305/44 is a monoclonal antibody recognizing the porcine homologue of human CD52, a 19 kDa antigen expressed by mature lymphocytes, monocytes and dendritic cells. Mouse anti Pig CD52, clone 11/305/44 was originally clustered at the 1st International Swine Cluster of Differentiation Workshop held in 1992 as SWC1 (Lunney et al. 1994). Further studies have demonstrated that SWC1 is the porcine orthologue to human CD52, which is expressed by most leucocytes including resting T-cells, monocytes and granulocytes, but is not expressed by B-cells, erythrocytes or platelets (Piriou-Guyzack et al. 2008) & (Leitner et al. 2012). Porcine CD52, expressed at very much higher levels on monocytes than mature macrophages, and SWC9, expressed exclusively on mature tissue macrophages, have been used as markers of monocyte-macrophage differentiation (Sanchez et al. 1999) & (McCollough et al. 1999).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul
References	1. Leitner, J. <i>et al.</i> (2012) Porcine SWC1 is CD52--final determination by the use of a retroviral cDNA expression library. Vet Immunol Immunopathol. 146 (1): 27-34. 2. Lunney, J.K. <i>et al.</i> (1994) Overview of the First International Workshop to Define Swine Leukocyte Cluster of Differentiation (CD) Antigens. Vet Immunol Immunopathol. 43: 193-206. 3. Seeboth, J. <i>et al.</i> (2012) The fungal T-2 toxin alters the activation of primary macrophages induced by TLR-agonists resulting in a decrease of the inflammatory response in the pig. Vet Res. 43: 35. 4. Shao, L. <i>et al.</i> (2016) Tissue-specific mRNA expression profiles of porcine Toll-like receptors at different ages in germ-free and conventional pigs. Vet Immunol Immunopathol. 171: 7-16.
Further Reading	1. Piriou-Guyzack, L. <i>et al.</i> (2008) Membrane markers of the immune cells in swine: an update. Vet Res. 39: 54 2. Sánchez, C. <i>et al.</i> (1999) The Porcine 2A10 Antigen is Homologous to Human CD163 and Related to Macrophage Differentiation. J Immunol. 162: 5230-7. 3. McCullough, K.C. <i>et al.</i> (1999) Intermediate stages in monocyte-macrophage differentiation modulate phenotype and susceptibility to virus infection. Immunology. 98 (2): 203-12.
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. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Shelf Life	18 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 \(MCA691F\)](#)

Recommended Useful Reagents

[MOUSE ANTI PIG CD203a \(MCA1973GA\)](#)

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