

Datasheet: MCA2312F BATCH NUMBER 166715

Description:	MOUSE ANTI PIG CD172a:FITC
Specificity:	CD172a
Other names:	SWC3
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	BL1H7
Isotype:	lgG1
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

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 conjugat	ed to Fluorescein Isotl	niocyanate Isomer	1 (FITC) - liquid
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nn	n)
	FITC	490	525	
Buffer Solution	supernatant Phosphate buffered s	ealine		
Preservative	0.09% sodium azide	(NaN ₃)		
Stabilisers	1% bovine serum alb	umin		
Approx. Protein	IgG concentration 0.1	l mg/ml		

Concentrations

Immunogen	Porcine alveolar macrophages.
External Database Links	UniProt: Q5K4Q3 Related reagents
RRID	AB_2188073
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line.
Specificity	Mouse anti Pig CD172a, clone BL1H7 recognizes porcine CD172a, a member of the signal regulatory protein (SIRP) family (<u>Alvarez et al. 2000</u>).
	Mouse anti Pig CD172a, clone BL1H7 was originally clustered as SWC3 at the Third International Swine Cluster of Differentiation Workshop (Haverson et al. 2001; Thacker et al. 2001). CD172a is expressed on monocyte derived dendritic cells (MoDCs) (Facci et al. 2010) also conventional (cDCs), plasmacytoid (pDCs) DCs and blood DCs.(Facci; Jeong et al. 2010). Mouse anti Pig CD172a, clone BL1H7 immunoprecipitates a single band of ~90-110 kDa from preparations of biotinylated alveolar macrophages, a result confirmed by Western blotting analysis of alveolar macrophage lysates under non reducing conditions (Alvarez et al. 2000). Aberrant expression of CD172a has been noted on porcine leukemias (Sipos et al. 2006) with blast cells co-expressing lymphocytic markers CD5 and CD25 whilst expressing the Myeloid marker CD172a in a bi-phenotypic pattern as opposed to the more characteristic single population of CD172+ cells seen in normal blood PBMC (Chamorro et al. 2005).
	Mouse anti Pig CD172a, clone BL1H7 has proved a useful and reliable tool for immunohistochemical analysis of routinely processed, formalin fixed, paraffin embedded porcine tissues (Domenech et al. 2003).
Flow Cytometry	Use 10µl of the suggested working dilution to 1x10 ⁶ cells in 100µl
References	 Alvarez, B. et al. (2000) A porcine cell surface receptor identified by monoclonal antibodies to SWC3 is a member of the signal regulatory protein family and associates with protein-tyrosine phosphatase SHP-1. <u>Tissue Antigens</u>. 55 (4): 342-51. Domenech, N. et al. (2003) Identification of porcine macrophages with monoclonal antibodies in formalin-fixed, paraffin-embedded tissues. <u>Vet Immunol Immunopathol</u>. 94 (1-2): 77-81.
	 Carrillo, A. <i>et al.</i> (2002) Isolation and characterization of immortalized porcine aortic endothelial cell lines. <u>Vet Immunol Immunopathol. 89 (1-2): 91-8.</u> Fraile, L. <i>et al.</i> (2012) Immunomodulatory properties of beta-sitosterol in pig immune responses. <u>Int Immunopharmacol. 13 (3): 316-21.</u> Jeong, H.J. <i>et al.</i> (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 (4): 503-12.

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circovirus type 2 Theoretical and Applied Veterinary Medicine. 12 (1): 15-24.

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: https://www.bio-rad-antibodies.com/SDS/MCA2312F 10041
Regulatory	For research purposes only

Related Products

America

Recommended Negative Controls

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MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

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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 'M414391:221206'

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