

Datasheet: MCA1218F

Description:	MOUSE ANTI PIG CD14:FITC
Specificity:	CD14
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	MIL2
Isotype:	lgG2b
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 w					sit www.bio-
	rad-antibodies.com/protocols.				
		Yes	No	Not Determined	Suggested Dilution
	Flow Cytometry	•			
	Where this product ha	is not been test	ed for u	ise in a particular t	technique this does not
	necessarily exclude its	s use in such pr	rocedur	es. Suggested wo	rking dilutions are given as
	a guide only. It is reco	mmended that	the use	r titrates the produ	uct for use in their own
	system using appropri	ate negative/po	ositive c	ontrols.	
Target Species	Pig				
Species Cross	Reacts with: Human				
Reactivity	N.B. Antibody reactivity and working conditions may vary between species. Cross				een species. Cross
	reactivity is derived fro	om testing within	n our la	boratories, peer-re	eviewed publications or
	personal communications from the originators. Please refer to references indicated				
	further information.				
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid				1 (FITC) - liquid
Max Ex/Em	Fluorophore	Excitation May	(nm)	Emission Max (nm	n)
	FITC	490	、 (IIII)	525	<u>17</u>
Preparation	Purified IgG prepared	by affinity chro	matogra	aphy on Protein A	from tissue culture
	supernatant				
Buffer Solution	Phosphate buffered sa	aline			

Preservative	0.09% sodium azide (NaN ₃)
Stabilisers	1% bovine serum albumin
Approx. Protein Concentrations	IgG concentration 0.1mg/ml.
Immunogen	Porcine peripheral blood lymphocytes.
External Database Links	UniProt: A2SW51 Related reagents
RRID	AB_808387
Fusion Partners	Spleen cells from immunized Balb/c mice were fused with cells from the P2-X63-Ag.653 mouse myeloma.
Specificity	Mouse anti Pig CD14, clone MIL2 recognizes porcine CD14. Clone MIL2 was clustered as porcine CD14 at the Third International Workshop on Swine Leukocyte Differentiation Antigens (Haverson <i>et al.</i> 2001). Mouse anti Pig CD14, clone MIL2 immunoprecipitates a protein of ~50 kDa consistent with the expected apparent molecular weight of porcine CD14, and demonstrates the expected CD14 profile by dual labelling and competition assays. Further, pre-incubation of peripheral blood monocytes with MIL2 inhibits the binding of FITC labelled LPS, consistent with masking the CD14 LPS binding site (Thacker <i>et al.</i> 2001).
	Mouse anti pig CD14, clone MIL2 demonstrates staining of both monocytes and neutrophils in peripheral blood by flow cytometry with a similar expression pattern to the anti human CD14 clone TüK4, lymphocytes and eosinophils are negative for MIL2 staining (Zelnickova <i>et al.</i> 2007). Cloning and characterization of porcine CD14 indicates a high degree of both functional and structural conservation when compared to CD14 from other mammalian species, the gene maps to chromosome 2 and is expressed on a wide range of tissues in a manner consistent with expression on myeloid cells. (Petersen <i>et al.</i> 2007, Sanz <i>et al.</i> 2007).
Flow Cytometry	Use 10µl of the suggested working dilution to label 10^6 cells in 100µl
References	 Hauet, T. <i>et al.</i> (2000) Trimetazidine reduces renal dysfunction by limiting the cold ischemia/reperfusion injury in autotransplanted pig kidneys. J Am Soc Nephrol. 11: <u>138-48.</u> Thacker, E. <i>et al.</i> (2001) Summary of workshop findings for porcine myelomonocytic markers. <u>Vet Immunol Immunopathol. 80 (1-2): 93-109.</u> Thorgersen, E.B. <i>et al.</i> (2010) CD14 inhibition efficiently attenuates early inflammatory and hemostatic responses in <i>Escherichia coli</i> sepsis in pigs. <u>FASEB J. 24: 712-22.</u> Goujon, J.M. <i>et al.</i> (2000) Influence of cold-storage conditions on renal function of autotransplanted large pig kidneys. <u>Kidney Int. 58: 838-50.</u> Li, Y. <i>et al.</i> (2014) Identification of apoptotic cells in the thymus of piglets infected with highly pathogenic porcine reproductive and respiratory syndrome virus. <u>Virus Res. 189:</u>

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Further Reading	 Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. <u>Vet Res. 39: 54.</u> Petersen, C.B. <i>et al.</i> (2007) Cloning, characterization and mapping of porcine CD14 					
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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 b 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/MCA1218F 10041			
Regulatory	For research purposes only			

Related Products

Recommended Negative Controls

MOUSE IgG2b NEGATIVE CONTROL:FITC (MCA691F)

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