Datasheet: MCA1218F

BATCH NUMBER 166714

Description:	MOUSE ANTI PIG CD14:FITC
Specificity:	CD14
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	MIL2
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	▪			

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

Species Cross Reactivity

Reacts with: Human

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 (NaN_3) 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 *et al.* 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 *et al.* 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 *et al.* 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 *et al.* 2007, Sanz *et al.* 2007).
Flow Cytometry	Use 10µl of the suggested working dilution to label 10^6 cells in 100µl
References	1. Hauet, T. *et al.* (2000) Trimetazidine reduces renal dysfunction by limiting the cold ischemia/reperfusion injury in autotransplanted pig kidneys. J Am Soc Nephrol. 11: 138-48. 2. Thacker, E. *et al.* (2001) Summary of workshop findings for porcine myelomonocytic markers. Vet Immunol Immunopathol. 80 (1-2): 93-109. 3. Thorgersen, E.B. *et al*. (2010) CD14 inhibition efficiently attenuates early inflammatory and hemostatic responses in *Escherichia coli* sepsis in pigs. FASEB J. 24: 712-22. 4. Goujon, J.M. *et al.* (2000) Influence of cold-storage conditions on renal function of autotransplanted large pig kidneys. Kidney Int. 58: 838-50. 5. Li, Y. *et al.* (2014) Identification of apoptotic cells in the thymus of piglets infected with highly pathogenic porcine reproductive and respiratory syndrome virus. Virus Res. 189:

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Further Reading

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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 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/MCA1218F 10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG2b NEGATIVE CONTROL:FITC (MCA691F)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	**Worldwide**	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	**Europe**	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com

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