

Datasheet: MCA2185F

BATCH NUMBER 166304

Description:	MOUSE ANTI HUMAN CD14:FITC
Specificity:	CD14
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	MEM-18
Isotype:	IgG1
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	Human		
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 0.1mg/ml		

Immunogen	Crude protein prepared by ammonium sulfate precipitation of urine from a proteinuria patient.
External Database Links	<p>UniProt: P08571 Related reagents</p> <p>Entrez Gene: 929 CD14 Related reagents</p>
RRID	AB_323759
Fusion Partners	Spleen cells from mice immunised BALB/c mice were fused with cells from the NS1-Ag4/1 mouse myeloma line.
Specificity	<p>Mouse anti Human CD14 antibody, clone MEM-18 recognizes human CD14, also known as Myeloid cell-specific leucine-rich glycoprotein. CD14 is a 375 amino acid ~55 kDa GPI-anchored cell membrane protein found predominantly on monocytes and macrophages, it is less strongly expressed on granulocytes, and is absent from stem cells and myeloid cells of very early differentiation states. In immunohistology CD14 present on Langerhans cells, follicular dendritic cells, histocytes and high endothelial venules. In ELISA clone MEM-18 recognizes the soluble form CD14 and has been used successfully in the development of a sensitive ELISA as a capture reagent in conjunction with biotinylated Mouse anti CD14 antibody, clone UCHM1 as a detection reagent</p> <p>Mouse anti Human CD14 antibody, clone MEM-18 is reported to block the binding of bacterial lipopolysaccharide (LPS) to monocytes (Prager et al. 2001) and has been used successfully for the detection of soluble CD14 in saliva samples (Bergandi et al. 2007).</p>
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 ⁶ cells in 100µl or 100µl whole blood
References	<ol style="list-style-type: none"> Plötz, S.G. <i>et al.</i> (2001) The interaction of human peripheral blood eosinophils with bacterial lipopolysaccharide is CD14 dependent. Blood. 97 (1): 235-41. Prager, E. <i>et al.</i> (2001) Induction of hyporesponsiveness and impaired T lymphocyte activation by the CD31 receptor:ligand pathway in T cells. J Immunol. 166 (4): 2364-71. Thacker, E. <i>et al.</i> (2001) Summary of workshop findings for porcine myelomonocytic markers. Vet Immunol Immunopathol. 80 (1-2): 93-109. Angel, C.E. <i>et al.</i> (2006) Cutting edge: CD1a+ antigen-presenting cells in human dermis respond rapidly to CCR7 ligands. J Immunol. 176: 5730-4. Jafarshad, A. <i>et al.</i> (2007) A novel antibody-dependent cellular cytotoxicity mechanism involved in defense against malaria requires costimulation of monocytes FcγRII and FcγRIII. J Immunol. 178: 3099-106. Shao, D.D. <i>et al.</i> (2008) Pivotal Advance: Th-1 cytokines inhibit, and Th-2 cytokines promote fibrocyte differentiation. J Leukoc Biol. 83: 1323-33. Paul, G. <i>et al.</i> (2012) The adult human brain harbors multipotent perivascular mesenchymal stem cells. PLoS One. 7: e35577. Silk, K.M. <i>et al.</i> (2012) Rapamycin conditioning of dendritic cells differentiated from human ES cells promotes a tolerogenic phenotype. J Biomed Biotechnol. 2012: 172420.

9. Kang, S.D. *et al.* (2013) Isolation of functional human endothelial cells from small volumes of umbilical cord blood. [Ann Biomed Eng. 41 \(10\): 2181-92.](#)
10. Grognez, A. *et al.* (2016) Human Fetal Progenitor Tenocytes for Regenerative Medicine. [Cell Transplant. 25 \(3\): 463-79.](#)
11. Chen, R. *et al.* (2017) *In Vitro* Response of Human Peripheral Blood Mononuclear Cells (PBMC) to Collagen Films Treated with Cold Plasma. [Polymers \(Basel\). 9 \(7\): 254](#)

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/MCA2185F>
10041

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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
----------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------	------------------	-------------------------------------------------------------------------------------------------------------------------------------------------	---------------	-----------------------------------------------------------------------------------------------------------------------------------------------------

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M413209:221121'

Printed on 18 Jan 2024