

Datasheet: MCA2185FT

Description:	MOUSE ANTI HUMAN CD14:FITC
Specificity:	CD14
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	MEM-18
Isotype:	IgG1
Quantity:	25 µg

Product Details

RRID AB_1100716

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 antibody 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 antibody 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 caprylic acid and ammonium sulfate precipitation.

Buffer Solution Phosphate buffered saline

Preservative 0.09% Sodium Azide
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

UniProt:
[P08571](#) [Related reagents](#)

Entrez Gene:

[929](#) CD14 [Related reagents](#)

Fusion Partners Spleen cells from mice immunised BALB/c mice were fused with cells from the NS1-Ag4/1 mouse myeloma line.

Specificity **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

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](#)).

Flow Cytometry Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul or 100ul whole blood

References

1. Plötz, S.G. *et al.* (2001) The interaction of human peripheral blood eosinophils with bacterial lipopolysaccharide is CD14 dependent. [Blood. 97 \(1\): 235-41.](#)
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4. Paul, G. *et al.* (2012) The adult human brain harbors multipotent perivascular mesenchymal stem cells. [PLoS One. 7: e35577.](#)
5. Angel, C.E. *et al.* (2006) Cutting edge: CD1a+ antigen-presenting cells in human dermis respond rapidly to CCR7 ligands. [J Immunol. 176: 5730-4.](#)
6. Shao, D.D. *et al.* (2008) Pivotal Advance: Th-1 cytokines inhibit, and Th-2 cytokines promote fibrocyte differentiation. [J Leukoc Biol. 83: 1323-33.](#)
7. Silk, K.M. *et al.* (2012) Rapamycin conditioning of dendritic cells differentiated from human ES cells promotes a tolerogenic phenotype. [J Biomed Biotechnol. 2012: 172420.](#)
8. Jafarshad, A. *et al.* (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.](#)
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. 9 \(7\): 254.](#)

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.

Guarantee	18 months from date of despatch.
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Health And Safety Information	Material Safety Datasheet documentation #10041 available at: 10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf
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Regulatory	For research purposes only
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Related Products

Recommended Negative Controls

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

Recommended Useful Reagents

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

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

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