

## Datasheet: MCA2185

**BATCH NUMBER 170511**

<b>Description:</b>	MOUSE ANTI HUMAN CD14
<b>Specificity:</b>	CD14
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MEM-18
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.2 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			
Immunoprecipitation	▪			
Western Blotting (1)	▪			

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.

(1) **MEM-18 recognizes CD14 under non-reducing conditions**

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by caprylic acid and ammonium sulphate precipitation
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Approx. Protein</b>	IgG concentration 1.0 mg/ml

## Concentrations

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**Immunogen** Crude protein prepared by ammonium sulfate precipitation of urine from a proteinuria patient.

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## External Database

### Links

#### UniProt:

[P08571](#)

[Related reagents](#)

#### Entrez Gene:

[929](#)

CD14

[Related reagents](#)

### RRID

AB\_324230

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### Fusion Partners

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

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### 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](#)).

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### Flow Cytometry

Use 10ul of the suggested working dilution to label  $10^6$  cells in 100ul.

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### 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.](#)
2. Prager, E. *et al.* (2001) Induction of hyporesponsiveness and impaired T lymphocyte activation by the CD31 receptor:ligand pathway in T cells. [J Immunol. 166 \(4\): 2364-71.](#)
3. Thacker, E. *et al.* (2001) Summary of workshop findings for porcine myelomonocytic markers. [Vet Immunol Immunopathol. 80 \(1-2\): 93-109.](#)
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 \(Basel\). 9 \(7\): 254](#)

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**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. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2185>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),  
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),  
[FITC](#), [HRP](#)  
Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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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](https://www.bio-rad-antibodies.com/datasheets)

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