

## Datasheet: MCA596GT

<b>Description:</b>	MOUSE ANTI HUMAN CD14
<b>Specificity:</b>	CD14
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	UCHM1
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	25 µg

## Product Details

**RRID** AB\_1100701

### 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	▪			1/50
Immunohistology - Frozen (1)	▪			
Immunohistology - Paraffin		▪		
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	

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)The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.**

### Target Species

Human

### Species Cross Reactivity

Reacts with: Cynomolgus monkey, Rhesus Monkey, Fish, Trout  
**N.B.** Antibody reactivity and working conditions may vary between species.

### Product Form

Purified IgG - liquid

### Preparation

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

### Buffer Solution

Phosphate buffered saline

### Preservative Stabilisers

0.09% Sodium Azide

<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Human Thymocytes followed by peripheral blood mononuclear cells.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P08571</a>   <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">929</a>   CD14   <a href="#">Related reagents</a></p>
<b>Fusion Partners</b>	Spleen cells from immunized BALB/c mice were fused with cells from the NS1-Ag4/1 mouse myeloma line.
<b>Specificity</b>	<p><b>Mouse anti Human CD14 antibody, clone UCHM1</b> recognizes a cell surface antigen of ~55 kDa, known as CD14. The CD14 molecule is found predominantly on monocytes and macrophages in flow cytometry, it is less strongly expressed on granulocytes, and is absent from stem cells and myeloid cells of very early differentiation states. In immunohistology the CD14 molecule is found to be present on Langerhans cells, follicular dendritic cells, histiocytes and high endothelial venules. Antibodies to the CD14 molecule are known to induce oxidative burst formation. In tonsil tissue sections UCHM1 gives positive staining reactions with monocytic cells, the interfollicular tissue macrophages seen under the capsule, and dendritic reticulum cells. Skin Langerhans cells are always negative (<a href="#">Hogg et al. 1984</a>). UCHM1 also reacts with Kupffer cells and sinus lining cells on the liver.</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>Histology Positive Control Tissue</b>	Tonsil
<b>References</b>	<ol style="list-style-type: none"> <li>Hogg, N. <i>et al.</i> (1984) Monoclonal antibodies specific for human monocytes, granulocytes and endothelium. <a href="#">Immunology. 53 (4): 753-67.</a></li> <li>Linch, D.C. <i>et al.</i> (1984) Monoclonal antibodies differentiating between monocytic and nonmonocytic variants of AML. <a href="#">Blood. 63 (3): 566-73.</a></li> <li>Angel, C.E. <i>et al.</i> (2006) Cutting edge: CD1a+ antigen-presenting cells in human dermis respond rapidly to CCR7 ligands. <a href="#">J Immunol. 176 (10): 5730-4.</a></li> <li>Köller, M. <i>et al.</i> (2004) Phenotypic and functional deficiencies of monocyte-derived dendritic cells in systemic lupus erythematosus (SLE) patients. <a href="#">Int Immunol. 16: 1595-604.</a></li> <li>Kämmerer, U. <i>et al.</i> (2003) Unique appearance of proliferating antigen-presenting cells expressing DC-SIGN (CD209) in the decidua of early human pregnancy. <a href="#">Am J Pathol. 162: 887-96.</a></li> <li>Goddard, S. <i>et al.</i> (2004) Interleukin-10 secretion differentiates dendritic cells from human liver and skin. <a href="#">Am J Pathol. 164: 511-9.</a></li> <li>Bournazos, S. <i>et al.</i> (2008) Monocyte functional responsiveness after PSGL-1-mediated platelet adhesion is dependent on platelet activation status. <a href="#">Arterioscler Thromb Vasc Biol. 28: 1491-8.</a></li> <li>Hovden, A.O. <i>et al.</i> (2011) Maturation of monocyte derived dendritic cells with OK432 boosts IL-12p70 secretion and conveys strong T-cell responses. <a href="#">BMC Immunol. 12:2.</a></li> <li>Hsu, T.L. <i>et al.</i> (2002) Modulation of dendritic cell differentiation and maturation by decoy receptor 3. <a href="#">J Immunol. 168: 4846-53.</a></li> <li>Karlsson, H. <i>et al.</i> (2002) Innate immune responses of human neonatal cells to bacteria from the normal gastrointestinal flora. <a href="#">Infect Immun. 70: 6688-96.</a></li> </ol>

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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**

18 months from date of despatch.

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**Health And Safety Information**

Material Safety Datasheet documentation #10040 available at: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Secondary Antibodies

- Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
- Goat Anti Mouse IgG (STAR77...) [HRP](#)
- Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
- Rabbit Anti Mouse IgG (STAR8...) [DyLight®800](#)
- Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
- Goat Anti Mouse IgG (STAR76...) [RPE](#)
- Goat Anti Mouse IgG (STAR70...) [FITC](#)
- Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
Human Anti Mouse IgG2a (HCA037...) [FITC](#), [HRP](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®680](#),  
[DyLight®800](#), [FITC](#), [HRP](#)

## Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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