

Datasheet: MCA596EL

Description:	MOUSE ANTI HUMAN CD14:Low Endotoxin		
Specificity:	CD14		
Format:	Low Endotoxin		
Product Type:	Monoclonal Antibody		
Clone:	UCHM1		
Isotype:	lgG2a		
Quantity:	0.5 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	•			1/50 - 1/100
Immunohistology - Frozen (1)	-			
Immunohistology - Paraffin				
ELISA			•	
Immunoprecipitation	•			
Western Blotting			•	
Immunofluorescence	-			
Functional Assays	•			

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.

Human
Reacts with: Cynomolgus monkey, Rhesus Monkey, Fish, Trout
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.

Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	None present
Carrier Free	Yes
Endotoxin Level	< 0.01 EU/ug
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Human Thymocytes followed by peripheral blood mononuclear cells.
External Database Links	UniProt: P08571 Related reagents Entrez Gene: 929 CD14 Related reagents
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells from the NS1-Ag4/1 mouse myeloma line.
Specificity	Mouse anti Human CD14 antibody, clone UCHM1 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 (Hogg et al. 1984). UCHM1 also reacts with Kupffer cells and sinus lining cells on the liver.
References	 Linch, D.C. <i>et al.</i> (1984) Monoclonal antibodies differentiating between monocytic and nonmonocytic variants of AML. <u>Blood. 63 (3): 566-73.</u> Hogg, N. & Horton, M.A. (1987) Myeloid antigens: new and previously defined clusters in Leucocyte Typing III White Cell differentiation antigens. Edited by McMichael, A.J., <i>et al.</i> Jonker, M. <i>et al.</i> (1989) Reactivity of mAb specific for human CD markers with Rhesus monkey leucocytes. Leucocyte Typing IV. Oxford University Press p 1058-63. Hsu, T.L. <i>et al.</i> (2002) Modulation of dendritic cell differentiation and maturation by decoy receptor 3. <u>J Immunol. 168: 4846-53.</u>

Purified IgG - liquid

Product Form

- 5. Karlsson, H. *et al.* (2002) Innate immune responses of human neonatal cells to bacteria from the normal gastrointestinal flora. Infect Immun. 70: 6688-96.
- 6. Kämmerer, U. *et al.* (2003) Unique appearance of proliferating antigen-presenting cells expressing DC-SIGN (CD209) in the decidua of early human pregnancy. <u>Am J Pathol.</u> 162: 887-96.
- 7. Köller, M. *et al.* (2004) Phenotypic and functional deficiencies of monocyte-derived dendritic cells in systemic lupus erythematosus (SLE) patients. <u>Int Immunol. 16: 1595-604.</u>
- 8. Goddard, S. *et al.* (2004) Interleukin-10 secretion differentiates dendritic cells from human liver and skin. Am J Pathol. 164: 511-9.
- 9. Chang, Y.C. *et al.* (2004) Modulation of macrophage differentiation and activation by decoy receptor 3. <u>J Leukoc Biol. 75: 486-94.</u>
- 10. Lin, C.W. *et al.* (2005) CD94 1A transcripts characterize lymphoblastic lymphoma/leukemia of immature natural killer cell origin with distinct clinical features. Blood. 106: 3567-74.
- 11. Angel, C.E. *et al.* (2006) Cutting edge: CD1a+ antigen-presenting cells in human dermis respond rapidly to CCR7 ligands. J Immunol. 176 (10): 5730-4.
- 12. Fischer, U. and Koellner, B. (2007) Cross-reactivity of human leukocyte differentiation antigen monoclonal antibodies on carp and rainbow trout cells. <u>Vet Immunol Immunopathol</u>. 119: 142-55.
- 13. Bournazos, S. *et al.* (2008) Monocyte functional responsiveness after PSGL-1-mediated platelet adhesion is dependent on platelet activation status. <u>Arterioscler Thromb Vasc Biol. 28: 1491-8.</u>
- 14. Iking-Konert, C. *et al.* (2008) T lymphocytes in patients with primary vasculitis: expansion of CD8+ T cells with the propensity to activate polymorphonuclear neutrophils. Rheumatology (Oxford). 47: 609-16.
- 15. Angel, C.E. *et al.* (2009) Distinctive localization of antigen-presenting cells in human lymph nodes. Blood. 113: 1257-67.
- 16. Brook, F.A. *et al.* (2010) Derivation and characterisation of the human embryonic stem cell line, OxF1. *In Vitro* Cell Dev Biol Anim. 46: 173-7.
- 17. Hovden, A.O. *et al.* (2011) Maturation of monocyte derived dendritic cells with OK432 boosts IL-12p70 secretion and conveys strong T-cell responses. BMC Immunol. 12:2.
- 18. Din JN *et al.* (2013) Effect of ω -3 fatty acid supplementation on endothelial function, endogenous fibrinolysis and platelet activation in male cigarette smokers. <u>Heart. 99 (3):</u> 168-74.
- 19. Bromberek, J.L. *et al.* (2016) Breed Distribution and Clinical Characteristics of B Cell Chronic Lymphocytic Leukemia in Dogs. <u>J Vet Intern Med. 30 (1): 215-22.</u>
- 20. Spiller, K.L. *et al.* (2016) Differential gene expression in human, murine, and cell line-derived macrophages upon polarization. <u>Exp Cell Res. 347 (1): 1-13.</u>
- 21. Kannegieter, N.M. *et al.* (2018) Analysis of NFATc1 amplification in T cells for pharmacodynamic monitoring of tacrolimus in kidney transplant recipients. <u>PLoS One. 13</u> (7): e0201113.
- 22. Wu, T.C. *et al.* (2018) IL1 Receptor Antagonist Controls Transcriptional Signature of Inflammation in Patients with Metastatic Breast Cancer. Cancer Res. 78 (18): 5243-58.
- 23. Hoang, P.T. *et al.* (2018) Subtype Diversification and Synaptic Specificity of Stem Cell-Derived Spinal Interneurons. Neuron. 100 (1): 135-149.e7.
- 24. Matsusaka, K. *et al.* (2022) Distinct roles in phagocytosis of the early and late increases of cell surface calreticulin induced by oxaliplatin <u>Biochem Biophys Rep. 29:</u>

101222.

Storage Store at -20°C only.

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.

Guarantee 12 months from date of despatch

Health And Safety Material Safety Datasheet documentation #10162 available at:

https://www.bio-rad-antibodies.com/SDS/MCA596EL

Regulatory For research purposes only

10162

Related Products

Information

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)

Rabbit Anti Mouse IgG (STAR12...)

RPE

Goat Anti Mouse IgG (STAR70...)

FITC

Goat Anti Mouse IgG IgA IgM (STAR87...) Alk. Phos., HRP

Goat Anti Mouse IgG (STAR76...) RPE

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550,

DyLight®650, DyLight®680, DyLight®800,

FITC, HRP

Rabbit Anti Mouse IgG (STAR13...) HRP

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

Rabbit Anti Mouse IgG (STAR9...) FITC

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL:Low Endotoxin (MCA929EL)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Worldwide T

Tel: +44 (0)1865 852 700 **E** Fax: +44 (0)1865 852 739

Europe Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_us@bio-rad.com

Email: antibody_sales_uk@bio-rad.com

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 'M405598:220916'

Printed on 12 Aug 2023