

Datasheet: MCA596A488

Description:	MOUSE ANTI HUMAN CD14:Alexa Fluor® 488
Specificity:	CD14
Format:	ALEXA FLUOR® 488
Product Type:	Monoclonal Antibody
Clone:	UCHM1
Isotype:	IgG2a
Quantity:	100 TESTS/1ml

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

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

Species Cross Reactivity

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.

Product Form

Purified IgG conjugated to Alexa Fluor 488 - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®488	495	519

Preparation

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

Buffer Solution

Phosphate buffered saline

Preservative	0.09% Sodium Azide
Stabilisers	1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml
Immunogen	Human Thymocytes followed by peripheral blood mononuclear cells.
External Database Links	<p>UniProt: P08571 Related reagents</p> <p>Entrez Gene: 929 CD14 Related reagents</p>
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells from the NS1-Ag4/1 mouse myeloma line.
Specificity	<p>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 <i>et al.</i> 1984). UCHM1 also reacts with Kupffer cells and sinus lining cells on the liver.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells or 100ul whole blood
References	<ol style="list-style-type: none"> 1. Linch, D.C. <i>et al.</i> (1984) Monoclonal antibodies differentiating between monocytic and nonmonocytic variants of AML. Blood. 63 (3): 566-73. 2. 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> 3. 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. 4. Hsu, T.L. <i>et al.</i> (2002) Modulation of dendritic cell differentiation and maturation by decoy receptor 3. J Immunol. 168: 4846-53. 5. Karlsson, H. <i>et al.</i> (2002) Innate immune responses of human neonatal cells to bacteria from the normal gastrointestinal flora. Infect Immun. 70: 6688-96. 6. 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. Am J Pathol. 162: 887-96. 7. Köller, M. <i>et al.</i> (2004) Phenotypic and functional deficiencies of monocyte-derived dendritic cells in systemic lupus erythematosus (SLE) patients. Int Immunol. 16: 1595-604. 8. Goddard, S. <i>et al.</i> (2004) Interleukin-10 secretion differentiates dendritic cells from

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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
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Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA596A488 10041
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Regulatory	For research purposes only
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Related Products

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:Alexa Fluor® 488 \(MCA929A488\)](#)

Recommended Useful Reagents

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

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

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