

Datasheet: MCA596A488

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| 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.

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| 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 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 | UniProt: | | |

Entrez Gene:

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| Fusion Partners | Spleen cells from immunized 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 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. |
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| Flow Cytometry | Use 10ul of the suggested working dilution to label 10 ⁶ cells or 100ul whole blood |
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| References | <ol style="list-style-type: none">1. Hogg, N. <i>et al.</i> (1984) Monoclonal antibodies specific for human monocytes, granulocytes and endothelium. Immunology. 53 (4): 753-67.2. Linch, D.C. <i>et al.</i> (1984) Monoclonal antibodies differentiating between monocytic and nonmonocytic variants of AML. Blood. 63 (3): 566-73.3. Angel, C.E. <i>et al.</i> (2006) Cutting edge: CD1a+ antigen-presenting cells in human dermis respond rapidly to CCR7 ligands. J Immunol. 176 (10): 5730-4.4. 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: 1595-604.5. 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: 887-96.6. Goddard, S. <i>et al.</i> (2004) Interleukin-10 secretion differentiates dendritic cells from human liver and skin. Am J Pathol. 164: 511-9.7. Bournazos, S. <i>et al.</i> (2008) Monocyte functional responsiveness after PSGL-1-mediated platelet adhesion is dependent on platelet activation status. Arterioscler Thromb Vasc Biol. 28: 1491-8.8. 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. BMC Immunol. 12:2.9. Hsu, T.L. <i>et al.</i> (2002) Modulation of dendritic cell differentiation and maturation by decoy receptor 3. J Immunol. 168: 4846-53.10. Karlsson, H. <i>et al.</i> (2002) Innate immune responses of human neonatal cells to bacteria from the normal gastrointestinal flora. Infect Immun. 70: 6688-96.11. Din JN <i>et al.</i> (2013) Effect of ω-3 fatty acid supplementation on endothelial function, endogenous fibrinolysis and platelet activation in male cigarette smokers. Heart. 99 (3): 168-74.12. Fischer, U. and Koellner, B. (2007) Cross-reactivity of human leukocyte differentiation antigen monoclonal antibodies on carp and rainbow trout cells. Vet Immunol Immunopathol. 119: 142-55.13. Lin, C.W. <i>et al.</i> (2005) CD94 1A transcripts characterize lymphoblastic lymphoma/leukemia of immature natural killer cell origin with distinct clinical features. Blood. 106: 3567-74.14. Angel, C.E. <i>et al.</i> (2009) Distinctive localization of antigen-presenting cells in human lymph nodes. Blood. 113: 1257-67.15. Chang, Y.C. <i>et al.</i> (2004) Modulation of macrophage differentiation and activation by decoy receptor 3. J Leukoc Biol. 75: 486-94.16. Iking-Konert, C. <i>et al.</i> (2008) T lymphocytes in patients with primary vasculitis: expansion of |
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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. 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

Acknowledgements

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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>

Regulatory

For research purposes only

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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