Datasheet: MCA596APC

Description:	MOUSE ANTI HUMAN CD14:APC
Specificity:	CD14
Format:	APC
Product Type:	Monoclonal Antibody
Clone:	UCHM1
Isotype:	IgG2a
Quantity:	100 TESTS

Product Details

RRID AB_322464

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 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.

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 Allophycocyanin (APC) - lyophilised

Reconstitution Reconstitute with 1 ml distilled water

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
APC	650	661

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
1%	Bovine Serum Albumin
5%	Sucrose

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.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.
References	1. Hogg, N. *et al.* (1984) Monoclonal antibodies specific for human monocytes, granulocytes and endothelium. Immunology. 53 (4): 753-67. 2. Linch, D.C. *et al.* (1984) Monoclonal antibodies differentiating between monocytic and nonmonocytic variants of AML. Blood. 63 (3): 566-73. 3. 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. 4. Köller, M. *et al.* (2004) Phenotypic and functional deficiencies of monocyte-derived dendritic cells in systemic lupus erythematosus (SLE) patients. Int Immunol. 16: 1595-604. 5. Kämmerer, U. *et al.* (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. *et al.* (2004) Interleukin-10 secretion differentiates dendritic cells from human liver and skin. Am J Pathol. 164: 511-9. 7. Bournazos, S. *et al.* (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. *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. 9. Hsu, T.L. *et al.* (2002) Modulation of dendritic cell differentiation and maturation by decoy receptor 3. J Immunol. 168: 4846-53. 10. Karlsson, H. *et al.* (2002) Innate immune responses of human neonatal cells to bacteria from the normal gastrointestinal flora. Infect Immun. 70: 6688-96. 11. Din JN *et al.* (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. *et al.* (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. *et al.* (2009) Distinctive localization of antigen-presenting cells in human lymph nodes. Blood. 113: 1257-67. 15. Chang, Y.C. *et al.* (2004) Modulation of macrophage differentiation and activation by decoy receptor 3. J Leukoc Biol. 75: 486-94.

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21. Kannegieter, N.M. *et al.* (2018) Analysis of NFATc1 amplification in T cells for pharmacodynamic monitoring of tacrolimus in kidney transplant recipients. PLoS One. 13 (7): e0201113.

Storage	Prior to reconstitution store at +4ºC. Following reconstitution store at +4ºC. DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of reconstitution.
Health And Safety Information	Material Safety Datasheet documentation #10075 available at: 10075: https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL:APC (MCA929APC)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

North & South America Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com
Worldwide Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com
Europe Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com

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