

Datasheet: MCA596A700

BATCH NUMBER 1611

Description:	MOUSE ANTI HUMAN CD14:Alexa Fluor® 700			
Specificity:	CD14			
Format:	ALEXA FLUOR® 700			
Product Type:	Monoclonal Antibody			
Clone:	UCHM1			
Isotype:	lgG2a			
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 700 - liquid						
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)				
	Alexa Fluor®700	702	723				
Preparation	Purified IgG prepar supernatant	red by affinity chromatog	raphy on Protein G from tis	sue culture			
Buffer Solution	Phosphate buffered	d agling					

Preservative Stabilisers

0.09% Sodium Azide

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:

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 10⁶ cells or 100ul whole blood

References

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- 4. 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>
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- 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. <u>Arterioscler Thromb Vasc Biol.</u> 28: 1491-8.

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- 9. Hsu, T.L. *et al.* (2002) Modulation of dendritic cell differentiation and maturation by decoy receptor 3. <u>J Immunol</u>. 168: 4846-53.
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- 14. Angel, C.E. *et al.* (2009) Distinctive localization of antigen-presenting cells in human lymph nodes. <u>Blood. 113: 1257-67.</u>
- 15. Chang, Y.C. *et al.* (2004) Modulation of macrophage differentiation and activation by decoy receptor 3. <u>J Leukoc Biol. 75: 486-94.</u>
- 16. 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.
- 17. 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.
- 18. 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>
- 19. Amouroux, R. *et al.* (2016) *De novo* DNA methylation drives 5hmC accumulation in mouse zygotes. Nat Cell Biol. 18 (2): 225-33.
- 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>
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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

12 months from date of despatch

Acknowledgements

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Health And Safety Information

Material Safety Datasheet documentation #10041 available at:

https://www.bio-rad-antibodies.com/SDS/MCA596A700

10041

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL: Alexa Fluor® 700 (MCA929A700)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

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