

Datasheet: MCA1614P647

Description:	MOUSE ANTI HUMAN CD55:RPE-Alexa Fluor® 647
Specificity:	CD55
Other names:	DAF
Format:	RPE-ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	67
Isotype:	IgG1
Quantity:	100 TESTS

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 - 1/10

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
Product Form	Purified IgG conjugated to RPE-Alexa Fluor® 647 - lyophilized

Reconstitution	Reconstitute with 1.0 ml distilled water Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution.
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Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE-Alexa Fluor®647 488nm laser	496	667
	RPE-Alexa Fluor®647 561nm laser	546	667

Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
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Buffer Solution	Phosphate buffered saline
Preservative	0.09% sodium azide (NaN ₃)
Stabilisers	1% bovine serum albumin 5% sucrose
Immunogen	K562 cells
External Database Links	<p>UniProt: P08174 Related reagents</p> <p>Entrez Gene: 1604 CD55 Related reagents</p>
Synonyms	CR, DAF
Specificity	<p>Mouse anti Human CD55 antibody, clone 67 recognizes the human CD55 cell surface antigen, a GPI linked molecule also known as decay accelerating factor (DAF). CD55 is expressed by a wide range of cell types.</p> <p>CD55 is the complement regulatory protein, decay accelerating factor (DAF) (Lublin and Atkinson 1989). Human CD55 is a ~70 kDa glycoprotein (in erythrocytes) anchored in the membrane by glycosylphosphatidylinositol tail. In other cells the apparent molecular weight is somewhat larger. It has a substantial content of O-glycans, and also on N-glycan. DAF binds to activated C4b or C3b complement fragments on the cell surface, preventing the assembly and accelerating the decay of both classical and alternative pathways. DAF carries the Cromer related blood group antigens.</p> <p>DAF has a wide distribution on cells in non-haematopoietic tissues, particularly epithelium and is found at the fetal-maternal interface in placenta (Holmes et al. 1990 and Yang et al. 2009). Soluble forms of DAF are found, for example, in plasma, saliva and urine (Medof et al. 1987). The antigen on erythrocytes is pronase and chymotrypsin sensitive, but resistant to trypsin.</p>
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 ⁶ cells in 100µl. Please note: Bio-Rad do not recommend the use of this reagent to stain erythrocytes
References	<ol style="list-style-type: none"> 1. Hadam, M.R. (1989) In Leucocyte Typing IV: White Cell Differentiation Antigens. Edited by Knapp, W. <i>et al.</i> Oxford University Press pp 694-697. 2. Holmes, C.H. <i>et al.</i> (1990) Preferential expression of the complement regulatory protein decay accelerating factor at the fetomaternal interface during human pregnancy. J Immunol. 144 (8): 3099-105. 3. O'Brien, D.P. <i>et al.</i> (2009) Regulation of the Helicobacter pylori cellular receptor decay-accelerating factor. J Biol Chem. 283: 23922-30. 4. Kraan, M.C. <i>et al.</i> (2004) T cells, fibroblast-like synoviocytes, and granzyme B+ cytotoxic cells are associated with joint damage in patients with recent onset rheumatoid arthritis. Ann Rheum Dis. 63: 483-8.

5. van Holten, J. *et al.* (2005) A multicentre, randomised, double blind, placebo controlled phase II study of subcutaneous interferon beta-1a in the treatment of patients with active rheumatoid arthritis. [Ann Rheum Dis. 64 \(1\): 64-9.](#)
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10. Vos, K. *et al.* (2007) Early effects of rituximab on the synovial cell infiltrate in patients with rheumatoid arthritis. [Arthritis Rheum. 56 \(3\): 772-8.](#)
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13. Abreu, J.R. *et al.* (2009) The Ras guanine nucleotide exchange factor RasGRF1 promotes matrix metalloproteinase-3 production in rheumatoid arthritis synovial tissue. [Arthritis Res Ther. 11\(4\):R121.](#)
14. Thurlings, R.M. *et al.* (2008) Synovial tissue response to rituximab: mechanism of action and identification of biomarkers of response. [Ann Rheum Dis. 67 \(7\): 917-25.](#)
15. Edginton S *et al.* (2016) Effects of Rituximab and Infliximab Treatment on Carboxypeptidase B and Its Substrates in RA Synovium. [J Rheumatol. 43 \(5\): 846-54.](#)

Further Reading

1. Lublin, D.M. & Atkinson, J.P. (1989) Decay-accelerating factor: biochemistry, molecular biology, and function. [Annu Rev Immunol. 7: 35-58.](#)
2. Daniels, G. (1989) Cromer-related antigens--blood group determinants on decay-accelerating factor. [Vox Sang. 56 \(4\): 205-11.](#)

Storage

Prior to reconstitution store at +4°C.
 After reconstitution store at +4°C.
 DO NOT FREEZE.
 This product should be stored undiluted. This product is photosensitive and should be protected from light

Guarantee

12 months from date of despatch

Acknowledgements

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Health And Safety Information	Material Safety Datasheet documentation #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA1614P647 20487
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Regulatory	For research purposes only
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Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE-Alexa Fluor® 647 \(MCA928P647\)](#)

Recommended Useful Reagents

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

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

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Printed on 19 Oct 2023

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