

## Datasheet: MCA2659

<b>Description:</b>	MOUSE ANTI HUMAN CD55
<b>Specificity:</b>	CD55
<b>Other names:</b>	DAF
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	Bu14
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.2 mg

## 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/200
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Western Blotting			▪	
Functional Assays			▪	

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.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )

<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0mg/ml
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P08174</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">1604</a>    CD55    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	CR, DAF
<b>RRID</b>	AB_2075955
<b>Specificity</b>	<p><b>Mouse anti Human CD55 antibody, clone Bu14</b> recognizes human CD55, also known as Decay Accelerating Factor (DAF). CD55 is a glycosylphosphatidylinositol (GPI) anchored type I surface protein which prevents complement mediated lysis of autologous cells. CD55 functions to limit the formation and accelerate the decay of C3/C5-convertases from the classic and alternative pathway.</p> <p>The molecular weight of CD55 varies between ~50 and 100 kDa dependent on cell type. Alternative transcripts can lead to soluble DAF, which is detectable in plasma, tears, saliva, urine and cerebrospinal fluid (<a href="#">Medof et al. 1987</a>).</p> <p>CD55 acts as a ligand for CD97 (<a href="#">Hamaan et al. 1998</a>) and is an entry receptor for Echovirus (<a href="#">Bergelson et al. 1994</a>) and Coxsackie B virus (<a href="#">Hafenstein et al. 2007</a>). CD55 has been linked to many diseases including multiple sclerosis, rheumatoid arthritis and cancer development (<a href="#">Visser et al. 2002</a>).</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label $1 \times 10^6$ cells in 100ul.
<b>References</b>	1. Loveland, B.E. and Szokolai, K. (1998) CD55 Workshop Report NL11 In: Leukocyte Typing VI, Eds Kishimoto, T. <i>et al.</i> Garland publishing . 519-520.
<b>Further Reading</b>	<p>1. Ruiz-Argüelles, A. &amp; Llorente, L. (2007) The role of complement regulatory proteins (CD55 and CD59) in the pathogenesis of autoimmune hemocytopenias. <a href="#">Autoimmun Rev. 6 (3): 155-61.</a></p> <p>2. Mikesch, J.H. <i>et al.</i> (2006) Decay-accelerating factor (CD55): a versatile acting molecule in human malignancies. <a href="#">Biochim Biophys Acta. 1766 (1): 42-52.</a></p>
<b>Storage</b>	<p>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.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.</p>

**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at:  
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Rabbit Anti Mouse IgG (STAR8...) [DyLight®800](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),  
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),  
[FITC](#), [HRP](#)

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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