

## Datasheet: MCA2659F

<b>Description:</b>	MOUSE ANTI HUMAN CD55:FITC
<b>Specificity:</b>	CD55
<b>Other names:</b>	DAF
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	Bu14
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.1 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 - 1/20

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 conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	FITC	490	525
<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> ) 1% Bovine Serum Albumin		
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1 mg/ml		

**External Database****Links****UniProt:**

[P08174](#)    [Related reagents](#)

**Entrez Gene:**

[1604](#)    CD55    [Related reagents](#)

**Synonyms**

CR, DAF

**RRID**

AB\_2275855

**Specificity**

**Mouse anti Human CD55 antibody, clone Bu14** 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.

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 ([Medof \*et al.\* 1987](#)).

CD55 acts as a ligand for CD97 ([Hamaan \*et al.\* 1998](#)) and is an entry receptor for Echovirus ([Bergelson \*et al.\* 1994](#)) and Coxsackie B virus ([Hafenstein \*et al.\* 2007](#)). CD55 has been linked to many diseases including multiple sclerosis, rheumatoid arthritis and cancer development ([Visser \*et al.\* 2002](#)).

**Flow Cytometry**

Use 10ul of the suggested working dilution to label  $1 \times 10^6$  cells in 100ul.

**References**

1. Loveland, B.E. and Szokolai, K. (1998) CD55 Workshop Report NL11 In: Leukocyte Typing VI, Eds Kishimoto, T. *et al.* Garland publishing . 519-520.

**Further Reading**

1. Ruiz-Argüelles, A. & Llorente, L. (2007) The role of complement regulatory proteins (CD55 and CD59) in the pathogenesis of autoimmune hemocytopenias. [Autoimmun Rev. 6 \(3\): 155-61.](#)
2. Mikesch, J.H. *et al.* (2006) Decay-accelerating factor (CD55): a versatile acting molecule in human malignancies. [Biochim Biophys Acta. 1766 \(1\): 42-52.](#)

**Storage**

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.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

**Guarantee**

12 months from date of despatch

**Health And Safety**

Material Safety Datasheet documentation #10041 available at:

**Information** <https://www.bio-rad-antibodies.com/SDS/MCA2659F10041>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

### Recommended Useful Reagents

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

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

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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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**Printed on 19 Jan 2024**

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