

Datasheet: MCA2648

BATCH NUMBER 154075

Description:	MOUSE ANTI HUMAN C3d
Specificity:	C3d
Other names:	COMPLEMENT COMPONENT 3d
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	053A-514.3.1.4
Isotype:	IgG1
Quantity:	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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA	▪			
Immunoprecipitation			▪	
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.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A
Buffer Solution	Borate buffered saline
Preservative Stabilisers	0.1% Sodium Azide (NaN ₃)

Approx. Protein Concentrations	IgG concentration 1.14mg/ml
Immunogen	Purified human C3d (neoantigen).
External Database Links	<p>UniProt: P01024 Related reagents</p> <p>Entrez Gene: 718 C3 Related reagents</p>
Synonyms	CPAMD1
RRID	AB_2259274
Specificity	<p>Mouse anti Human C3d antibody, clone 053A-514.3.1.4 recognizes human complement component 3d (C3d) neoantigen, a ~33 kDa polypeptide fragment generated over the course of complement activation in which where complement 3 (C3) convertases cleave C3 to C3b, which is further degraded into iC3b and C3dg/C3d.</p> <p>C3d is involved in the regulation of many aspects of the immune response, including antigen processing and presentation. The C3d/antigen complex mediates B cell activation by simultaneously binding antigen-specific surface bound immunoglobulin and CD21, lowering the complement activation threshold. C3 is crucial in the induction of tolerance generated when an antigen is introduced into immunoprivileged sites and this is exploited by pathogens and cancer cells to evade the immune system by inhibiting complement activation.</p>
Histology Positive Control Tissue	Kidney from post streptococcal glomerulonephritis patients
References	<ol style="list-style-type: none"> 1. Verghese PS <i>et al.</i> (2016) The clinical implications of the unique glomerular complement deposition pattern in transplant glomerulopathy. J Nephrol. Nov 15. [Epub ahead of print] 2. Kashiwagi, N. <i>et al.</i> (2017) Method for measuring anti-drug antibody. US patent Application US20170315118A1
Further Reading	<ol style="list-style-type: none"> 1. Bergmann-Leitner, E.S. <i>et al.</i> (2006) Complement 3d: from molecular adjuvant to target of immune escape mechanisms. Clin Immunol. 121 (2): 177-85. 2. Barilla-LaBarca, M.L. <i>et al.</i> (2002) Role of membrane cofactor protein (CD46) in regulation of C4b and C3b deposited on cells. J Immunol. 168 (12): 6298-304.
Storage	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>

Guarantee	Guaranteed until date of expiry. Please see product label.
Health And Safety Information	Material Safety Datasheet documentation #10334 available at: https://www.bio-rad-antibodies.com/SDS/MCA2648 10334
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

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

Recommended Negative Controls

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

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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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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