

Datasheet: MCA2648

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	Please see label for concentration
Immunogen	Purified human C3d (neoantigen).
External Database	UniProt:

Links [P01024](#) [Related reagents](#)

Entrez Gene:

[718](#) C3 [Related reagents](#)

Synonyms CPAMD1

RRID AB_2259274

Specificity **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.

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.

Histology Positive Control Tissue Kidney from post streptococcal glomerulonephritis patients

References

1. Verghese PS *et al.* (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. *et al.* (2017) Method for measuring anti-drug antibody. [US patent Application US20170315118A1](#)

Further Reading

1. Bergmann-Leitner, E.S. *et al.* (2006) Complement 3d: from molecular adjuvant to target of immune escape mechanisms. [Clin Immunol. 121 \(2\): 177-85.](#)
2. Barilla-LaBarca, M.L. *et al.* (2002) Role of membrane cofactor protein (CD46) in regulation of C4b and C3b deposited on cells. [J Immunol. 168 \(12\): 6298-304.](#)

Storage Store at +4°C or at -20°C if preferred.
Storage in frost-free freezers is not recommended.
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.

Guarantee Guaranteed until date of expiry. Please see product label.

Health And Safety Information Material Safety Datasheet documentation #10334 available at: 10334: <https://www.bio-rad-antibodies.com/uploads/MSDS/10334.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)

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

Recommended Negative Controls

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

Recommended Useful Reagents

[HISTAR DETECTION SYSTEM \(STAR3000A\)](#)

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