

Datasheet: MCA2607

Description:	MOUSE ANTI HUMAN iC3b (NEOANTIGEN)
Specificity:	iC3b (NEOANTIGEN)
Other names:	INACTIVATED COMPLEMENT COMPONENT 3b
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	013III-1.16
Isotype:	IgG2b
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	▪			10 ug/ml
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 from ascites
Buffer Solution	Borate buffered saline
Preservative Stabilisers	<0.1% Sodium Azide (NaN ₃)
Approx. Protein	Current, batch-specific concentration 1.045 mg/ml

Concentrations

Immunogen Purified human iC3b

External Database Links

UniProt:

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

Entrez Gene:

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

Synonyms CPAMD1

RRID AB_877464

Specificity

Mouse anti Human iC3b (Neoantigen) antibody, clone 013III-1.16 recognizes the ~42 kDa human inactive complement component 3b (iC3b) neoantigen present in blood serum. Cleavage of C3b into iC3b by the protease factor I, in the presence of cofactors, changes the structure and resulting binding properties, preventing binding by complement factor B and properdin. This prevents further progression of the complement pathway, providing another mechanism by which the complement pathway may be regulated.

iC3b is thought to play a role in inducing tolerance ([Sohn *et al.* 2003](#)), binding complement receptor type 3 on antigen presenting cells and stimulating them to produce transforming growth factor beta2 and interleukin-10. It is thought to stimulate B-cells via the CD21 receptor providing a link between the innate and adaptive immune responses. Additionally iC3b acts as an opsonin which is recognised by complement receptor 3 expressed on leukocytes or complement receptor of the immunoglobulin superfamily (CRIg) on Kupffer cells, stimulating phagocytosis of the tagged cells. iC3b levels are often elevated in diseases such as Systemic Lupus Erythematosis and Rheumatoid arthritis. iC3b levels are often elevated in diseases such as Systemic Lupus Erythematosis and Rheumatoid arthritis.

Histology Positive Control Tissue

Kidney from post streptococcal glomerulonephritis patients

Further Reading

1. Janssen, B. *et al.* (2007) Structural insights into the central complement component C3. [Molecular Immunology. 44: 3-10.](#)
 2. Bergmann-Leitner, E.S. *et al.* (2006) Complement 3d: from molecular adjuvant to target of immune escape mechanisms. [Clin Immunol. 121 \(2\): 177-85.](#)
 3. Sohn, J.H. *et al.* (2003) Tolerance is dependent on complement C3 fragment iC3b binding to antigen-presenting cells. [Nat Med. 9 \(2\): 206-12.](#)
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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.

Guarantee	Guaranteed until date of expiry. Please see product label.
Health And Safety Information	Material Safety Datasheet documentation #10077 available at: https://www.bio-rad-antibodies.com/SDS/MCA2607 10077
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Rabbit Anti Mouse IgG (STAR13...)	HRP
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
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC

Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL \(MCA691\)](#)

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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