

Datasheet: MCA2607 BATCH NUMBER 156052

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:	lgG2b
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
Buffer Solution	Borate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)

Approx. Protein Concentrations	IgG concentration 1.12 mg/ml			
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 streptoccal glomerulonephritis patients			
Further Reading	1. Janssena, B. <i>et al.</i> (2007) Structural insights into the central complement component C3. Molecular Immunology. 44: 3-10.			

- 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.

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 #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...)

Goat Anti Mouse IgG IgA IgM (STAR87...)

RPE

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

Rabbit Anti Mouse IgG (STAR9...) <u>FITC</u>
Goat Anti Mouse IgG (STAR77...) <u>HRP</u>

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

Recommended Negative Controls

MOUSE IgG2b NEGATIVE CONTROL (MCA691)

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

 $\textbf{Email: antibody_sales_us@bio-rad.com} \\ \textbf{Email: antibody_sales_uk@bio-rad.com} \\ \textbf{Email: antibody_sales_uk@b$

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M378965:210318'

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