

## MOUSE ANTI HUMAN iC3b (NEOANTIGEN)

MCA2607

Description: MOUSE ANTI HUMAN iC3b (NEOANTIGEN)  
 Specificity: iC3b (NEOANTIGEN)  
 Other names: INACTIVATED COMPLEMENT COMPONENT 3b  
 Format: Purified  
 Product Type: Monoclonal Antibody  
 Clone: 013III1.16  
 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.

	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.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A
<b>Buffer Solution</b>	Borate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (Na <sub>3</sub> N)
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0mg/ml
<b>Immunogen</b>	Purified human iC3b
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P01024</a> <a href="#">CO3_HUMAN</a> <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">718</a> <a href="#">C3</a> <a href="#">Related reagents</a></p>
<b>Synonyms</b>	CPAMD1

**Specificity** MCA2607 recognises 42kDa 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, 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 Erythematosus and Rheumatoid arthritis.

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**Histology Positive Control Tissue** Kidney from post streptococcal glomerulonephritis patients

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**References**

1. Janssena, B. *et al.* (2007) Structural insights into the central complement component C3. [Molecular Immunology](#) 44: 3-10.
2. Bergmann-Leitner, E. *et al.* (2006) Complement 3d: From molecular adjuvant to target of immune escape mechanisms. [Clinical Immunology](#) 121: 177-185.
3. Sohn, J. H. *et al.* (2003) Tolerance is dependent on complement C3 fragment iC3b binding to antigen-presenting cells. [Nature Medicine](#) 9: 206-212.

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**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.

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**Shelf Life** 18 months from date of despatch.

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**Health And Safety Information** Material Safety Datasheet Documentation #10077 available at: <http://www.abdserotec.com/uploads/MSDS/10077.pdf>

## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®549](#), [DyLight®649](#), [DyLight®800](#), [FITC](#), [HRP](#)  
Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
HuCAL Anti Mouse IgG2b (HCA038...) [FITC](#), [HRP](#), [RPE](#)  
Sheep Anti Mouse IgG (H/L) (AAC10...) [Biotin](#), [FITC](#)  
Rabbit Anti Mouse IgG (STAR8...) [DyLight®800](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

### Recommended Negative Controls

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

### Recommended Useful Reagents

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

[HISTAR DETECTION SYSTEM \(STAR3000B\)](#)