



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.

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 1.0mg/ml		
Immunogen	Purified human iC3b		
External Database Links	UniProt: P01024 CO3_HUMAN Related reagents Entrez Gene: 718 C3 Related reagents		
Synonyms	CPAMD1		

Gentaur Molecular Products Voortstraat 49 1910 Kampenhout, Belgium

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 Erythematosis and Rheumatoid arthritis.

Histology Positive Control Tissue

Kidney from post streptoccal glomerulonephritis patients

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 Immunology121: 177-185.
- 3. Sohn, J. H. *et al.* (2003) Tolerance is dependent on complement C3 fragment iC3b binding to antigen-presenting cells. <u>Nature Medicine 9: 206-212.</u>

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.

Shelf Life

18 months from date of despatch.

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...)

Sheep Anti Mouse IgG (H/L) (AAC10...)

Rabbit Anti Mouse IgG (STAR8...)

PITC, HRP, RPE

Biotin, FITC

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)