

Datasheet: MCA2610

Description:	MOUSE ANTI HUMAN C5
Specificity:	C5
Other names:	COMPLEMENT COMPONENT 5
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	046-10.2.2 (10-04)
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
ELISA	▪			
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 the 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 Concentrations	Current, batch-specific concentration 1.08 mg/ml
Immunogen	Purified human C5.

**External Database
Links**

UniProt:

[P01031](#) [Related reagents](#)

Entrez Gene:

[727](#) C5 [Related reagents](#)

Synonyms

CPAMD4

RRID

AB_2067051

Specificity

Mouse anti Human C5 antibody, clone 046-10.2.2 recognizes secreted complement component 5 (C5), a ~190 kDa serine protease present in blood serum. It is composed of an ~115 kDa disulphide linked alpha-chain and a ~75 kDa beta-chain. In addition to its role in complement, C5 is thought to be associated with inflammation, stimulating tumour necrosis factor alpha, interferon gamma mediated suppression of IL-10 and IL-12 production.

C5 is activated via either the classical or the alternative complement pathway, by proteolytic cleavage of C5a from the N-terminal of the alpha-chain, by C5 convertase. C5a is an anaphylotoxin which mediates local inflammation. It induces the contraction of smooth muscle, increases vascular permeability and causes histamine release from mast cells and basophilic leukocytes. It also stimulates chemotaxis of neutrophils, eosinophils, basophils and monocytes towards the site of inflammation. The remaining fragment, C5b, initiates the assembly of the membrane attack complex.

Mouse anti Human C5 antibody, clone 046-10.2.2 blocks C5 haemolytic activity ([Harder et al. 2017](#)).

Removal of sodium azide is recommended prior to use in functional assays.

Further Reading

1. Karp, C.L. *et al.* (2000) Identification of complement factor 5 as a susceptibility locus for experimental allergic asthma. [Nat Immunol. 1 \(3\): 221-6.](#)
2. Peng, T. *et al.* (2005) Role of C5 in the development of airway inflammation, airway hyperresponsiveness, and ongoing airway response. [J Clin Invest. 115 \(6\): 1590-600.](#)

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/MCA2610>
10077

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Goat Anti Mouse IgG (STAR76...)	RPE
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 (STAR13...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC

Recommended Negative Controls

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

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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

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