

## Datasheet: MCA2610

**BATCH NUMBER 155458**

|                      |                        |
|----------------------|------------------------|
| <b>Description:</b>  | MOUSE ANTI HUMAN C5    |
| <b>Specificity:</b>  | C5                     |
| <b>Other names:</b>  | COMPLEMENT COMPONENT 5 |
| <b>Format:</b>       | Purified               |
| <b>Product Type:</b> | Monoclonal Antibody    |
| <b>Clone:</b>        | 046-10.2.2 (10-04)     |
| <b>Isotype:</b>      | IgG1                   |
| <b>Quantity:</b>     | 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](http://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.

|                                       |   |
|---------------------------------------|---|
| <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>       | 0.1% Sodium Azide (NaN <sub>3</sub> )                         |
| <b>Approx. Protein Concentrations</b> | IgG concentration 1.08 mg/ml                                  |

**Immunogen** Purified human C5.

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**External Database Links**

**UniProt:**  
[P01031](#) [Related reagents](#)

**Entrez Gene:**  
[727](#) C5 [Related reagents](#)

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**Synonyms** CPAMD4

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**RRID** AB\_2067051

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**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.

In haemolysis inhibition studies it was found that Mouse anti Human C5 antibody, clone 046-10.2.2 will block C5 haemolytic activity ([Harder \*et al.\* 2017](#)).

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

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**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.](#)
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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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**Guarantee**

Guaranteed until date of expiry. Please see product label.

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**Health And Safety Information**

Material Safety Datasheet documentation #10334 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA2610>

**Regulatory**

For research purposes only

**Related Products****Recommended Secondary Antibodies**

|   |   |
|---|---|
| Rabbit Anti Mouse IgG (STAR12...)       | <a href="#">RPE</a>   |
| Goat Anti Mouse IgG IgA IgM (STAR87...) | <a href="#">HRP</a>   |
| Goat Anti Mouse IgG (STAR76...)         | <a href="#">RPE</a>   |
| Rabbit Anti Mouse IgG (STAR13...)       | <a href="#">HRP</a>   |
| Goat Anti Mouse IgG (STAR70...)         | <a href="#">FITC</a>  |
| Goat Anti Mouse IgG (H/L) (STAR117...)  | <a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> ,<br><a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> ,<br><a href="#">FITC</a> , <a href="#">HRP</a> |
| Rabbit Anti Mouse IgG (STAR9...)        | <a href="#">FITC</a>  |
| Goat Anti Mouse IgG (STAR77...)         | <a href="#">HRP</a>   |
| Goat Anti Mouse IgG (Fc) (STAR120...)   | <a href="#">FITC</a> , <a href="#">HRP</a>  |

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'M378960:210318'

**Printed on 18 Jan 2024**