

Datasheet: MCA2604

**BATCH NUMBER 162539**

|                      |                         |
|----------------------|-------------------------|
| <b>Description:</b>  | MOUSE ANTI HUMAN C3a    |
| <b>Specificity:</b>  | C3a                     |
| <b>Other names:</b>  | COMPLEMENT COMPONENT 3a |
| <b>Format:</b>       | Purified                |
| <b>Product Type:</b> | Monoclonal Antibody     |
| <b>Clone:</b>        | 048-18.6.3.X (10-21)    |
| <b>Isotype:</b>      | IgG1                    |
| <b>Quantity:</b>     | 0.1 ml                  |

## 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            | ▪   |    |                | 1/1500 - 1/6000    |
| Western Blotting | ▪   |    |                |                    |

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>       | 0.1% Sodium Azide (NaN <sub>3</sub> )                         |
| <b>Approx. Protein Concentrations</b> | Current, batch-specific concentration 1.1 mg/ml               |
| <b>Immunogen</b>                      | Native purified human C3a.                                    |

**External Database  
Links**

**UniProt:**

[P01024](#)   [Related reagents](#)

**Entrez Gene:**

[718](#)   C3   [Related reagents](#)

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**Synonyms**

CPAMD1

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**RRID**

AB\_2195323

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**Specificity**

**Mouse anti Human C3a antibody, clone 048-18.6.3.X (10-21)** recognizes the ~9 kDa complement component 3a (C3a) which is present in the blood serum. C3a is generated over the course of complement activation where complement 3 (C3) convertases cleave C3 to C3a and C3b, which is further degraded into iC3b and C3dg/C3d. C3 is crucial in the induction of tolerance generated when an antigen is introduced into immunoprivileged sites and this is exploited by pathogens and cancer cells to evade the immune system by inhibiting complement activation.

C3a mediates local inflammatory process. It induces the contraction of smooth muscle, increases vascular permeability and causes histamine release from mast cells and basophilic leukocytes. C3a is expressed at significantly higher levels in colorectal cancer.

Mouse anti Human C3a antibody, clone 10-21 shows minimal reactivity with other complement proteins in radioimmunoassays and haemagglutination.

Mouse anti Human C3a antibody, clone 10-21 has been reported to work in western blotting applications.

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**Further Reading**

1. Hugli, T.E. (1975) Human anaphylatoxin (C3a) from the third component of complement. Primary structure. [J Biol Chem. 250 \(21\): 8293-301.](#)
2. Habermann, J.K. *et al.* (2006) Increased serum levels of complement C3a anaphylatoxin indicate the presence of colorectal tumors. [Gastroenterology. 131 \(4\): 1020-9; quiz 1284.](#)

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**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.

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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/MCA2604>  
10334

## 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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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)

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