

Datasheet: MCA2604

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

	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.

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 1.1 mg/ml
Immunogen	Native purified human C3a.

**External Database
Links**

UniProt:

[P01024](#) [Related reagents](#)

Entrez Gene:

[718](#) C3 [Related reagents](#)

Synonyms

CPAMD1

RRID

AB_2195323

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.

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.](#)

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:
10077: <https://www.bio-rad-antibodies.com/uploads/MSDS/10077.pdf>

Regulatory

For research purposes only

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 \(MCA928\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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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
'M415992:230124'

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