

## Datasheet: MCA6152GA

<b>Description:</b>	MOUSE ANTI HUMAN C3/C3a
<b>Specificity:</b>	C3/C3a
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	474
<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	▪			1/50
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 G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1 mg/ml
<b>Immunogen</b>	C3a

**External Database  
Links**

**UniProt:**

[P01024](#)   [Related reagents](#)

**Entrez Gene:**

[718](#)   C3   [Related reagents](#)

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**Synonyms**

CPAMD1

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**Specificity**

**Mouse anti Human C3/C3a antibody, clone 474**, recognizes an epitope on C3a and also detects C3. C3 is a 185 kDa glycoprotein consisting of an alpha and beta chain and is the key component of all of the complement activation pathways. It is also the most abundant complement protein within serum, with levels of ~1.3 mg/ml ([Sim et al. 1981](#)).

There are 3 activation pathways within the complement system; the classical, lectin and alternative pathways. All three pathways converge on C3; resulting in its cleavage to anaphylatoxin C3a and opsonin C3b. C3a is a ligand to the seven-transmembrane coupled receptor C3aR ([Dunkelberger & Song 2010](#)). The actual response to C3a binding to C3aR has been shown to be cell type specific. For example, in mast cells, C3a elicits a pro-inflammatory histamine degranulation response ([el-Lati et al. 1994](#)). Whereas, on neutrophils, C3a exhibits an anti-inflammatory response, through attenuation of neutrophil mobilization into circulation after injury ([Mathern & Heeger 2015](#)). C3a has been shown to have a number of additional functionalities including to facilitate cross-talk between immune cells and tumor cells in the tumor microenvironment, promoting tumor cell metastasis ([Afshar-Karghan 2017](#)).

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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**

12 months from date of despatch

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**Health And Safety  
Information**

Material Safety Datasheet documentation #10040 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA6152GA>  
10040

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**Regulatory**

For research purposes only

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## 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](#)

Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
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](#)

## **Recommended Negative Controls**

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

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</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)  
'M410633:221028'

**Printed on 18 Jan 2024**

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