

## Datasheet: MCA6158GA

<b>Description:</b>	RAT ANTI HUMAN C3c
<b>Specificity:</b>	C3c
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	4
<b>Isotype:</b>	IgG2a
<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
Immunoprecipitation	▪			

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

### External Database Links

**UniProt:**  
[P01024](https://www.uniprot.org/uniprot/P01024)    [Related reagents](#)

**Entrez Gene:**[718](#) C3 [Related reagents](#)

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**Synonyms** CPAMD1

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**Specificity** **Rat anti Human C3c antibody, clone 4**, recognizes the cleaved human C3 fragment; C3c also recognizes C3b and iC3b. C3 is a 185 kDa glycoprotein consisting of an alpha and beta chain and is the key component of the complement activation pathways. 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. Once formed, C3b targets microbial cell surface receptors, marking them for phagocytosis by macrophages. The activity of C3b is heavily regulated to prevent accidental host tissue damage. Of these regulators, circulating Factor I, in the presence of co-factors, cleaves C3b to generate inactivated C3b (iC3b). This inactive designation relates to its inability to assist in the formation of convertases. In the presence of membrane bound complement receptor 1, iC3b is then cleaved further to C3dg, before further cleavage into C3d and C3c ([Ricklin et al. 2016](#)). The exact role of C3c is yet to be fully defined.

With C5a being highly active with a half-life less than 5 mins, the various C3 activation products are more readily detectable in assays, as they remain for a few hours ([Bosmann et al. 2012](#)). C3c is considered a valuable marker for inflammatory processes since it is more stable and develops out of C3 within one hour at body temperature. As such C3c is often chosen as an indicator of complement activation.

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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/MCA6158GA>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR69...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Rabbit Anti Rat IgG (STAR17...)	<a href="#">FITC</a>

Goat Anti Rat IgG (STAR131...)

[Alk. Phos.](#), [Biotin](#)

Goat Anti Rat IgG (STAR72...)

[HRP](#)

Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...) [DyLight®550](#), [DyLight®650](#), [DyLight®800](#)

Rabbit Anti Rat IgG (STAR21...)

[HRP](#)

Rabbit Anti Rat IgG (STAR16...)

[DyLight®800](#)

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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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