

Datasheet: MCA6161GA

BATCH NUMBER 157933

Description:	RAT ANTI HUMAN C3d
Specificity:	C3d
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	3
Isotype:	IgG2a
Quantity:	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.

	Yes	No	Not Determined	Suggested Dilution
ELISA	▪			
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.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml

External Database Links

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

Entrez Gene:

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

Synonyms

CPAMD1

Specificity

Rat anti Human C3d antibody, clone 3 (also known as clone YB2/39-11-7), recognizes a linear antigen on C3d. This antibody also detects C3, C3b, iC3b and C3dg, it does not recognize C3c. To distinguish C3 from C3b, a Mouse anti Human C3a/C3a desArg antibody ([MCA6163GA](#)) can be used.

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). iC3b's inactive designation relates to its inability to assist in the formation of convertases. In the presence of membrane bound complement receptor 1, iC3b is cleaved further to C3dg, before further cleavage into C3d and C3c. C3d is able to interact with complement receptor 2, which is expressed on the surface of B cells. C3d is involved in pathogen opsonisation, using a thiolester bond to covalently coat pathogens ([Ricklin *et al.* 2016](#)).

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.

Guarantee

12 months from date of despatch

Health And Safety Information

Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA6161GA>
10040

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	DyLight@800
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE

Rabbit Anti Rat IgG (STAR21...)

[HRP](#)

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

Goat Anti Rat IgG (STAR131...)

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

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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

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