

Datasheet: MCA6163GA

BATCH NUMBER 157935

Description:	MOUSE ANTI HUMAN C3a/C3a desArg
Specificity:	C3a/C3a desArg
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	2991
Isotype:	IgG1
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	▪			
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 G
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	Human C3a des-arg

External Database
Links

UniProt:

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

Entrez Gene:

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

Synonyms

CPAMD1

Specificity

Mouse anti Human C3a/C3a desArg antibody, clone 2991, recognizes the neo-epitope of both human C3a and C3a desArg, with at least a 5x higher preference for C3a desArg. Neo-epitopes are regions on native proteins that are only exposed and detectable on activated proteins. As such, detection of these neo-epitopes can be used for the direct quantification of the activation of different steps in the complement cascade.

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 ([Dunkelberger & Song 2010](#)). C3a is a ligand to the seven-transmembrane coupled receptor C3aR. Upon binding to this receptor C3a elicits an anti-inflammatory response, by attenuating neutrophil mobilization into circulation after injury ([Mathern & Heeger 2015](#)). C3a is however rapidly cleaved by serum carboxypeptidases at the C-terminal arginine to the more stable C3a desArg. C3a desArg has no detectable activity with C3aR, but there is some evidence to suggest that it can bind to C5aR2, a receptor of C5a as well as C5L2 ([Kalant et al. 2003](#), [Zhang et al. 2017](#)). Measurement of C3a desArg has been used to examine the level of complement activation in test samples.

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/MCA6163GA>
10040

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)

Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)

Goat Anti Mouse IgG (STAR70...) [FITC](#)

Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®550 , DyLight®650 , DyLight®680 , DyLight®800 , FITC , HRP
Goat Anti Mouse IgG (STAR76...)	RPE

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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
'M387839:210726'

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