

## Datasheet: MCA2649

<b>Description:</b>	MOUSE ANTI HUMAN C4d (NEOANTIGEN)
<b>Specificity:</b>	C4d (NEOANTIGEN)
<b>Other names:</b>	COMPLEMENT COMPONENT 4d
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	057-51.5.1.6
<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
Flow Cytometry			▪	
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting			▪	
Functional Assays			▪	

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 A from ascites
<b>Buffer Solution</b>	Borate buffered saline
<b>Preservative Stabilisers</b>	0.1% Sodium Azide (NaN <sub>3</sub> )
<b>Approx. Protein</b>	Current, batch-specific concentration 1.10 mg/ml

## Concentrations

---

**Immunogen** Purified human C4d.

---

## External Database Links

### UniProt:

[P0C0L4](#) [Related reagents](#)

[P0C0L5](#) [Related reagents](#)

### Entrez Gene:

[720](#) C4A [Related reagents](#)

[721](#) C4B [Related reagents](#)

---

**Synonyms** CO4, CPAMD2, CPAMD3

---

**RRID** AB\_871990

---

**Specificity** **Mouse anti Human C4d (Neoantigen) antibody, clone 057-51.5.1.6** recognizes a neoantigen on the secreted protein complement component 4d (C4d). The complement 1 complex cleaves complement 4 (C4) to form C4b and C4a. C4b levels are strictly regulated. Single site cleavage of the C4b's alpha chain by Factor I forms iC4b and blocks C3 convertase, inhibiting opsonisation and activation of the classical pathway. This requires C4 binding protein or CR1 as a cofactor. iC4b is further degraded into C4d and C4c. The short half life of C4d means that it is present in serum at high enough concentrations to make it a useful marker for classical complement activation.

C4 has been linked to susceptibility to systemic lupus erythematosus.

---

## Histology Positive Control Tissue

Kidney from post streptococcal glomerulonephritis patients

---

## References

1. Rogers, J. *et al.* (1992) Complement activation by beta-amyloid in Alzheimer disease. [Proc Natl Acad Sci U S A. 89 \(21\): 10016-20.](#)

---

## 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 #10334 available at: 10334: <https://www.bio-rad-antibodies.com/uploads/MSDS/10334.pdf>

---

## Regulatory

For research purposes only

---

## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">Alk. Phos.</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight@488</a> , <a href="#">DyLight@550</a> , <a href="#">DyLight@650</a> , <a href="#">DyLight@680</a> , <a href="#">DyLight@800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>

### 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>
----------------------------------	---	------------------	---	---------------	---

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)  
'M405880:220916'

Printed on 16 Sep 2022