

Datasheet: MCA2603

BATCH NUMBER 166215

Description:	MOUSE ANTI HUMAN C1q
Specificity:	C1q
Other names:	COMPLEMENT COMPONENT 1q
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	004-43.X (3R9/2)
Isotype:	IgG1
Quantity:	0.1 ml

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
Flow Cytometry	▪			
Immunohistology - Frozen	▪			1:500 - 1:1000
ELISA	▪			
Western Blotting	▪			
Immunofluorescence	▪			

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 A from ascites
Buffer Solution	Borate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Approx. Protein	Current, batch-specific concentration 1.09 mg/ml

Concentrations

Immunogen	Globular head domain of C1q, purified from human plasma.
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External Database Links

UniProt:

[P02745](#) [Related reagents](#)

[P02746](#) [Related reagents](#)

[P02747](#) [Related reagents](#)

Entrez Gene:

[712](#) C1QA [Related reagents](#)

[713](#) C1QB [Related reagents](#)

[714](#) C1QC [Related reagents](#)

Synonyms	C1QG
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RRID	AB_2067258
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Specificity	<p>Mouse anti human C1q antibody, clone 004-43.X (3R9/2), recognizes human complement component 1 q (C1q), a ~156 kDa secreted protein.</p> <p>C1q associates with proenzymes C1r and C1s to form the calcium-dependent C1 complex, the first component of the serum complement system. C1q is composed of six A-, six B-chains and six C-polypeptide chains. Each chain contains a collagen-like region located near the N-terminus and a C-terminal globular region. These regions bind the Fc region of IgM and IgG molecules, initiating the classical pathway of complement activation.</p> <p>C1q deficiency has been associated with lupus erythematosus and glomerulonephritis (Troedson <i>et al.</i> 2013).</p>
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Histology Positive Control Tissue	Kidney from patients with streptococcal glomerulonephritis
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References	<ol style="list-style-type: none">1. Castellano, G. <i>et al.</i> (2010) Therapeutic targeting of classical and lectin pathways of complement protects from ischemia-reperfusion-induced renal damage. Am J Pathol. 176: 1648-59.2. Ma, W. <i>et al.</i> (2012) RAGE binds C1q and enhances C1q-mediated phagocytosis. Cell Immunol. 274: 72-82.3. Lachmann, N. <i>et al.</i> (2013) Systematic comparison of four cell- and Luminex-based methods for assessment of complement-activating HLA antibodies. Transplantation. 95 (5): 694-700.4. Cai, Y. <i>et al.</i> (2015) C1q protein binds to the apoptotic nucleolus and causes C1 protease degradation of nucleolar proteins. J Biol Chem. 290 (37): 22570-80.5. Madhukaran, S.P. <i>et al.</i> (2015) Decidual expression and localization of human surfactant protein SP-A and SP-D, and complement protein C1q. Mol Immunol. 66 (2): 197-207.6. Kashiwagi, N. <i>et al.</i> (2017) Method for measuring anti-drug antibody US Patent Application US20170315118A1
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- Further Reading**
1. Petry, F. (1998) Molecular basis of hereditary C1q deficiency. [Immunobiology. 199 \(2\): 286-94.](#)
 2. Schejbel, L. *et al.* (2011) Molecular basis of hereditary C1q deficiency--revisited: identification of several novel disease-causing mutations. [Genes Immun. 12 \(8\): 626-34.](#)

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 #10077 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2603>
10077

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 (STAR76...) [RPE](#)
 Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
 Goat Anti Mouse IgG (STAR70...) [FITC](#)
 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 (STAR9...) [FITC](#)
 Goat Anti Mouse IgG (STAR77...) [HRP](#)
 Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

Recommended Negative Controls

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

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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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
 'M405858:220916'

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