

# Datasheet: MCA2647 BATCH NUMBER 164602

Description:	MOUSE ANTI HUMAN COMPLEMENT FACTOR B (Ba FRAGMENT)
Specificity:	COMPLEMENT FACTOR B (Ba FRAGMENT)
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	014III-33.2.4.3
Isotype:	lgG1
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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	•			
Immunohistology - Frozen	•			
Immunohistology - Paraffin				
ELISA (1)	•			
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.

(1)Cone 014III-33.2.4.3binds both the Ba fragment and the whole protein so is not suitable for all ELISA applications.

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	0.1% Sodium Azide (NaN <sub>3</sub> )

Approx. Protein Concentrations	Current, batch-specific concentration 1.1 mg/ml			
Immunogen	Purified human complement factor b.			
External Database Links	UniProt: P00751 Related reagents  Entrez Gene:			
	629 CFB Related reagents			
Synonyms	BF, BFD			
RRID	AB_2080001			
Specificity	Mouse anti Human Complement Factor B (Ba Fragment) antibody, clone 014III-33.2.4.3 recognises the 30 kDa Ba fragment of 90 kDa human complement factor B, present in blood serum. C3b associates with complement factor B, inducing conformational change. This enables complement factor D to cleave the N-terminal of complement factor B (the Ba subunit), leaving the 63 kDa Bb subunit associated with C3b, forming C3 convertase. Subunit Ba inhibits lymphocyte proliferation. Conversely, subunit Bb is involved in the proliferation of preactivated B lymphocytes.			
	Mouse anti Human Complement Factor B (Ba Fragment) antibody, clone 014III-33.2.4.3 blocks activity of the target protein. Removal of Sodium Azide is recommended prior to use in functional assays.			
Histology Positive Control Tissue	Kidney from post streptococcal glomerulonephritis patients			
References	<ol> <li>Zipplies, J.K. <i>et al.</i> (2010) Complement factor B expression profile in a spontaneous uveitis model. <u>Immunobiology. 215 (12): 949-55.</u></li> <li>Loyet, K.M. <i>et al.</i> (2012) Activation of the alternative complement pathway in vitreous is controlled by genetics in age-related macular degeneration. <u>Invest Ophthalmol Vis Sci. 53 (10): 6628-37.</u></li> <li>Katschke, K.J. Jr. <i>et al.</i> (2018) Classical and alternative complement activation on photoreceptor outer segments drives monocyte-dependent retinal atrophy. <u>Sci Rep. 8 (1): 7348.</u></li> </ol>			
Further Reading	<ol> <li>Xu, Y. et al. (2001) Structural biology of the alternative pathway convertase. <u>Immunol Rev. 180: 123-35.</u></li> <li>Ponnuraj, K. et al. (2004) Structural analysis of engineered Bb fragment of complement factor B: insights into the activation mechanism of the alternative pathway C3-convertase. <u>Mol Cell. 14 (1): 17-28.</u></li> </ol>			
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: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2647">https://www.bio-rad-antibodies.com/SDS/MCA2647</a> 10077
Regulatory	For research purposes only

## **Related Products**

### **Recommended Secondary Antibodies**

Rabbit Anti Mouse IgG (STAR12...)

Goat Anti Mouse IgG IgA IgM (STAR87...)

HRP

Goat Anti Mouse IgG (STAR76...)

RPE

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 (STAR13...) HRP

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

Rabbit Anti Mouse IgG (STAR9...) <u>FITC</u>
Goat Anti Mouse IgG (STAR77...) <u>HRP</u>

**Recommended Negative Controls** 

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M416006:230124'

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