

Datasheet: MCA2647

**BATCH NUMBER 173057**

<b>Description:</b>	MOUSE ANTI HUMAN COMPLEMENT FACTOR B (Ba FRAGMENT)
<b>Specificity:</b>	COMPLEMENT FACTOR B (Ba FRAGMENT)
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	014III-33.2.4.3
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

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

<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 Concentrations</b>	Current, batch-specific concentration 1.1 mg/ml
<b>Immunogen</b>	Purified human complement factor b.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P00751</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">629</a>    CFB    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	BF, BFD
<b>RRID</b>	AB_2080001
<b>Specificity</b>	<p><b>Mouse anti Human Complement Factor B (Ba Fragment) antibody, clone 014III-33.2.4.3</b> 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.</p> <p>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.</p>
<b>Histology Positive Control Tissue</b>	Kidney from post streptococcal glomerulonephritis patients
<b>References</b>	<ol style="list-style-type: none"> <li>1. Zipplies, J.K. <i>et al.</i> (2010) Complement factor B expression profile in a spontaneous uveitis model. <a href="#">Immunobiology. 215 (12): 949-55.</a></li> <li>2. 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. <a href="#">Invest Ophthalmol Vis Sci. 53 (10): 6628-37.</a></li> <li>3. Katschke, K.J. Jr. <i>et al.</i> (2018) Classical and alternative complement activation on photoreceptor outer segments drives monocyte-dependent retinal atrophy. <a href="#">Sci Rep. 8 (1): 7348.</a></li> </ol>
<b>Further Reading</b>	<ol style="list-style-type: none"> <li>1. Xu, Y. <i>et al.</i> (2001) Structural biology of the alternative pathway convertase. <a href="#">Immunol Rev. 180: 123-35.</a></li> <li>2. Ponnuraj, K. <i>et al.</i> (2004) Structural analysis of engineered Bb fragment of complement factor B: insights into the activation mechanism of the alternative pathway C3-convertase. <a href="#">Mol Cell. 14 (1): 17-28.</a></li> </ol>
<b>Storage</b>	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.

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<b>Guarantee</b>	Guaranteed until date of expiry. Please see product label.
<b>Health And Safety Information</b>	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>
<b>Regulatory</b>	For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</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>

### Recommended Negative Controls

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

**Product inquiries:** [www.bio-rad-antibodies.com/technical-support](http://www.bio-rad-antibodies.com/technical-support)

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](http://bio-rad-antibodies.com/datasheets)

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