

Datasheet: MCA2113

**BATCH NUMBER 169578**

<b>Description:</b>	MOUSE ANTI HUMAN CD46
<b>Specificity:</b>	CD46
<b>Other names:</b>	MEMBRANE CO-FACTOR PROTEIN
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MEM-258
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.2 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	▪			1/10 - 1/50
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting	▪			Non reducing conditions
Immunofluorescence	▪			
Functional Assays (1)	▪			

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) This product contains sodium azide, removal by dialysis is recommended prior to use in functional assays.**

<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 tissue culture supernatant

<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% sodium azide (NaN <sub>3</sub> )
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	HPB-ALL cell line.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P15529</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">4179</a>    CD46    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	MCP, MIC10
<b>RRID</b>	AB_323983
<b>Specificity</b>	<p><b>Mouse anti Human CD46 antibody, clone MEM-258</b> recognizes the human CD46 cell surface antigen, also known as membrane co-factor protein (MCP), Trophoblast leukocyte common antigen or TLX. CD46 is a 392 amino acid (including a 34 aa signal peptide) ~43-60 kDa single pass type 1 trans-membrane glycoprotein expressed by all cell types with the exception of erythrocytes.</p> <p>CD46 functions as a receptor for complement and inhibitor of complement activation, limiting the formation and activity of C3 convertases. CD46 is expressed by all nucleated cells, often as multiple isoforms (<a href="#">Seya et al. 1993</a>) on the same cells. The molecule is also expressed by sperm and may be important in the process of fertilisation (<a href="#">Carver-Ward et al. 1996</a>). CD46 is reported to function as a receptor for adenovirus in a range of human cells and cell lines (<a href="#">Wu et al. 2024</a>).</p>
<b>Flow Cytometry</b>	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> or 100µl whole blood
<b>References</b>	<ol style="list-style-type: none"> <li>Sirena D <i>et al.</i> (2004) The human membrane cofactor CD46 is a receptor for species B adenovirus serotype 3. <a href="#">J Virol. 78 (9): 4454-62.</a></li> <li>Fremaux-Bacchi, V. <i>et al.</i> (2006) Genetic and functional analyses of membrane cofactor protein (CD46) mutations in atypical hemolytic uremic syndrome. <a href="#">J Am Soc Nephrol. 17 (7): 2017-25.</a></li> <li>Fleischli, C. <i>et al.</i> (2005) The distal short consensus repeats 1 and 2 of the membrane cofactor protein CD46 and their distance from the cell membrane determine productive entry of species B adenovirus serotype 35. <a href="#">J Virol. 79:10013-22.</a></li> <li>Sweigard, J.H. <i>et al.</i> (2010) Adenovirus vectors targeting distinct cell types in the retina. <a href="#">Invest Ophthalmol Vis Sci. 51:2219-28.</a></li> <li>Yang, P. <i>et al.</i> (2009) Expression and modulation of RPE cell membrane complement regulatory proteins. <a href="#">Invest Ophthalmol Vis Sci. 50: 3473-81.</a></li> <li>Bahat, A. and Eisenbach, M. (2010) Human sperm chemotaxis is mediated by</li> </ol>

- phospholipase C and inositol trisphosphate receptor Ca<sup>2+</sup> channel. [Biol Reprod. 82: 606-16.](#)
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degeneration. [Gene Ther. 18 \(6\): 613-21.](#)

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**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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2113>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),  
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),  
[FITC](#), [HRP](#)

### 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)  
'M412902:221117'

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