

## Datasheet: MCA2113A647

<b>Description:</b>	MOUSE ANTI HUMAN CD46:Alexa Fluor® 647
<b>Specificity:</b>	CD46
<b>Other names:</b>	MEMBRANE CO-FACTOR PROTEIN
<b>Format:</b>	ALEXA FLUOR® 647
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MEM-258
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	100 TESTS/1ml

## 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	▪			Neat - 1/10

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 conjugated to Alexa Fluor® 647 - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	Alexa Fluor®647	650	665
<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> )		
	1% bovine serum albumin		
<b>Approx. Protein Concentrations</b>	IgG concentration 0.05 mg/ml		

Immunogen	HPB-ALL cell line.
External Database Links	<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>
Synonyms	MCP, MIC10
RRID	AB_566781
Specificity	<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 transmembrane glycoprotein expressed by all cell types with the exception of erythrocytes.</p> <p>CD46 functions as areceptor 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 (Seya <i>et al.</i> 1993) on the same cells. The molecule is also expressed by sperm and may be important in the process of fertilisation (Carver-Ward <i>et al.</i> 1996).</p>
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> or 100µl whole blood
References	<ol style="list-style-type: none"> <li>1. 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>2. Fremeaux-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>3. 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>4. 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>5. 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>6. Bahat, A. and Eisenbach, M. (2010) Human sperm thermotaxis is mediated by phospholipase C and inositol trisphosphate receptor Ca<sup>2+</sup> channel. <a href="#">Biol Reprod. 82: 606-16.</a></li> <li>7. Bienaime, F. <i>et al.</i> (2010) Mutations in components of complement influence the outcome of Factor I-associated atypical hemolytic uremic syndrome. <a href="#">Kidney Int. 77: 339-49.</a></li> <li>8. Wang, H. <i>et al.</i> (2008) <i>In vitro</i> and <i>in vivo</i> properties of adenovirus vectors with increased affinity to CD46. <a href="#">J Virol. 82: 10567-79.</a></li> <li>9. Hara, H. <i>et al.</i> (2011) Initial <i>in vitro</i> investigation of the human immune response to</li> </ol>

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  26. Sweigard, J.H. *et al.* (2011) Adenovirus-mediated delivery of CD46 attenuates the alternative complement pathway on RPE: implications for age-related macular 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. This product is photosensitive and should be

protected from light.

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<b>Guarantee</b>	12 months from date of despatch
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2113A647">https://www.bio-rad-antibodies.com/SDS/MCA2113A647</a> 10041
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA928A647\)](#)

### Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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