

Datasheet: MCA2113PE

BATCH NUMBER 171986

Description:	MOUSE ANTI HUMAN CD46:RPE
Specificity:	CD46
Other names:	MEMBRANE CO-FACTOR PROTEIN
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	MEM-258
Isotype:	IgG1
Quantity:	100 TESTS

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	▪			Neat

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 conjugated to R. Phycoerythrin (RPE) - lyophilized		
Reconstitution	Reconstitute with 1 ml distilled water		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% sodium azide (NaN ₃)		
Stabilisers	1% bovine serum albumin		

Immunogen	HPB-ALL cell line.
External Database Links	<p>UniProt: P15529 Related reagents</p> <p>Entrez Gene: 4179 CD46 Related reagents</p>
Synonyms	MCP, MIC10
RRID	AB_324204
Specificity	<p>Mouse anti Human CD46 antibody, clone MEM-258 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 (Seya et al. 1993) on the same cells. The molecule is also expressed by sperm and may be important in the process of fertilisation (Carver-Ward et al. 1996). CD46 is reported to function as a receptor for adenovirus in a range of human cells and cell lines (Wu et al. 2024).</p>
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 ⁶ or 100µl whole blood
References	<ol style="list-style-type: none"> 1. Sirena D <i>et al.</i> (2004) The human membrane cofactor CD46 is a receptor for species B adenovirus serotype 3. J Virol. 78 (9): 4454-62. 2. Fremeaux-Bacchi, V. <i>et al.</i> (2006) Genetic and functional analyses of membrane cofactor protein (CD46) mutations in atypical hemolytic uremic syndrome. J Am Soc Nephrol. 17 (7): 2017-25. 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. J Virol. 79:10013-22. 4. Sweigard, J.H. <i>et al.</i> (2010) Adenovirus vectors targeting distinct cell types in the retina. Invest Ophthalmol Vis Sci. 51:2219-28. 5. Yang, P. <i>et al.</i> (2009) Expression and modulation of RPE cell membrane complement regulatory proteins. Invest Ophthalmol Vis Sci. 50: 3473-81. 6. Bahat, A. and Eisenbach, M. (2010) Human sperm chemotaxis is mediated by phospholipase C and inositol trisphosphate receptor Ca²⁺ channel. Biol Reprod. 82: 606-16. 7. Bienaime, F. <i>et al.</i> (2010) Mutations in components of complement influence the outcome of Factor I-associated atypical hemolytic uremic syndrome. Kidney Int. 77: 339-49. 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. J Virol. 82: 10567-79.

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Storage

This product is shipped at ambient temperature.
Store at +4°C.

DO NOT FREEZE

This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee	12 months from date of despatch
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Health And Safety Information	Material Safety Datasheet documentation #20486 available at: https://www.bio-rad-antibodies.com/SDS/MCA2113PE
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Regulatory	For research purposes only
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Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

Recommended Useful Reagents

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

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

Product inquiries: 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
'M440406:250523'

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