

Datasheet: MCA2113 BATCH NUMBER 161207

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

	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 antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody 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.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A
Buffer Solution	Phosphate buffered saline

Preservative Stabilisers	0.09% Sodium Azide		
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml		
Immunogen	HPB-ALL cell line.		
External Database Links	UniProt: P15529 Related reagents Entrez Gene: 4179 CD46 Related reagents		
Synonyms	MCP, MIC10		
RRID	AB_323983		

Specificity

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 transmembrane glysoprotein expressed by all cell types with the exception of erythrocytes.

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 *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).

Flow Cytometry

Use 10ul of the suggested working dilution to label 10⁶ or 100ul whole blood.

References

- 1. Sirena D *et al.* (2004) The human membrane cofactor CD46 is a receptor for species B adenovirus serotype 3. <u>J Virol. 78 (9): 4454-62.</u>
- 2. Fremeaux-Bacchi, V. *et al.* (2006) Genetic and functional analyses of membrane cofactor protein (CD46) mutations in atypical hemolytic uremic syndrome. <u>J Am Soc Nephrol</u>. 17 (7): 2017-25.
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- 4. Sweigard, J.H. *et al.* (2010) Adenovirus vectors targeting distinct cell types in the retina. Invest Ophthalmol Vis Sci. 51:2219-28.
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- 6. Bahat, A. and Eisenbach, M. (2010) Human sperm thermotaxis is mediated by phospholipase C and inositol trisphosphate receptor Ca2+ channel. <u>Biol Reprod. 82:</u> 606-16.
- 7. Bienaime, F. et al. (2010) Mutations in components of complement influence the

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- 10. El Karoui, K. *et al.* (2012) A clinicopathologic study of thrombotic microangiopathy in IgA nephropathy. J Am Soc Nephrol. 23 (1): 137-48.
- 11. Bach, P. et al. (2013) Specific elimination of CD133+ tumor cells with targeted oncolytic measles virus. <u>Cancer Res. 73 (2): 865-74.</u>
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- 13. Tuve, S. *et al.* (2006) A new group B adenovirus receptor is expressed at high levels on human stem and tumor cells. J Virol. 80 (24): 12109-20.
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- 15. Loré, K. *et al.* (2007) Myeloid and plasmacytoid dendritic cells are susceptible to recombinant adenovirus vectors and stimulate polyfunctional memory T cell responses. <u>J Immunol.</u> 179 (3): 1721-9.
- 16. Fremeaux-Bacchi, V. *et al.* (2007) Unusual clinical severity of complement membrane cofactor protein-associated hemolytic-uremic syndrome and uniparental isodisomy. <u>Am J Kidney Dis. 49 (2): 323-9.</u>
- 17. Le Quintrec, M. *et al.* (2008) Complement mutation-associated *de novo* thrombotic microangiopathy following kidney transplantation. Am J Transplant. 8 (8): 1694-701.
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- 23. White, K.M. *et al.* (2013) Assessment of a novel, capsid-modified adenovirus with an improved vascular gene transfer profile. <u>J Cardiothorac Surg. 8: 183.</u>
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- 25. Iwase, H. *et al.* (2014) Regulation of human platelet aggregation by genetically modified pig endothelial cells and thrombin inhibition. <u>Xenotransplantation</u>. 21 (1): 72-83.
- 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.

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	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA2113 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)

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

RPE

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

Goat Anti Mouse IgG (STAR77...)

Rabbit Anti Mouse IgG (STAR9...)

FITC

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

Rabbit Anti Mouse IgG (STAR13...) HRP

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

North & South Tel: +1 800 265 7376 America Fax: +1 919 878 3751

Worldwide

Tel: +44 (0)1865 852 700

Europe

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_us@bio-rad.com

Fax: +44 (0)1865 852 739
Email: antibody_sales_uk@bio-rad.com

Email: antibody sales de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M382929:210513'

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