Datasheet: MCA2113F

Description:	MOUSE ANTI HUMAN CD46:FITC
Specificity:	CD46
Other names:	MEMBRANE CO-FACTOR PROTEIN
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	MEM-258
Isotype:	IgG1
Quantity:	0.1 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	▪			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 Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
FITC	490	525

Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% sodium azide (NaN_3)
1% bovine serum albumin

Approx. Protein Concentrations

IgG concentration 0.1 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_323798
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 10µl of the suggested working dilution to label 10^6 or 100µl whole blood.
References	1. Sirena D *et al.* (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. *et al.* (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. *et al.* (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. *et al.* (2010) Adenovirus vectors targeting distinct cell types in the retina. Invest Ophthalmol Vis Sci. 51:2219-28. 5. Yang, P. *et al.* (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 thermotaxis is mediated by phospholipase C and inositol trisphosphate receptor Ca2+ channel. Biol Reprod. 82: 606-16. 7. Bienaime, F. *et al.* (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. *et al.* (2008) *In vitro* and *in vivo* properties of adenovirus vectors with increased affinity to CD46. J Virol. 82: 10567-79. 9. Hara, H. *et al.* (2011) Initial *in vitro* investigation of the human immune response to

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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.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA2113F 10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	**Worldwide**	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	**Europe**	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 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

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