Datasheet: MCA1880F

Description:	MOUSE ANTI HUMAN CD6:FITC
Specificity:	CD6
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	MEM-98
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 ascites

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

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

Approx. Protein Concentrations

IgG concentration 0.1mg/ml

Immunogen

Purified CD6 antigen

External Database Links	**UniProt:** P30203 Related reagents **Entrez Gene:** 923 CD6 Related reagents
RRID	AB_322544
Fusion Partners	Spleen cells from immunized mice
Specificity	**Mouse anti Human CD6 antibody, clone MEM-98** recognizes human CD6, also known as T12 or TP120. CD6 is a ~100-130 kDa type 1 single pass trans-membrane protein member of the immunoglobulin superfamily. CD6 possesses 3 scavenger receptor cysteine rich (SRCR) domains in it's extracellular sequence. The membrane proximal SRCR3 contains the epitope responsible for interaction with CD166, also known as Activated Leukocyte Cell Adhesion Molecule (ALCAM) or CD166. Multiple gene transcripts have been detected encoding CD6 in man resulting in the production of a number of CD6 isoforms. Mouse anti human CD6, clone MEM-98 recognizes an external epitope located in the membrane-distal SRCR domain 1 and is expected to recognize all CD6 isoforms so far identified, CD6A-E. CD6 has been implicated as a therapeutic target for a number of autoimmune conditions (Pinto *et al.* 2013) including Sjögren's syndrome (Ramos-Casals *et al.* 2001) , rheumatoid arthritis (Rodriguez *et al.*) and psoriasis (Wilsmann-Theis *et al.* 2006).
Flow Cytometry	Use 10µl of the suggested working dilution to label 10^6 cells or 100µl whole blood
References	1. Bazil, V. *et al.* (1989) Monoclonal antibodies against human leucocyte antigens. III. Antibodies against CD45R, CD6, CD44 and two newly described broadly expressed glycoproteins MEM-53 and MEM-102. Folia Biol (Praha). 35 (5): 289-97. 2. Hassan, N.J. *et al.* (2006) CD6 regulates T-cell responses through activation-dependent recruitment of the positive regulator SLP-76. Mol Cell Biol. 26 (17): 6727-38. 3. Castro, M.A. *et al.* (2007) Extracellular isoforms of CD6 generated by alternative splicing regulate targeting of CD6 to the immunological synapse. J Immunol. 178 (7): 4351-61. 4. Nair, P. *et al.* (2010) CD6 synergistic co-stimulation promoting proinflammatory response is modulated without interfering with the activated leucocyte cell adhesion molecule interaction. Clin Exp Immunol. 162 (1): 116-30. 5. Bughani, U. *et al.* (2017) T cell activation and differentiation is modulated by a CD6 domain 1 antibody Itolizumab. PLoS One. 12 (7): e0180088. 6. LI, G. *et al.* (2018) CD6 monoclonal antibodies differ in epitope, kinetics and mechanism of action. Immunology. 155 (2): 273-82.
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/MCA1880F 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

'M415215:221215'

Printed on 29 Aug 2024