

## Datasheet: MCA1880F

**BATCH NUMBER 164080**

<b>Description:</b>	MOUSE ANTI HUMAN CD6:FITC
<b>Specificity:</b>	CD6
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MEM-98
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://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.

<b>Target Species</b>	Human		
<b>Product Form</b>	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	FITC	490	525
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from ascites		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative</b>	0.09% sodium azide (NaN <sub>3</sub> )		
<b>Stabilisers</b>	1% bovine serum albumin		
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1mg/ml		
<b>Immunogen</b>	Purified CD6 antigen		

<b>External Database Links</b>	<b>UniProt:</b> <a href="#">P30203</a> <a href="#">Related reagents</a>  <b>Entrez Gene:</b> <a href="#">923</a> CD6 <a href="#">Related reagents</a>
<b>RRID</b>	AB_322544
<b>Fusion Partners</b>	Spleen cells from immunised mice.
<b>Specificity</b>	<p><b>Mouse anti Human CD6 antibody, clone MEM-98</b> 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 (<a href="#">SRCR</a>) 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 (<a href="#">ALCAM</a>) or CD166.</p> <p>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, <a href="#">CD6A-E</a>.</p> <p>CD6 has been implicated as a therapeutic target for a number of autoimmune conditions (<a href="#">Pinto et al. 2013</a>) including Sjögren's syndrome (<a href="#">Ramos-Casals et al. 2001</a>) , rheumatoid arthritis (<a href="#">Rodriguez et al.</a>) and psoriasis (<a href="#">Wilsmann-Theis et al. 2006</a>).</p>
<b>Flow Cytometry</b>	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells or 100µl whole blood
<b>References</b>	<ol style="list-style-type: none"> <li>1. Bazil, V. <i>et al.</i> (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. <a href="#">Folia Biol (Praha). 35 (5): 289-97.</a></li> <li>2. Nair, P. <i>et al.</i> (2010) CD6 synergistic co-stimulation promoting proinflammatory response is modulated without interfering with the activated leucocyte cell adhesion molecule interaction. <a href="#">Clin Exp Immunol. 162 (1): 116-30.</a></li> <li>3. Castro, M.A. <i>et al.</i> (2007) Extracellular isoforms of CD6 generated by alternative splicing regulate targeting of CD6 to the immunological synapse. <a href="#">J Immunol. 178 (7): 4351-61.</a></li> <li>4. Hassan, N.J. <i>et al.</i> (2006) CD6 regulates T-cell responses through activation-dependent recruitment of the positive regulator SLP-76. <a href="#">Mol Cell Biol. 26 (17): 6727-38.</a></li> <li>5. Bughani, U. <i>et al.</i> (2017) T cell activation and differentiation is modulated by a CD6 domain 1 antibody Itolizumab. <a href="#">PLoS One. 12 (7): e0180088.</a></li> <li>6. LI, G. <i>et al.</i> (2018) CD6 monoclonal antibodies differ in epitope, kinetics and mechanism of action. <a href="#">Immunology. 155 (2): 273-82.</a></li> </ol>
<b>Storage</b>	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/MCA1880F">https://www.bio-rad-antibodies.com/SDS/MCA1880F</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:FITC \(MCA928F\)](#)

### Recommended Useful Reagents

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

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

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)  
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