

Datasheet: MCA2086F

**BATCH NUMBER 164437**

<b>Description:</b>	MOUSE ANTI HUMAN CD18 (ACTIVATION EPI TOPE):FITC
<b>Specificity:</b>	CD18 (ACTIVATION EPI TOPE)
<b>Other names:</b>	INTEGRIN BETA 2 CHAIN
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MEM-148
<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	▪			

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	0.09% sodium azide (NaN <sub>3</sub> )		
Stabilisers	1% bovine serum albumin		
Approx. Protein	IgG concentration 0.1 mg/ml		

## Concentrations

Immunogen	Peripheral blood mononuclear cells.
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## External Database Links

### UniProt:

[P05107](#)

[Related reagents](#)

### Entrez Gene:

[3689](#)

ITGB2

[Related reagents](#)

Synonyms	CD18, MFI7
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RRID	AB_323796
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Specificity	<b>Mouse anti Human CD18 (Activation Epitope) antibody, clone MEM-148</b> recognizes an epitope on the human CD18 molecule that is hidden in the CD11/CD18 heterodimer on resting cells. Clone MEM-148 binds very weakly to resting peripheral blood leukocytes and strongly to all leukocytes upon cellular activation. The epitope recognized by Mouse anti Human CD18 (Activation Epitope) antibody, clone MEM-148 is also exposed during dissociation of the CD11/CD18 by low pH.
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Flow Cytometry	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl
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## References

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2. Ehrichtiou, D. *et al.* (2005) Dual function for a unique site within the beta2I domain of integrin alphaMbeta2. [J Biol Chem. 280: 8324-31.](#)
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6. Cheng, M. *et al.* (2007) Mutation of a conserved asparagine in the I-like domain promotes constitutively active integrins alphaLbeta2 and alphaIIbbeta3. [J Biol Chem. 282: 18225-32.](#)
7. Kudlová M. *et al.* (2007) Expression of an activated form of integrin beta2 chain CD18 in cardiac surgical operations. [Acta Medica \(Hradec Kralove\). 50: 187-93.](#)
8. Anogianaki, A. *et al.* (2007) Capsaicin an irritant anti-inflammatory compound. [J Biol Regul Homeost Agents. 21: 1-4.](#)
9. Tang, X.Y. *et al.* (2008) Intercellular adhesion molecule-3 binding of integrin alphaL beta2 requires both extension and opening of the integrin headpiece. [J Immunol. 180: 4793-804.](#)
10. Arthos, J. *et al.* (2008) HIV-1 envelope protein binds to and signals through integrin alpha4beta7, the gut mucosal homing receptor for peripheral T cells. [Nat Immunol. 9: 301-9.](#)
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regulated in cis by alpha4beta1 integrin activation. [J Cell Biol. 183 \(6\): 1159-73.](#)

12. Feng, C. *et al.* (2011) Endogenous PMN sialidase activity exposes activation epitope on CD11b/CD18 which enhances its binding interaction with ICAM-1. [J Leukoc Biol. 90: 313-21.](#)

13. Dilek, N. *et al.* (2013) Targeting CD28, CTLA-4 and PD-L1 costimulation differentially controls immune synapses and function of human regulatory and conventional T-cells. [PLoS One. 8 \(12\): e83139.](#)

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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.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information**

Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2086F>  
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**Regulatory**

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 \(BUF070B\)](#)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

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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://bio-rad-antibodies.com/datasheets)

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