

Datasheet: MCA2086XZ

**BATCH NUMBER 152941**

<b>Description:</b>	MOUSE ANTI HUMAN CD18 (ACTIVATION EPI TOPE):Preservative Free
<b>Specificity:</b>	CD18 (ACTIVATION EPI TOPE)
<b>Other names:</b>	INTEGRIN BETA 2 CHAIN
<b>Format:</b>	Preservative Free
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MEM-148
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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	▪			1/20 - 1/200
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting	▪			Non-reducing conditions

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	None Present

<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Peripheral blood mononuclear cells.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P05107</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">3689</a>    ITGB2    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	CD18, MFI7
<b>RRID</b>	AB_323901
<b>Specificity</b>	<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.
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Drbal, K. <i>et al.</i> (2001) A proteolytically truncated form of free CD18, the common chain of leukocyte integrins, as a novel marker of activated myeloid cells. <a href="#">Blood. 98 (5): 1561-6.</a></li> <li>2. Luissint, A.C. <i>et al.</i> (2008) JAM-L-mediated leukocyte adhesion to endothelial cells is regulated in cis by alpha4beta1 integrin activation. <a href="#">J Cell Biol. 183 (6): 1159-73.</a></li> <li>3. Feng, C. <i>et al.</i> (2011) Endogenous PMN sialidase activity exposes activation epitope on CD11b/CD18 which enhances its binding interaction with ICAM-1. <a href="#">J Leukoc Biol. 90: 313-21.</a></li> <li>4. Anogianaki, A. <i>et al.</i> (2007) Capsaicin an irritant anti-inflammatory compound. <a href="#">J Biol Regul Homeost Agents. 21: 1-4.</a></li> <li>5. Arthos, J. <i>et al.</i> (2008) HIV-1 envelope protein binds to and signals through integrin alpha4beta7, the gut mucosal homing receptor for peripheral T cells. <a href="#">Nat Immunol. 9: 301-9.</a></li> <li>6. Cairo, C.W. <i>et al.</i> (2006) Cytoskeletal regulation couples LFA-1 conformational changes to receptor lateral mobility and clustering. <a href="#">Immunity. 25: 297-308.</a></li> <li>7. Tang, X.Y. <i>et al.</i> (2008) Intercellular adhesion molecule-3 binding of integrin alphaL beta2 requires both extension and opening of the integrin headpiece. <a href="#">J Immunol. 180: 4793-804.</a></li> <li>8. Kudlová M. <i>et al.</i> (2007) Expression of an activated form of integrin beta2 chain CD18 in cardiac surgical operations. <a href="#">Acta Medica (Hradec Kralove). 50: 187-93.</a></li> <li>9. Solovjov, D.A. <i>et al.</i> (2005) Distinct roles for the alpha and beta subunits in the functions of integrin alphaMbeta2. <a href="#">J Biol Chem. 280: 1336-45.</a></li> <li>10. Ehirchiou, D. <i>et al.</i> (2005) Dual function for a unique site within the beta2I domain of integrin alphaMbeta2. <a href="#">J Biol Chem. 280: 8324-31.</a></li> </ol>

11. 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.](#)
12. Shi, M. *et al.* (2007) A structural hypothesis for the transition between bent and extended conformations of the leukocyte beta2 integrins. [J Biol Chem. 282: 30198-206.](#)
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**

Store at -20°C.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information**

Material Safety Datasheet documentation #10162 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2086XZ>  
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**Regulatory**

For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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](http://bio-rad-antibodies.com/datasheets)

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