

Datasheet: MCA2086

Description:	MOUSE ANTI HUMAN CD18 (ACTIVATION EPITOPE)
Specificity:	CD18 (ACTIVATION EPITOPE)
Other names:	INTEGRIN BETA 2 CHAIN
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	MEM-148
Isotype:	IgG1
Quantity:	0.2 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	▪			
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.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml

Immunogen	Peripheral blood mononuclear cells.
External Database Links	<p>UniProt: P05107 Related reagents</p> <p>Entrez Gene: 3689 ITGB2 Related reagents</p>
Synonyms	CD18, MFI7
RRID	AB_323889
Specificity	Mouse anti Human CD18 (Activation Epitope) antibody, clone MEM-148 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.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> 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. Blood. 98 (5): 1561-6. 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. J Cell Biol. 183 (6): 1159-73. 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. J Leukoc Biol. 90: 313-21. 4. Anogianaki, A. <i>et al.</i> (2007) Capsaicin an irritant anti-inflammatory compound. J Biol Regul Homeost Agents. 21: 1-4. 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. Nat Immunol. 9: 301-9. 6. Cairo, C.W. <i>et al.</i> (2006) Cytoskeletal regulation couples LFA-1 conformational changes to receptor lateral mobility and clustering. Immunity. 25: 297-308. 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. J Immunol. 180: 4793-804. 8. Kudlová M. <i>et al.</i> (2007) Expression of an activated form of integrin beta2 chain CD18 in cardiac surgical operations. Acta Medica (Hradec Kralove). 50: 187-93. 9. Solovjov, D.A. <i>et al.</i> (2005) Distinct roles for the alpha and beta subunits in the functions of integrin alphaMbeta2. J Biol Chem. 280: 1336-45. 10. Ehrichtiou, D. <i>et al.</i> (2005) Dual function for a unique site within the beta2I domain of integrin alphaMbeta2. J Biol Chem. 280: 8324-31. 11. Cheng, M. <i>et al.</i> (2007) Mutation of a conserved asparagine in the I-like domain promotes constitutively active integrins alphaLbeta2 and alphaIIb beta3. 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.](#)

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.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10040 available at: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR76...)	RPE
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®680 , DyLight®800 , FITC , HRP
Goat Anti Mouse IgG (STAR70...)	FITC

Recommended Negative Controls

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

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
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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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