

Datasheet: MCA2086F

BATCH NUMBER 1608

Description:	MOUSE ANTI HUMAN CD18 (ACTIVATION EPITOPE):FITC
Specificity:	CD18 (ACTIVATION EPITOPE)
Other names:	INTEGRIN BETA 2 CHAIN
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	MEM-148
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	▪			

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 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		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide		
Stabilisers	1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml		

Immunogen	Peripheral blood mononuclear cells.
External Database Links	UniProt: P05107 Related reagents Entrez Gene: 3689 ITGB2 Related reagents
Synonyms	CD18, MFI7
RRID	AB_323796
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	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	Store at +4°C or at -20°C if preferred. This product should be stored undiluted. Storage in frost free freezers is not recommended. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
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/MCA2086F 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 \(BUF070B\)](#)

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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
'M366147:200529'

Printed on 23 May 2025