

Datasheet: MCA2086PE

BATCH NUMBER INN0515

Description:	MOUSE ANTI HUMAN CD18 (ACTIVATION EPI TOPE):RPE
Specificity:	CD18 (ACTIVATION EPI TOPE)
Other names:	INTEGRIN BETA 2 CHAIN
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	MEM-148
Isotype:	IgG1
Quantity:	100 TESTS

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	▪			Neat

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 R. Phycoerythrin (RPE) - lyophilized		
Reconstitution	Reconstitute with 1 ml distilled water		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578
Preparation	Purified IgG prepared by affinity chromatography on Protein G		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide		
Stabilisers	1% Bovine Serum Albumin		

Immunogen Peripheral blood mononuclear cells.

External Database

Links

UniProt:

[P05107](#) [Related reagents](#)

Entrez Gene:

[3689](#) ITGB2 [Related reagents](#)

Synonyms

CD18, MF17

RRID

AB_324674

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 10⁶ cells in 100ul.

References

1. Drbal, K. *et al.* (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. *et al.* (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. *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.](#)
4. Anogianaki, A. *et al.* (2007) Capsaicin an irritant anti-inflammatory compound. [J Biol Regul Homeost Agents. 21: 1-4.](#)
5. 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.](#)
6. Cairo, C.W. *et al.* (2006) Cytoskeletal regulation couples LFA-1 conformational changes to receptor lateral mobility and clustering. [Immunity. 25: 297-308.](#)
7. 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.](#)
8. 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.](#)
9. Solovjov, D.A. *et al.* (2005) Distinct roles for the alpha and beta subunits in the functions of integrin alphaMbeta2. [J Biol Chem. 280: 1336-45.](#)
10. Ehirchiou, D. *et al.* (2005) Dual function for a unique site within the beta2I domain of integrin alphaMbeta2. [J Biol Chem. 280: 8324-31.](#)
11. Cheng, M. *et al.* (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 Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.

DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light. 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 #20487 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2086PE>
20487

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

Recommended Useful Reagents

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

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

North & South Tel: +1 800 265 7376

America 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

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)

'M375413:210104'

Printed on 16 Apr 2024

© 2024 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)