

Datasheet: MCA1847F BATCH NUMBER 160807

Description:	MOUSE ANTI HUMAN CD81:FITC
Specificity:	CD81
Other names:	TAPA-1
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	1D6
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				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.

Species Cross
Reactivity

Target Species

Reacts with: Chimpanzee, Sheep, Goat

Human

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

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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 Stabilisers	0.09% Sodium Azide 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	OCI-LY8 cells aggregated by 5A6 (another CD81 antibody)
External Database Links	UniProt: P60033 Related reagents Entrez Gene: 975 CD81 Related reagents
Synonyms	TAPA1, TSPAN28
RRID	AB_322612
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse PX3-Ag.8.653 myeloma cell line
Specificity	Mouse anti Human CD81 antibody, clone 1D6 recognizes human CD81, a 26 kDa cell surface antigen also known as TAPA-1, and a member of the tetraspanin family. CD81 is widely expressed on human leucocytes and appears to be involved in a variety of cellular leucocytes including activation, proliferation and differentiation.
	Mouse anti Human CD81 antibody, clone 1D6 is a potent CD81 reagent, induces homotypic adhesion and has powerful anti-proliferative effects.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	 Schick, M.R. & Levy, S. (1993) The TAPA-1 molecule is associated on the surface of B cells with HLA-DR molecules. <u>J Immunol. 151 (8): 4090-7.</u> Levy, S. <i>et al.</i> (1998) CD81 (TAPA-1): a molecule involved in signal transduction and cell adhesion in the immune system. <u>Annu Rev Immunol. 16: 89-109.</u> Griebel, P.J. <i>et al.</i> (2007) Cross-reactivity of mAbs to human CD antigens with sheep leukocytes. <u>Vet Immunol Immunopathol. 119: 115-22.</u> Welton, J.L. <i>et al.</i> (2010) Proteomics analysis of bladder cancer exosomes. <u>Mol Cell Proteomics. 9: 1324-38.</u> Davis, W.C. <i>et al.</i> (2007) Use of flow cytometry to identify monoclonal antibodies that recognize conserved epitopes on orthologous leukocyte differentiation antigens in goats, llamas, and rabbits. <u>Vet Immunol Immunopathol. 119: 123-30.</u> Flint, M. <i>et al.</i> (1999) Characterization of hepatitis C virus E2 glycoprotein interaction with a putative cellular receptor, CD81. <u>J Virol. 73:6235-44.</u> Parthasarathy, V. <i>et al.</i> (2009) Distinct roles for tetraspanins CD9, CD63 and CD81 in

the formation of multinucleated giant cells. Immunology. 127: 237-48.

- 8. Rohlena, J. *et al.* (2009) Endothelial CD81 is a marker of early human atherosclerotic plaques and facilitates monocyte adhesion. <u>Cardiovasc Res. 81: 187-96</u>.
- 9. Ventress, J.K. *et al.* (2016) Peptides from Tetraspanin CD9 Are Potent Inhibitors of Staphylococcus Aureus Adherence to Keratinocytes. <u>PLoS One. 11 (7): e0160387.</u>
- 10. Mleczko, J. *et al.* (2018) Extracellular Vesicles from Hypoxic Adipocytes and Obese Subjects Reduce Insulin-Stimulated Glucose Uptake. <u>Mol Nutr Food Res. 62 (5)Feb 20 [Epub ahead of print].</u>

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.

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/MCA1847F 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)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Worldwide

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Europe

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50

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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 'M385487:210513'

Printed on 28 May 2025

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