Datasheet: MCA1847P647

Description:	MOUSE ANTI HUMAN CD81:RPE-Alexa Fluor® 647
Specificity:	CD81
Other names:	TAPA-1
Format:	RPE-ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	1D6
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 product 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 product for use in their own system using appropriate negative/positive controls.

Target Species

Human

Species Cross Reactivity

Reacts with: Chimpanzee, Sheep, Goat

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.

Product Form

Purified IgG conjugated to RPE-Alexa Fluor® 647 - lyophilized

Reconstitution

Reconstitute with 1.0 ml distilled water

Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
RPE-Alexa Fluor®647 488nm laser	496	667

	RPE-Alexa Fluor®647 561nm laser	546	667

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 (NaN_3) 1% bovine serum albumin 5% sucrose
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
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 10µl of the suggested working dilution to label 10^6 cells in 100µl
References	1. Schick, M.R. & Levy, S. (1993) The TAPA-1 molecule is associated on the surface of B cells with HLA-DR molecules. J Immunol. 151 (8): 4090-7. 2. Levy, S. *et al.* (1998) CD81 (TAPA-1): a molecule involved in signal transduction and cell adhesion in the immune system. Annu Rev Immunol. 16: 89-109. 3. Flint, M. *et al.* (1999) Characterization of hepatitis C virus E2 glycoprotein interaction with a putative cellular receptor, CD81. J Virol. 73:6235-44. 4. Davis, W.C. *et al.* (2007) Use of flow cytometry to identify monoclonal antibodies that recognize conserved epitopes on orthologous leukocyte differentiation antigens in goats, llamas, and rabbits. Vet Immunol Immunopathol. 119: 123-30. 5. Griebel, P.J. *et al.* (2007) Cross-reactivity of mAbs to human CD antigens with sheep leukocytes. Vet Immunol Immunopathol. 119: 115-22. 6. Rohlena, J. *et al.* (2009) Endothelial CD81 is a marker of early human atherosclerotic plaques and facilitates monocyte adhesion. Cardiovasc Res. 81: 187-96.

7. Parthasarathy, V. *et al.* (2009) Distinct roles for tetraspanins CD9, CD63 and CD81 in the formation of multinucleated giant cells. Immunology. 127: 237-48.
8. Welton, J.L. *et al* (2010) Proteomics analysis of bladder cancer exosomes. Mol Cell Proteomics. 9: 1324-38.
9. Ventress, J.K. *et al.* (2016) Peptides from Tetraspanin CD9 Are Potent Inhibitors of Staphylococcus Aureus Adherence to Keratinocytes. PLoS One. 11 (7): e0160387.
10. Mleczko, J. *et al.* (2018) Extracellular Vesicles from Hypoxic Adipocytes and Obese Subjects Reduce Insulin-Stimulated Glucose Uptake. Mol Nutr Food Res. 62 (5)Feb 20 [Epub ahead of print].

Storage	Prior to reconstitution store at +4°C. After reconstitution store at +4°C. DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light.
Guarantee	12 months from date of despatch
Acknowledgements	This product is provided under an intellectual property license from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchased product solely in research conducted by the buyer, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad, CA 92008 USA or outlicensing@thermofisher.com
Health And Safety Information	Material Safety Datasheet documentation #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA1847P647 20487
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:RPE-Alexa Fluor® 647 (MCA928P647)

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

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