

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
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Preparation Purified IgG prepared by affinity chromatography on Protein A

Buffer Solution Phosphate buffered saline

**Preservative
Stabilisers** 0.09% Sodium Azide (NaN₃)
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 10ul of the suggested working dilution to label 10⁶ 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. [J Immunol. 151 \(8\): 4090-7.](#)
- 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.](#)
- Griebel, P.J. *et al.* (2007) Cross-reactivity of mAbs to human CD antigens with sheep leukocytes. [Vet Immunol Immunopathol. 119: 115-22.](#)
- Welton, J.L. *et al.* (2010) Proteomics analysis of bladder cancer exosomes. [Mol Cell Proteomics. 9: 1324-38.](#)
- 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.](#)
- Flint, M. *et al.* (1999) Characterization of hepatitis C virus E2 glycoprotein interaction with a putative cellular receptor, CD81. [J Virol. 73:6235-44.](#)
- 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. Rohlena, J. *et al.* (2009) Endothelial CD81 is a marker of early human atherosclerotic plaques and facilitates monocyte adhesion. [Cardiovasc Res. 81: 187-96.](#)

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

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Health And Safety Information Material Safety Datasheet documentation #20487 available at: 20487: <https://www.bio-rad-antibodies.com/uploads/MSDS/20487.pdf>

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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'M378636:210222'

Printed on 17 Sep 2021
