

Datasheet: MCA1847A647

BATCH NUMBER 1611

Description:	MOUSE ANTI HUMAN CD81:Alexa Fluor® 647
Specificity:	CD81
Other names:	TAPA-1
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	1D6
Isotype:	IgG1
Quantity:	100 TESTS/1ml

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 Alexa Fluor 647 - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®647	650	665

Preparation

Purified IgG prepared by affinity chromatography on Protein A

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers	0.09% Sodium Azide (NaN ₃) 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml
Immunogen	OCI-LY8 cells aggregated by 5A6 (another CD81 antibody)
External Database Links	<p>UniProt: P60033 Related reagents</p> <p>Entrez Gene: 975 CD81 Related reagents</p>
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	<p>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.</p> <p>Mouse anti Human CD81 antibody, clone 1D6 is a potent CD81 reagent, induces homotypic adhesion and has powerful anti-proliferative effects.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul
References	<ol style="list-style-type: none"> 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. <i>et al.</i> (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. <i>et al.</i> (2007) Cross-reactivity of mAbs to human CD antigens with sheep leukocytes. Vet Immunol Immunopathol. 119: 115-22. Welton, J.L. <i>et al.</i> (2010) Proteomics analysis of bladder cancer exosomes. Mol Cell Proteomics. 9: 1324-38. 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. Vet Immunol Immunopathol. 119: 123-30. Flint, M. <i>et al.</i> (1999) Characterization of hepatitis C virus E2 glycoprotein interaction with a putative cellular receptor, CD81. J Virol. 73:6235-44. 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. Rohlana, J. <i>et al.</i> (2009) Endothelial CD81 is a marker of early human atherosclerotic plaques and facilitates monocyte adhesion. Cardiovasc Res. 81: 187-96. Ventress, J.K. <i>et al.</i> (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 Store at +4°C or at -20°C if preferred.
Storage in frost-free freezers is not recommended.
This product should be stored undiluted. 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

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Health And Safety Information Material Safety Datasheet documentation #10041 available at:
<https://www.bio-rad-antibodies.com/SDS/MCA1847A647>
10041

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA928A647\)](#)

Recommended Useful Reagents

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

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

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