

Datasheet: MCA1847A647

**BATCH NUMBER 171892**

<b>Description:</b>	MOUSE ANTI HUMAN CD81:Alexa Fluor® 647
<b>Specificity:</b>	CD81
<b>Other names:</b>	TAPA-1
<b>Format:</b>	ALEXA FLUOR® 647
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	1D6
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://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 from tissue culture supernatant

<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% sodium azide (NaN <sub>3</sub> ) 1% bovine serum albumin
<b>Approx. Protein Concentrations</b>	IgG concentration 0.05 mg/ml
<b>Immunogen</b>	OCI-LY8 cells aggregated by 5A6 (another CD81 antibody)
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P60033</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">975</a> CD81    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	TAPA1, TSPAN28
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the mouse PX3-Ag.8.653 myeloma cell line
<b>Specificity</b>	<p><b>Mouse anti Human CD81 antibody, clone 1D6</b> 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>
<b>Flow Cytometry</b>	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl
<b>References</b>	<ol style="list-style-type: none"> <li>Schick, M.R. &amp; Levy, S. (1993) The TAPA-1 molecule is associated on the surface of B cells with HLA-DR molecules. <a href="#">J Immunol. 151 (8): 4090-7.</a></li> <li>Levy, S. <i>et al.</i> (1998) CD81 (TAPA-1): a molecule involved in signal transduction and cell adhesion in the immune system. <a href="#">Annu Rev Immunol. 16: 89-109.</a></li> <li>Flint, M. <i>et al.</i> (1999) Characterization of hepatitis C virus E2 glycoprotein interaction with a putative cellular receptor, CD81. <a href="#">J Virol. 73:6235-44.</a></li> <li>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. <a href="#">Vet Immunol Immunopathol. 119: 123-30.</a></li> <li>Griebel, P.J. <i>et al.</i> (2007) Cross-reactivity of mAbs to human CD antigens with sheep leukocytes. <a href="#">Vet Immunol Immunopathol. 119: 115-22.</a></li> <li>Rohlana, J. <i>et al.</i> (2009) Endothelial CD81 is a marker of early human atherosclerotic plaques and facilitates monocyte adhesion. <a href="#">Cardiovasc Res. 81: 187-96.</a></li> <li>Parthasarathy, V. <i>et al.</i> (2009) Distinct roles for tetraspanins CD9, CD63 and CD81 in the formation of multinucleated giant cells. <a href="#">Immunology. 127: 237-48.</a></li> <li>Welton, J.L. <i>et al</i> (2010) Proteomics analysis of bladder cancer exosomes. <a href="#">Mol Cell</a></li> </ol>

[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 \[Epub ahead of print\].](#)

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**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.

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**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>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

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

### Recommended Useful Reagents

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

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

**Product inquiries:** [www.bio-rad-antibodies.com/technical-support](http://www.bio-rad-antibodies.com/technical-support)

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](http://bio-rad-antibodies.com/datasheets)  
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