

## Datasheet: MCA1847PE

**BATCH NUMBER INN1611**

<b>Description:</b>	MOUSE ANTI HUMAN CD81:RPE
<b>Specificity:</b>	CD81
<b>Other names:</b>	TAPA-1
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	1D6
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](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 R. Phycoerythrin (RPE) - 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 488nm laser	496	578

<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> ) 1% Bovine Serum Albumin 5% Sucrose
<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 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul
<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>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>Welton, J.L. <i>et al.</i> (2010) Proteomics analysis of bladder cancer exosomes. <a href="#">Mol Cell Proteomics. 9: 1324-38.</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>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>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>Rohlana, J. <i>et al.</i> (2009) Endothelial CD81 is a marker of early human atherosclerotic</li> </ol>

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** 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

---

**Health And Safety Information** Material Safety Datasheet documentation #20487 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1847PE>  
20487

---

**Regulatory** For research purposes only

---

## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

### Recommended Useful Reagents

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

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

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

**Worldwide**

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)

**Europe**

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: [antibody\\_sales\\_de@bio-rad.com](mailto: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](https://www.bio-rad-antibodies.com/datasheets)

'M375373:210104'

**Printed on 19 Oct 2023**

---

© 2023 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)