

## Datasheet: MCA2464PB

<b>Description:</b>	RAT ANTI MOUSE CD279:Pacific Blue®
<b>Specificity:</b>	CD279
<b>Other names:</b>	PD-1
<b>Format:</b>	Pacific Blue®
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	RMP1-30
<b>Isotype:</b>	IgG2b
<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 - 1/5

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Mouse						
<b>Product Form</b>	Purified IgG conjugated to Pacific Blue® - liquid						
<b>Max Ex/Em</b>	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation (nm)</th> <th>Emission (nm)</th> </tr> </thead> <tbody> <tr> <td>Pacific Blue®</td> <td>410</td> <td>455</td> </tr> </tbody> </table>	Fluorophore	Excitation (nm)	Emission (nm)	Pacific Blue®	410	455
Fluorophore	Excitation (nm)	Emission (nm)					
Pacific Blue®	410	455					
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant						
<b>Buffer Solution</b>	Phosphate buffered saline						
<b>Preservative</b>	0.09% Sodium Azide						
<b>Stabilisers</b>	1% Bovine Serum Albumin						
<b>Approx. Protein Concentrations</b>	IgG concentration 0.05 mg/ml						
<b>Immunogen</b>	PD-1 transferred BHK cells.						
<b>External Database Links</b>	<b>UniProt:</b> <a href="http://www.uniprot.org/entry/Q02242">Q02242</a> <a href="#">Related reagents</a>						

**Entrez Gene:**

[18566](#) Pcd1 [Related reagents](#)

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<b>Synonyms</b>	Pd1
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<b>Fusion Partners</b>	Spleen cells from immunised Sprague Dawley rats were fused with cells of the P3U1 myeloma cell line.
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<b>Specificity</b>	<p><b>Rat anti Mouse CD279 antibody, clone RMP1-30</b> recognizes mouse CD279, a ~55 kDa cell surface protein, a member of the CD28/CTLA-4 family, otherwise known as Programmed Death-1 (PD-1). CD279 is expressed predominantly on activated T- and B- lymphocytes and on a subset of thymocytes.</p> <p>Studies suggest that CD279, an immunoinhibitory receptor, plays a critical role in peripheral tolerance induction and prevention of autoimmune disease. Two members of the B7 family, B7-H1 (PD-L1) and B7-DC (PD-L2), have been identified as the ligands for CD279.</p> <p>Rat anti Mouse CD279 antibody, clone RMP1-30 does not block the binding of either B7-H1-Ig or B7-DC-Ig fusion proteins to PD-1 transfected BHK cells.</p>
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<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
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<b>References</b>	<ol style="list-style-type: none"><li>1. Matsumoto, K. <i>et al.</i> (2004) B7-DC regulates asthmatic response by an IFN-gamma-dependent mechanism. <a href="#">J Immunol. 172 (4): 2530-41.</a></li><li>2. Bartkowiak, T. (2013) Novel Imaging-Based Techniques Reveal a Role for PD-1/PD-L1 in Tumor Immune Surveillance in the Lung. <a href="#">UT GSBS Dissertations and Theses (Open Access). Paper 354.</a></li><li>3. Hu, Z. <i>et al.</i> (2013) Regulatory CD8+ T cells associated with erosion of immune surveillance in persistent virus infection suppress <i>in vitro</i> and have a reversible proliferative defect. <a href="#">J Immunol. 191 (1): 312-22.</a></li></ol>
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<b>Storage</b>	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. This product is photosensitive and should be protected from light.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
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<b>Shelf Life</b>	18 months from date of despatch.
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<b>Health And Safety</b>	Material Safety Datasheet Documentation #10041 available at:
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**Information**      <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

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**Regulatory**      For research purposes only

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