

## Datasheet: MCA2464A488

<b>Description:</b>	RAT ANTI MOUSE CD279:Alexa Fluor® 488
<b>Specificity:</b>	CD279
<b>Other names:</b>	PD-1
<b>Format:</b>	ALEXA FLUOR® 488
<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

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 Alexa Fluor®488-liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	Alexa Fluor®488	495	519
<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 Stabilisers</b>	0.09% Sodium Azide		
	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>	<p><b>UniProt:</b>  <a href="#">Q02242</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">18566</a> Pcd1    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	Pd1
<b>RRID</b>	AB_961511
<b>Fusion Partners</b>	Spleen cells from immunised Sprague Dawley rats were fused with cells of the P3U1 myeloma cell line.
<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>
<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>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>
<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>
<b>Guarantee</b>	12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10041 available at:  
10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

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**Regulatory** For research purposes only

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