

Datasheet: MCA2464A647

Description:	RAT ANTI MOUSE CD279:Alexa Fluor® 647
Specificity:	CD279
Other names:	PD-1
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	RMP1-30
Isotype:	IgG2b
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 - 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.

Target Species	Mouse		
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 G from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative Stabilisers	0.09% Sodium Azide		
	1%	Bovine Serum Albumin	
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml		

Immunogen	PD-1 transferred BHK cells.
External Database Links	<p>UniProt: Q02242 Related reagents</p> <p>Entrez Gene: 18566 Pdcd1 Related reagents</p>
Synonyms	Pd1
RRID	AB_999315
Fusion Partners	Spleen cells from immunised Sprague Dawley rats were fused with cells of the P3U1 myeloma cell line.
Specificity	<p>Rat anti Mouse CD279 antibody, clone RMP1-30 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>CD279, an immunoinhibitory receptor, plays a critical role in peripheral tolerance induction and prevention of autoimmune disease (Ansari <i>et al.</i> 2003). 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>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> 1. Matsumoto, K. <i>et al.</i> (2004) B7-DC regulates asthmatic response by an IFN-gamma-dependent mechanism. J Immunol. 172 (4): 2530-41. 2. Bartkowiak, T. (2013) Novel Imaging-Based Techniques Reveal a Role for PD-1/PD-L1 in Tumor Immune Surveillance in the Lung. UT GSBS Dissertations and Theses (Open Access). Paper 354. 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. J Immunol. 191 (1): 312-22. 4. Groh, J. <i>et al.</i> (2018) Teriflunomide attenuates neuroinflammation-related neural damage in mice carrying human PLP1 mutations. J Neuroinflammation. 15 (1): 194.
Storage	<p>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.</p> <p>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.</p>

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/MCA2464A647 10041
Regulatory	For research purposes only

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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)
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