

Datasheet: MCA2464A488

BATCH NUMBER 157278

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

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®488-liquid						
Max Ex/Em	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>Alexa Fluor®488</td> <td>495</td> <td>519</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	Alexa Fluor®488	495	519
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
Alexa Fluor®488	495	519					
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant						
Buffer Solution	Phosphate buffered saline						
Preservative	0.09% Sodium Azide						
Stabilisers	1% Bovine Serum Albumin						
Approx. Protein	IgG concentration 0.05 mg/ml						

Concentrations

Immunogen PD-1 transfected BHK cells.

External Database Links

UniProt:

[Q02242](#) [Related reagents](#)

Entrez Gene:

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

Synonyms Pd1

RRID AB_961511

Fusion Partners Spleen cells from immunised Sprague Dawley rats were fused with cells of the P3U1 myeloma cell line.

Specificity **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.

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.

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.

Flow Cytometry Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.

References

1. Matsumoto, K. *et al.* (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. *et al.* (2013) Regulatory CD8+ T cells associated with erosion of immune surveillance in persistent virus infection suppress *in vitro* and have a reversible proliferative defect. [J Immunol. 191 \(1\): 312-22.](#)
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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

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Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2464A488>
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