

Datasheet: MCA2464GA

Description:	RAT ANTI MOUSE CD279
Specificity:	CD279
Other names:	PD-1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	RMP1-30
Isotype:	IgG2b
Quantity:	0.1 mg

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	■			1/100 - 1/200
Immunohistology - Frozen			■	
Immunohistology - Paraffin			■	
ELISA			■	
Immunoprecipitation			■	
Western Blotting			■	

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 - liquid
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 (NaN ₃)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1 mg/ml
Immunogen	PD-1 transferred BHK cells.

**External Database
Links**

UniProt:

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

Entrez Gene:

[18566](#) Pdcd1 [Related reagents](#)

Synonyms

Pd1

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 10⁶ 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.](#)

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. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life

18 months from date of despatch.

**Health And Safety
Information**

Material Safety Datasheet documentation #10040 available at:
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)

[DyLight®800](#)

Goat Anti Rat IgG (STAR73...)

[RPE](#)

Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®549 , DyLight®649 , DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP

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