OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850
UNITED STATES
Phone: +1-888-267-4436
Fax: +1-301-340-8606
techsupport@origene.com

OriGene Technologies GmbH
Schillerstr. 5
32052 Herford
GERMANY
Phone: +49-5221-34606-0
Fax: +49-5221-34606-11
info-de@origene.com

AM05574PU-N Monoclonal Antibody to CD279 / PD1 - Purified

Alternate names:	PDCD1, Programmed cell death protein 1, Protein PD-1, hPD-1
Quantity:	0.25 mg
Concentration:	1.0 mg/ml
Background:	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.
Uniprot ID:	Q02242
NCBI:	NP_032824.1
GeneID:	18566
Host / Isotype:	Rat / IgG2a
Recommended Isotype Controls:	SM15P, SM15PX
Clone:	RMP1-14
Immunogen:	PD-1 transfected BHK cells
Format:	**State:** Liquid purified IgG **Purification:** Affinity chromatography on Protein G **Buffer System:** Phosphate buffered saline pH7.4 containing 0.09% Sodium Azide
Applications:	Immunohistochemistry on frozen sections. Flow Cytometry: 1/10 - 1/25. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody recognises CD279, a 55kD cell surface protein which is a member of the CD28/CTLA-4 family, otherwise known as programmed death-1 (PD-1). Antibodies produced by clone RMP1-14 have been reported to block the binding of both B7-H1-Ig and B7-DC-Ig fusion proteins to PD-1 transfected BHK cells. **Species:** Mouse. Other species not tested.
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
Caution:	(A full Health and Safety assessment is available upon request) This product contains Sodium Azide: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.

General Readings:

1. Yamazaki T, Akiba H, Koyanagi A, Azuma M, Yagita H, Okumura K. Blockade of B7-H1 on macrophages suppresses CD4+ T cell proliferation by augmenting IFN-gamma-induced nitric oxide production. J Immunol. 2005 Aug 1;175(3):1586-92. PubMed PMID: 16034097.
2. Matsumoto K, Inoue H, Nakano T, Tsuda M, Yoshiura Y, Fukuyama S, et al. B7-DC regulates asthmatic response by an IFN-gamma-dependent mechanism. J Immunol. 2004 Feb 15;172(4):2530-41. PubMed PMID: 14764726.
3. Kanai T, Totsuka T, Uraushihara K, Makita S, Nakamura T, Koganei K, et al. Blockade of B7-H1 suppresses the development of chronic intestinal inflammation. J Immunol. 2003 Oct 15;171(8):4156-63. PubMed PMID: 14530338.