

AM05614RP-N**Monoclonal Antibody to CD279 / PD1 - PE**

Alternate names:	PDCD1, Programmed cell death protein 1, Protein PD-1, hPD-1
Quantity:	100 Tests
Concentration:	0,1 mg/ml
Background:	CD279 is 50-55kD membrane protein which is a member of the CD28 family, and functions mainly as a negative regulator of T-cell activation. CD279 has two specific ligands; CD274 (PD-L1) and CD273 (PD-L2), and their interaction is key in the balance between stimulatory and inhibitory signals needed for effective immune responses to microbes and self-tolerance. CD279 is inducibly expressed by T-cells, B-cells, NK-T-cells and monocytes upon activation. Loss of CD279 function has been associated with a number of autoimmune diseases, including rheumatoid arthritis, type I diabetes and ankylosing spondylitis. Recent studies suggest that CD279 could be targeted therapeutically in the treatment of HIV infection to reduce T-cell exhaustion.
Uniprot ID:	Q15116
NCBI:	NP_005009.2
GeneID:	5133
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	SM10R (for use in human samples)
Clone:	MIH4
Immunogen:	Human CD279 - transfected L cells.
Format:	State: Lyophilised purified IgG Purification: Affinity chromatography on Protein G Buffer System: Phosphate buffered saline pH7.4 containing 0.09% Sodium Azide (NaN ₃) and 1% Bovine Serum Albumin Label: PE – R. Phycoerythrin (RPE) Reconstitution: Reconstitute with 1.0ml distilled water
Applications:	Flow Cytometry. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody detects CD279, a co-stimulatory molecule also known as programmed cell death-1 (PD-1). Species: Human. Other species not tested.
Storage:	Prior to and following reconstitution store the antibody at 2-8°C. DO NOT FREEZE! This product is photosensitive and should be protected from light. 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. 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.
2. Freeman GJ, Wherry EJ, Ahmed R, Sharpe AH. Reinvigorating exhausted HIV-specific T cells via PD-1-PD-1 ligand blockade. *J Exp Med.* 2006 Oct 2;203(10):2223-7. Epub 2006 Sep 25. PubMed PMID: 17000870.
3. Keir, M.E. et al. (2007) PD-1 and its ligands in T-cell immunity. *Curr. Opin. Immunol.* 19: 309 - 314.