

For Research Use Only

Anti-Mouse CD279 (PD-1) (RMP1-14)



Catalog Number: 65288-1-Ig

Basic Information

Catalog Number: 65288-1-Ig	GenBank Accession Number: BC119179	Purification Method: Affinity purification
Size: 500ug, 0.5 mg/ml	GeneID (NCBI): 18566	CloneNo.: RMP1-14
Source: Rat	Full Name: programmed cell death 1	
Isotype: IgG2a, kappa		

Applications

Tested Applications:
Blocking, ELISA

Species Specificity:
mouse

Background Information

Programmed cell death 1 (PD-1, also known as CD279) is an immunoinhibitory receptor that belongs to the CD28/CTLA-4 subfamily of the Ig superfamily. It is a 288 amino acid (aa) type I transmembrane protein composed of one Ig superfamily domain, a stalk, a transmembrane domain, and an intracellular domain containing an immunoreceptor tyrosine-based inhibitory motif (ITIM) as well as an immunoreceptor tyrosine-based switch motif (ITSM) (PMID: 18173375). PD-1 is expressed during thymic development and is induced in a variety of hematopoietic cells in the periphery by antigen receptor signaling and cytokines (PMID: 20636820). Engagement of PD-1 by its ligands PD-L1 or PD-L2 transduces a signal that inhibits T-cell proliferation, cytokine production, and cytolytic function (PMID: 19426218). It is critical for the regulation of T cell function during immunity and tolerance. Blockade of PD-1 can overcome immune resistance and also has been shown to have antitumor activity (PMID: 22658127; 23169436). RMP1-14 is a monoclonal antibody that targets the murine PD-1 protein and can be used in mouse models to block the reaction between PD-1 and PD-L1/PD-L2 (PMID: 14764726; 31832706).

Storage

Storage:
Store at 2-8°C. Stable for one year after shipment.

Storage Buffer:
PBS with 0.09% sodium azide.

For technical support and original validation data for this product please contact:

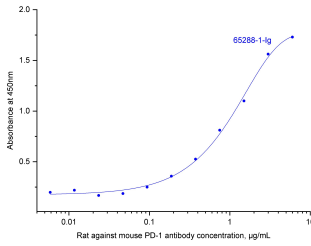
T: 4006900926

E: Proteintech-CN@ptglab.com

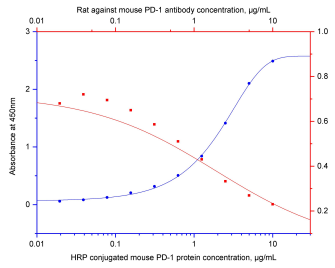
W: ptgcn.com

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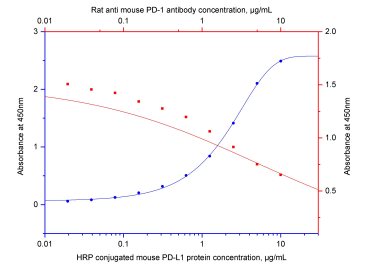
Selected Validation Data



ELISA test of 65288-1-Ig. Mouse PD-1 (Eg0918) was coated at 70 ng/well followed by blocking. Serial diluted Rat anti-Mouse PD-1 antibody 65288-1-Ig was applied and detected with HRP conjugated secondary antibody. Signal was developed by TMB substrate.



Mouse PD-L1 (Eg0985) was coated at 70 ng/well. Serial diluted HRP conjugated mouse PD-1 (Eg0918) was added for binding test (blue curve, refer to bottom X - left Y). Blocking test was performed by mixing serial diluted Rat anti-mouse PD-1 antibody 65288-1-Ig with 1 µg/mL HRP conjugated mouse PD-1 (Eg0918) followed by same dose coated Mouse PD-L1 (Eg0985). Typical ND50 is around 1 µg/mL.



Mouse PD-1 (Eg0918) was coated at 70 ng/well. Serial diluted HRP conjugated mouse PD-L1 (Eg0985) was added for binding test (blue curve, refer to bottom X - left Y). Blocking test was performed by mixing serial diluted Rat anti-mouse PD-1 antibody 65288-1-Ig with 1 µg/mL HRP conjugated mouse PD-L1 (Eg0985) followed by applying to 70 ng/well coated Mouse PD-1 (Eg0918). Typical ND50 is around 1-5 µg/mL.