

For Research Use Only

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



Catalog Number: 65288-1-Ig

## Basic Information

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

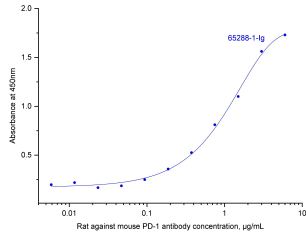
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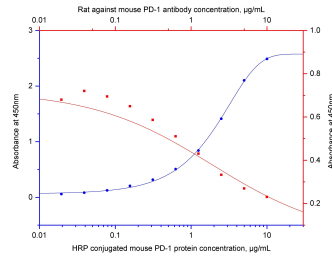
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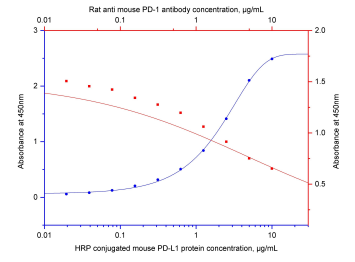
## Selected Validation Data



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.