

For Research Use Only

# Anti-Mouse PD-1/CD279 Rat Recombinant Antibody

Catalog Number: 98080-7-TR



## Basic Information

Catalog Number:

98080-7-TR

Size:

100ug , 1000 µg/ml

Source:

Rat

Isotype:

IgG2a

GenBank Accession Number:

GeneID (NCBI):

18566

Full Name:

programmed cell death 1

Purification Method:

Protein A purification

CloneNo.:

29F.1A12

Recommended Dilutions:

FC: 0.25 ug per 10<sup>6</sup> cells in a 100 µl suspension

## Applications

Tested Applications:

FC

Species Specificity:

mouse

Positive Controls:

FC : Anti-CD3/CD28 treated mouse splenocytes,

## 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, pH7.3

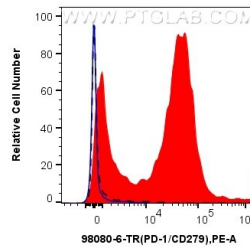
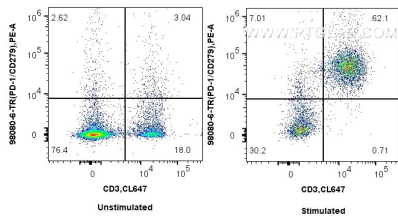
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

## Selected Validation Data



$1 \times 10^6$  untreated or anti-CD3/CD28 treated mouse splenocytes were surface stained with 0.25 ug Anti-Mouse PD-1/CD279 Rat RecAb (98080-6-TR, Clone:29F.1A12) and PE anti-rat IgG2a Antibody. Cells were then stained with CoraLite® Plus 647 Anti-Mouse CD3. Cells were not fixed.

$1 \times 10^6$  anti-CD3/CD28 treated mouse splenocytes were surface stained with 0.25 ug Anti-Mouse PD-1/CD279 Rat RecAb (98080-6-TR, Clone: 29F.1A12) (red) or Rat IgG2a Isotype Control (2A3) (65209-1-Ig, Clone: 2A3) (blue), and PE anti-rat IgG2a Antibody.  $1 \times 10^6$  untreated mouse splenocytes were surface stained with 0.25 ug Anti-Mouse PD-1/CD279 Rat RecAb (98080-6-TR, Clone: 29F.1A12) (black, dashed) and PE anti-rat IgG2a Antibody.

