

For Research Use Only

# PD-1/CD279 Polyclonal antibody

Catalog Number: 29780-1-AP



## Basic Information

<b>Catalog Number:</b> 29780-1-AP	<b>GenBank Accession Number:</b> BC074740	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 450 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 5133	<b>Recommended Dilutions:</b> WB 1:500-1:3000
<b>Source:</b> Rabbit	<b>Full Name:</b> programmed cell death 1	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 288 aa, 32 kDa	
<b>Immunogen Catalog Number:</b> AG31288	<b>Observed MW:</b> 55 kDa	

## Applications

<b>Tested Applications:</b> WB, ELISA	<b>Positive Controls:</b> WB : mouse thymus tissue, rat thymus tissue
<b>Species Specificity:</b> Human, Mouse, Rat	

## 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). It has been reported that PD-1 is heavily glycosylated and migrates with an apparent molecular mass of 47-55 kDa on SDS-PAGE, which is larger than its predicted mass of 32 kDa (PMID: 8671665; 17640856; 17003438).

## Storage

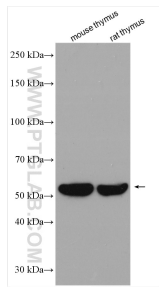
**Storage:**  
Store at -20°C.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

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  
W: ptglab.com

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## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 29780-1-AP (PD-1/CD279 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.