

# PD-1/CD279 Polyclonal antibody

Catalog Number: 29780-1-AP

## Basic Information

**Catalog Number:**

29780-1-AP

**Size:**

450 µg/ml

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG31288

**GenBank Accession Number:**

BC074740

**GeneID (NCBI):**

5133

**UNIPROT ID:**

Q15116

**Full Name:**

programmed cell death 1

**Calculated MW:**

288 aa, 32 kDa

**Observed MW:**

55 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:500-1:3000

## Applications

**Tested Applications:**

WB, ELISA

**Species Specificity:**

Human, Mouse, Rat

**Positive Controls:**

WB : mouse thymus tissue, rat thymus tissue

## 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:**

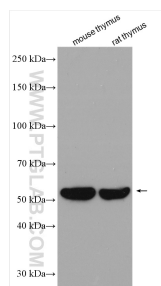
Store at -20°C.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

## 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.