

PD-1/CD279 Polyclonal antibody

Catalog Number: 31445-1-AP

Basic Information

Catalog Number:

31445-1-AP

Size:

400 µg/ml

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

NM_008798.2

GeneID (NCBI):

18566

UNIPROT ID:

Q02242

Full Name:

programmed cell death 1

Calculated MW:

32 kDa

Observed MW:

55 kDa

Purification Method:

Antigen affinity Purification

Recommended Dilutions:

WB 1:500-1:2000

Applications

Tested Applications:

WB, ELISA

Species Specificity:

mouse

Positive Controls:

WB : EL-4 cells, mouse 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:

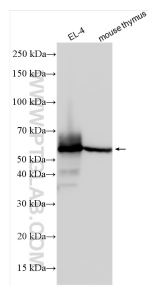
Store at -20°C. Stable for one year after shipment.

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 31445-1-AP (PD-1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.