For Research Use Only

Anti-Mouse PD-1/CD279 Rabbit Recombinant Antibody

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Purification Method:

Protein A purfication

CloneNo.:

240389B8

Catalog Number: 98080-1-RR

Basic Information

Catalog Number:

98080-1-RR

Size:

100ug , 1000 $\mu g/ml$

Source: Rabbit Isotype:

GenBank Accession Number:

NM_008798.2 GeneID (NCBI):

18566

UNIPROT ID: Q02242 Full Name:

programmed cell death 1

Calculated MW: 32 kDa

Applications

Tested Applications:

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).

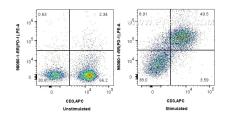
Storage

Storage:

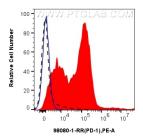
Store at 2 - 8°C. Stable for one year after shipment.

PBS with 0.09% sodium azide, pH 7.3.

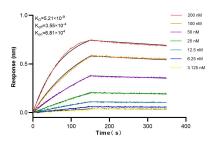
Selected Validation Data



1x10^6 untreated or anti-CD3/CD28 treated mouse splenocytes were surface stained with 0.25 ug Anti-Mouse PD-1/CD279 Rabbit Recombinant Antibody (98080-1-RR, Clone:240389B8) and PE-conjugated Goat Anti-Rabbit IgG. Cell were then stained with APC Anti-Mouse CD3. Cells were not fixed.



1x10^6 anti-CD3/CD28 treated mouse splenocytes were surface stained with 0.25 ug Anti-Mouse PD-1/CD279 Rabbit Recombinant Antibody (98080-1-RR, Clone:240389B8) (red) or Isotype Control (blue) and PE-conjugated Goat Anti-Rabbit IgG. 1x10^6 untreated mouse splenocytes were surface stained with 0.25 ug Anti-Mouse PD-1 Rabbit Recombinant Antibody (98080-1-RR, Clone:240389B8) (black). Cells were not fixed.



Biolayer interferometry (BLI) kinetic assays of 98080-1-RR against Mouse PD-1/CD279 were performed. The affinity constant is 5.21 nM.