For Research Use Only

Anti-Human PD-1/CD279 Rabbit Recombinant Antibody, PBS Only

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Catalog Number: 98068-1-PBS

Basic Information

Catalog Number:

98068-1-PBS

Size: 1mg, 2mg/ml

Source: Rabbit Isotype:

GenBank Accession Number:

BC074740 GeneID (NCBI):

UNIPROT ID: Q15116 Full Name:

programmed cell death 1

Calculated MW: 288 aa, 32 kDa

Purification Method: Protein A purfication

CloneNo.: 240724G11

Applications

Tested Applications:

Species Specificity:

human

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:

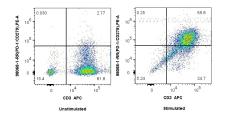
Store at -80°C.

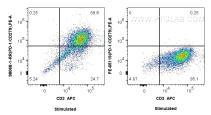
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

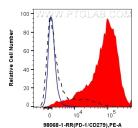
Storage Buffer:

PBS Only

Selected Validation Data



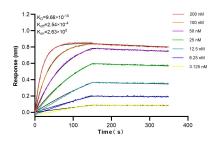




1x10^6 unstimulated or PHA stimulated human PBMCs were stained with 0.25 ug Anti-Human PD-1/CD279 Rabbit Recombinant Antibody (98068-1-RR, Clone:240724G11) and PE-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). Cells were then stained with APC Anti-Human CD3 (OKT3) Mouse IgG2a Recombinant Antibody (APC-65569, Clone: OKT3). Cells were not fixed. This data was developed using the same antibody clone with 98068-1-PBS in a different storage buffer

1x10^6 PHA stimulated human PBMCs were stained with 0.25 ug Anti-Human PD-1/CD279 Rabbit Recombinant Antibody (98068-1-RR Clone:240724G11)(left) or 0.25 ug PE Anti-Human PD-1/CD279 (J110) (PE-65119, Clone: J110)(right) and PE-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), Cells were then stained with APC Anti-Human CD3 (OKT3) Mouse IgG2a Recombinant Antibody (APC-65569, Clone: OKT3). Cells were not fixed. This data was developed using the same

1x10^6 unstimulated (black) or PHA stimulated human PBMCs (red) were stained with 0.25 ug Anti-Human PD-1/CD279 Rabbit Recombinant Antibody (98068-1-RR, Clone:240724G11) and PE-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). 1x10^6 PHA treated human PBMCs were stained with Isotype Control(blue). Cells were not fixed. This data was developed using the same antibody clone with 98068-1-PBS in a different storage buffer formulation.



Biolayer interferometry (BLL) kinetic assays of 98068-1-RR against Human PD-1/CD279 were performed. The affinity constant is 0.966 nM.