For Research Use Only

PE Anti-Mouse PD-1/CD279 (J43.1)

Catalog Number: PE-65120



Basic Information

Catalog Number:

GenBank Accession Number:

Purification Method:

PE-65120 Size: BC119179 GenelD (NCBI): Affinity purification

100ug , 0.2 mg/ml

GeneID (NCBI): 18566 CloneNo.: J43.1

Source:

UNIPROT ID:

Recommended Dilutions:

Armenian Hamster

Q02242

FC: 0.5 ug per 10^6 cells in $100 \, \mu l$ suspension

Isotype:

Full Name: sus

Excitation/Emission maxima

IgG

programmed cell death 1

wavelengths: 496 nm, 565 nm / 578 nm

Applications

Tested Applications:

FC

Positive Controls:

Species Specificity:

Mouse

 $\begin{tabular}{ll} FC: anti-CD3/CD28-stimulated mouse splenocytes, \\ \end{tabular}$

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

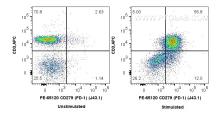
Storage:

Store at 2-8°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer

PBS with 0.09% sodium azide and 0.5% BSA, pH7.3

Selected Validation Data



1X10^6 unstimulated and anti-CD3/CD28stimulated (3 days) mouse splenocytes were surface co-stained with APC Anti-Mouse CD3 and 0.5 ug PE Anti-Mouse PD-1/CD279 (PE-65120, Clone: J43.1). Cells were not fixed.