For Research Use Only

## Atlantic Blue™ Anti-Human PD-1/CD279 (J110)

Catalog Number: AB-65119



**Basic Information** 

Catalog Number: AB-65119

GenBank Accession Number: BC074740

**Purification Method:** Affinity purification

Size:

GeneID (NCBI):

CloneNo.: J110

100tests, 5 ul/test

5133 Full Name:

Excitation/Emission maxima

Source: Mouse

programmed cell death 1 Calculated MW:

wavelengths: 404 nm / 458 nm

Isotype: lgG1

288 aa, 32 kDa

**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).

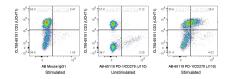
Storage

Storage:

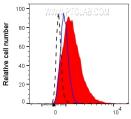
Store at 2-8°C. Avoid exposure to light. Stable for one year after shipment.

PBS with 0.09% sodium azide and 0.5% BSA.

## **Selected Validation Data**



1x10^6 untreated (center) or PHA treated (3 day) human PBMCs were surface stained with CL750 Anti-Human CD3 (CL750-65151, Clone: UCHT1) and 5 ul Atlantic Blue™ Anti-Human PD-1/CD279 (AB-65119, Clone: J110) (right) or Atlantic Blue™ Mouse IgG1 Isotype Control (AB-65124, Clone: MOPC-21) (left). Cells were not fixed. Cells were treated with FC Receptor Block prior to staining. Lymphocytes were gated.



AB-65119 PD-1/CD279 (J110)

1x10^6 untreated (black, dashed) or PHA treated (3 day) human PBMCs were surface stained with 5 ul Atlantic Blue™ Anti-Human PD-1/CD279 (AB-65119, Clone: J110) (red) or Atlantic Blue™ Mouse IgG1 Isotype Control (AB-65124, Clone: MOPC-21) (blue). Cells were not fixed. Cells were treated with FC Receptor Block prior to staining. Lymphocytes were gated.