

For Research Use Only

# CoraLite® Plus 405 Anti-Human PD-1/CD279 (J110)

Catalog Number: CL405-65119



## Basic Information

Catalog Number:

CL405-65119

Size:

100 tests, 5 µl/test

Source:

Mouse

Isotype:

IgG1

GenBank Accession Number:

BC074740

GeneID (NCBI):

5133

Full Name:

programmed cell death 1

Calculated MW:

288 aa, 32 kDa

Purification Method:

Affinity purification

CloneNo.:

J110

Excitation/Emission maxima wavelengths:

399 nm / 422 nm

## Applications

Tested Applications:

FC

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.

Storage Buffer:

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

For technical support and original validation data for this product please contact:

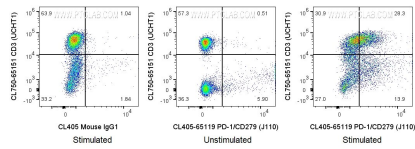
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)

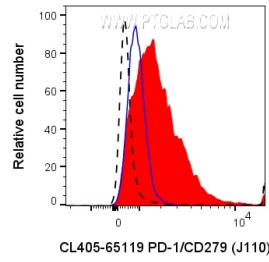
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

## Selected Validation Data



1x10<sup>6</sup> untreated (center) or PHA treated (3 day) human PBMCs were surface stained with CL750 Anti-Human CD3 (CL750-65151, Clone:UCHT1) and 5 ul CoraLite® Plus 405 Anti-Human PD-1/CD279 (CL405-65119, Clone:J110) (right) or CoraLite® Plus 405 Mouse IgG1 Isotype Control (CL405-65124, Clone: MOPC-21) (left). Cells were not fixed. Cells were treated with FC Receptor Block prior to staining. Lymphocytes were gated.



1x10<sup>6</sup> untreated (black dashed) or PHA treated (3 day) human PBMCs were surface stained with 5 ul CoraLite® Plus 405 Anti-Human PD-1/CD279 (CL405-65119, Clone:J110) (red) or CoraLite® Plus 405 Mouse IgG1 Isotype Control (CL405-65124, Clone: MOPC-21) (blue). Cells were not fixed. Cells were treated with FC Receptor Block prior to staining. Lymphocytes were gated.