

For Research Use Only

# CoraLite® Plus 594 Anti-Human PD-1/CD279 (J110)

Catalog Number: CL594-65119



## Basic Information

<b>Catalog Number:</b> CL594-65119	<b>GenBank Accession Number:</b> BC074740	<b>Purification Method:</b> Affinity purification
<b>Size:</b> 100tests, 5 ul/test	<b>GeneID (NCBI):</b> 5133	<b>CloneNo.:</b> J110
<b>Source:</b> Mouse	<b>Full Name:</b> programmed cell death 1	<b>Excitation/Emission maxima wavelengths:</b> 594 nm / 615 nm
<b>Isotype:</b> IgG1	<b>Calculated MW:</b> 288 aa, 32 kDa	

## 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.

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

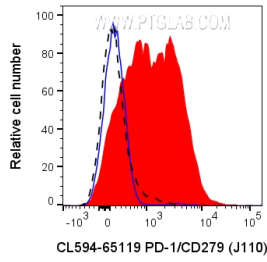
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

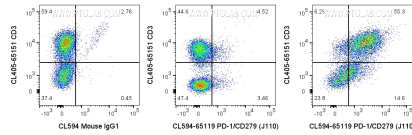
W: [ptgcn.com](http://ptgcn.com)

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## Selected Validation Data



1x10<sup>6</sup> PHA treated (3 day) human PBMCs were surface stained with 5 ul CoraLite® Plus 594 Anti-Human PD-1/CD279 (CL594-65119, Clone: J110) (red) or CoraLite® 594 Mouse IgG1 Isotype Control (CL594-65124, Clone: MOPC-21) (blue). 1x10<sup>6</sup> untreated human PBMCs were surface stained with 5 ul CoraLite® Plus 594 Anti-Human PD-1/CD279 (CL594-65119, Clone: J110) (black, dashed). Cells were incubated with FC Receptor Block prior to staining. Cells were not fixed.



1x10<sup>6</sup> PHA treated (3 day) human PBMCs were surface stained with CL405 Anti-Human CD3 (CL405-65151, Clone: UCHT1) and 5 ul CoraLite® Plus 594 Anti-Human PD-1/CD279 (CL594-65119, Clone: J110) (right) or CoraLite® 594 Mouse IgG1 Isotype Control (CL594-65124, Clone: MOPC-21) (left). 1x10<sup>6</sup> untreated human PBMCs were surface stained with CL405 Anti-Human CD3 (CL405-65151, Clone: UCHT1) and 5 ul CoraLite® Plus 594 Anti-Human PD-1/CD279 (CL594-65119,