

For Research Use Only

# CoraLite® Plus 405 Anti-Human PD-1/CD279 Rabbit Recombinant Antibody

Catalog Number: CL405-98068



## Basic Information

<b>Catalog Number:</b> CL405-98068	<b>GenBank Accession Number:</b> BC074740	<b>Purification Method:</b> Protein A purification
<b>Concentration:</b> 100tests, 5 ul/test	<b>GeneID (NCBI):</b> 5133	<b>CloneNo.:</b> 240724G11
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q15116	<b>Recommended Dilutions:</b> FC: 5 ul per 10 <sup>6</sup> cells in a 100 µl suspension
<b>Isotype:</b> IgG	<b>Full Name:</b> programmed cell death 1	<b>Excitation/Emission maxima wavelengths:</b> 399 nm / 422 nm
<b>Immunogen Catalog Number:</b> EG0974	<b>Calculated MW:</b> 288 aa, 32 kDa	

## Applications

<b>Tested Applications:</b> FC	<b>Positive Controls:</b> FC : PHA treated human PBMCs,
<b>Species Specificity:</b> 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).

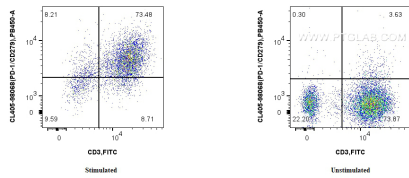
## Storage

**Storage:**  
Store at 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: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.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 or PHA-treated human PBMCs were surface stained with FITC Plus Anti-Human CD3 (OKT3) Mouse IgG2a RecAb (FITC-65569, Clone: OKT3) and 5  $\mu$ l CoraLite® Plus 405 Anti-Human PD-1/CD279 Rabbit RecAb (CL405-98068, Clone: 240724G11). Cells were not fixed.