## For Research Use Only

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

Catalog Number: CL405-98068

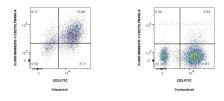


| Basic Information      | Catalog Number:<br>CL405-98068  | GenBank Accession Number:<br>BC074740  | Purification Method:<br>Protein A purification  |              |                               |   |  |
|------------------------|---|--|---|--------------|-------------------------------|---|--|
|                        | Size:<br>100tests , 5 ul/test   | GenelD (NCBI):<br>5133   | CloneNo.:<br>240724G11  |              |                               |   |  |
|                        | Source:<br>Rabbit<br>Isotype:<br>IgG<br>Immunogen Catalog Number:<br>EG0974   | UNIPROT ID:<br>Q15116<br>Full Name:<br>programmed cell death 1<br>Calculated MW:<br>288 aa, 32 kDa | Recommended Dilutions:<br>FC: 5 ul per 10 <sup>6</sup> cells in a 100 µl<br>suspension<br>Excitation/Emission maxima<br>wavelengths:<br>399 nm / 422 nm |              |                               |   |  |
|                        |   |  |   | Applications | Tested Applications:<br>FC    | Positive Controls:<br>FC : PHA treated human PBMCs, |  |
|                        |   |  |   |              | Species Specificity:<br>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:<br>Store at 2-8°C. Avoid exposure to light. Stable for one year after shipment.<br>Storage Buffer:<br>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<br/>in USA), or 1(312) 455-8498 (outside USA)E: proteintech@ptglab.comW: ptglab.comW: ptglab.com

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

## Selected Validation Data



1x10^6 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 ul CoraLite® Plus 405 Anti-Human PD-1/CD279 Rabbit RecAb (CL405-98068, Clone: 240724G11). Cells were not fixed.