

For Research Use Only

FcZero-rAb® PE-Cyanine7 Anti-Human PD-1/CD279 Rabbit Recombinant Antibody

Catalog Number: PY7-FcA98068



Basic Information

Catalog Number: PY7-FcA98068	GenBank Accession Number: BC074740	Purification Method: Protein A purification
Concentration: 100tests, 5 ul/test	GeneID (NCBI): 5133	CloneNo.: 240724G11
Source: Rabbit	UNIPROT ID: Q15116	Recommended Dilutions: FC: 5 ul per 10 ⁶ cells in a 100 µl suspension
Isotype: IgG	Full Name: programmed cell death 1	Excitation/Emission maxima wavelengths: 496 nm, 565 nm / 778 nm
Immunogen Catalog Number: EG0974	Calculated MW: 288 aa, 32 kDa	

Applications

Tested Applications: FC	Positive Controls: FC : PHA treated human PBMCs,
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). 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).

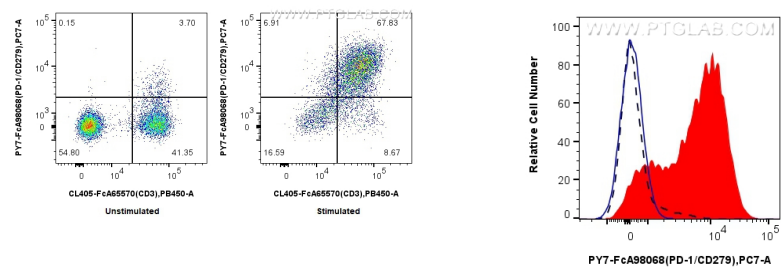
Storage

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

Selected Validation Data



1x10⁶ untreated or PHA treated human PBMCs were surface stained with FcZero-rAb® CoraLite® Plus 405 Anti-Human CD3 (UCHT1) and 5 ul PE-Cyanine7 Anti-Human PD-1/CD279 Rabbit RecAb (PY7-FcA98068, Clone: 240724G11). Cells were incubated with MonoZero™ Human/Mouse 3-in-1 blocking Reagent (PF00029) prior to staining. Cells were not fixed.

1x10⁶ PHA treated human PBMCs were surface stained with 5 ul PE-Cyanine7 Anti-Human PD-1/CD279 Rabbit RecAb (PY7-FcA98068, Clone: 240724G11) (red) or FcZero-rAb® PE-Cyanine7 Rabbit IgG Isotype Control Recombinant Antibody (PY7-FcA98136, Clone: 240953C9) (blue). 1x10⁶ untreated human PBMCs were surface stained with 5 ul PE-Cyanine7 Anti-Human PD-1/CD279 Rabbit RecAb (PY7-FcA98068, Clone: 240724G11) (black, dashed). Cells