

For Research Use Only

# Anti-Human PD-1/CD279 Rabbit scFv Antibody

Catalog Number: SF98068-1-RR



## Basic Information

|                                                                     |                                              |                                                                                               |
|---------------------------------------------------------------------|----------------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Catalog Number:</b><br>SF98068-1-RR                              | <b>GenBank Accession Number:</b><br>BC074740 | <b>Purification Method:</b><br>Affinity purification                                          |
| <b>Size:</b><br>100ug , Concentration: 1000 ug/ml by 5133 Nanodrop; | <b>GeneID (NCBI):</b><br>5133                | <b>CloneNo.:</b><br>240724G11                                                                 |
| <b>Source:</b><br>Rabbit                                            | <b>Full Name:</b><br>programmed cell death 1 | <b>Recommended Dilutions:</b><br>FC: 0.25 ug per 10 <sup>6</sup> cells in a 100 µl suspension |
| <b>Type:</b><br>scFv                                                | <b>Calculated MW:</b><br>288 aa, 32 kDa      |                                                                                               |
| <b>Immunogen Catalog Number:</b><br>EG0974                          |                                              |                                                                                               |

## Applications

|                                      |                                                            |
|--------------------------------------|------------------------------------------------------------|
| <b>Tested Applications:</b><br>FC    | <b>Positive Controls:</b><br>FC : PHA treated human PBMCs, |
| <b>Species Specificity:</b><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

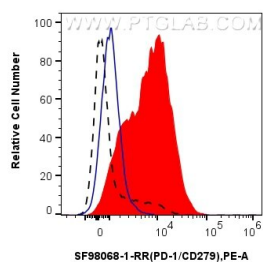
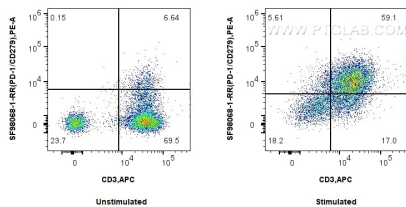
**Storage:**  
Store at 2-8°C. Stable for one year after shipment.  
**Storage Buffer:**  
50mM HEPES, 150mM NaCl, 5mM EDTA, 2mM TCEP, 5% Trehalose, 0.01% Proclin300, pH7.3

\*\*\* 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:  
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## Selected Validation Data



1x10<sup>6</sup> untreated or PHA-treated human PBMCs were surface stained with 0.25 ug PD-1/CD279 Recombinant Antibody (SF98068-1-RR, Clone: 240724G11) and PE Anti-6<sup>His</sup>, His-Tag Rabbit RecAb (PE-FcA98450, Clone: 251107A1). Cells were then stained with APC Anti-Human CD3 (OKT3) Mouse IgG2a Recombinant Antibody (APC-65569, Clone: OKT3). Cells were not fixed.

1x10<sup>6</sup> PHA-treated human PBMCs were surface stained with 0.25 ug PD-1/Cd279 Recombinant Antibody (SF98068-1-RR, Clone: 240724G11) (red) or 0.25 ug Rabbit scFv Isotype Control (SF98136-1-RR, Clone: 240953C9) (blue), and PE Anti-6<sup>His</sup>, His-Tag Rabbit RecAb (PE-FcA98450, Clone: 251107A1). 1x10<sup>6</sup> untreated human PBMCs were surface stained with 0.25 ug PD-1/Cd279 Recombinant Antibody (SF98068-1-RR, Clone: 240724G11) (black, dashed) and

