

RP00402

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# Recombinant Human PD-1/PDCD1/CD279 Protein

Catalog No.: RP00402

Recombinant

## Sequence Information

Species	Gene ID	Swiss Prot
HEK293 cells	5133	Q15116-1

### Tags

C-mFc

### Synonyms

PDCD1; PD1; CD279; SLEB2; PD-1

## Background

Programmed Death-1 receptor (PD-1), also known as CD279, is type I transmembrane protein belonging to the CD28 family of immune regulatory receptors. PD1 is a inhibitory receptor on antigen activated T-cells that plays a critical role in induction and maintenance of immune tolerance to self. Delivers inhibitory signals upon binding to ligands CD274/PDCD1L1 and CD273/PDCD1LG2 (PubMed:21276005). Following T-cell receptor (TCR) engagement, PDCD1 associates with CD3-TCR in the immunological synapse and directly inhibits T-cell activation.

## Basic Information

### Description

Recombinant Human PD-1/PDCD1/CD279 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Leu25-Gln167) of Human PD-1/PDCD1 (Accession #Q15116-1) fused with a C-mFc tag at the C-terminus.

### Bio-Activity

### Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

## Product Information

### Source

<I>E. coli</I>

### Purification

> 95% by SDS-PAGE ; > 95% by HPLC

### Endotoxin

< 1 EU/μg of the protein by LAL method

### Formulation

Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.

### Reconstitution

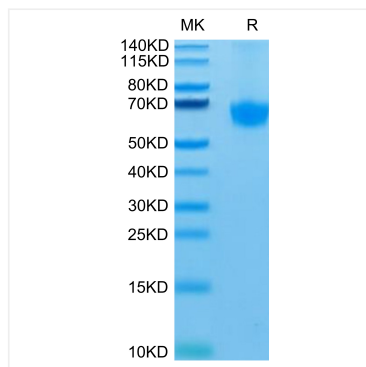
Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## Contact

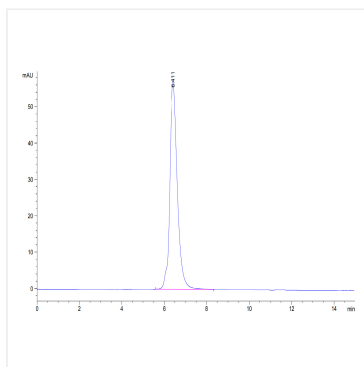


[www.abclonal.com](http://www.abclonal.com)

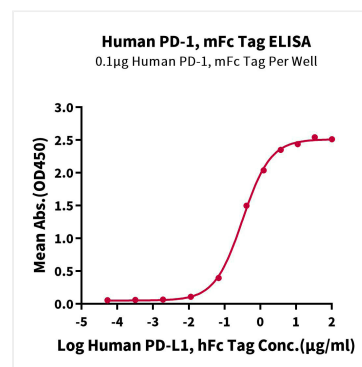
## Validation Data



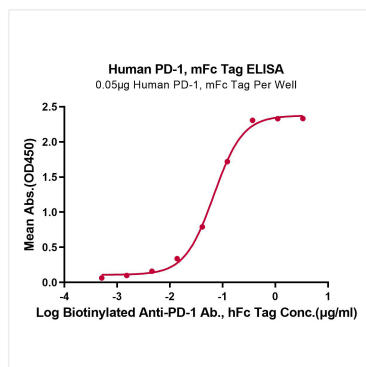
Human PD-1 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.



The purity of Human PD-1 is greater than 95% as determined by SEC-HPLC.



Immobilized Human PD-1, mFc Tag at 1 μg/mL (100 μL/well) on the plate. Dose response curve for Human PD-L1, hFc Tag with the  $EC_{50}$  of 0.17 μg/mL determined by ELISA (QC Test).



Immobilized Human PD-1, mFc Tag at 0.5 μg/mL (100 μL/Well). Dose response curve for Biotinylated Anti-PD-1 Ab., hFc Tag with the  $EC_{50}$  of 68ng/mL determined by ELISA.