

# Biotinylated Human PD-1/PDCD1 Protein, Ultra Low Endotoxin

Cat. No. PD1-HM501B-UL

## Description

<b>Source</b>	Recombinant Biotinylated Human PD-1/PDCD1 Protein is expressed from HEK293 with hFc (IgG1) tag and Avi tag at the C-Terminus. It contains Leu25-Gln167.
<b>Accession</b>	Q15116-1
<b>Molecular Weight</b>	The protein has a predicted MW of 44.7 kDa. Due to glycosylation, the protein migrates to 65-72 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 0.01 EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Programmed cell death protein 1, also known as PD-1 and CD279, is a protein found on the surface of cells that has a role in regulating the immune system's response to the cells of the human body by down-regulating the immune system and promoting self tolerance by suppressing T cell inflammatory activity.

## Assay Data

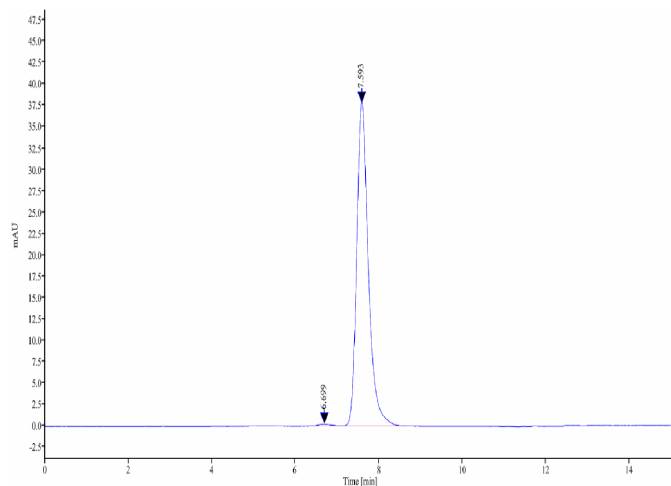
### Bis-Tris PAGE



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

### SEC-HPLC

**Assay Data**

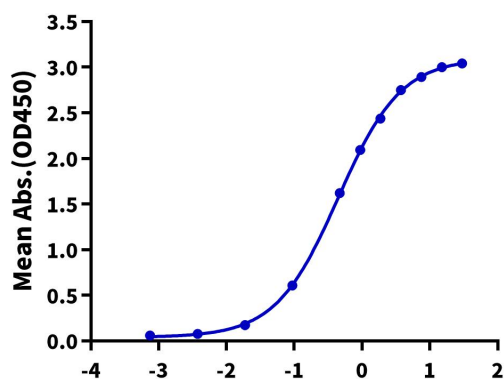


The purity of Biotinylated Human PD-1 is greater than 95% as determined by SEC-HPLC.

**ELISA Data**

**Biotinylated Human PD-1, hFc-Avi Tag ELISA**

0.2µg Human PD-L1, mFc Tag Per Well



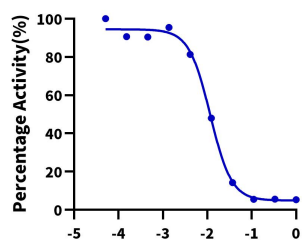
Immobilized Human PD-L1, mFc tag at 2µg/ml (100µl/Well). Dose response curve for Biotinylated Human PD-1, hFc tag with the EC50 of 0.45µg/ml determined by ELISA.

**Log Biotinylated Human PD-1, hFc-Avi Tag Conc.(µg/ml)**

**Blocking Data**

**Inhibition of Human PD-L1 and Biotinylated Human PD-1 Binding**

0.1µg Human PD-L1, His Tag Per Well



**Log Anti-PD-L1 Antibody, hFc Tag Conc.(µg/ml)**

Serial dilutions of Anti-PD-L1 Antibody were added into Human PD-L1, His Tag : Biotinylated Human PD-1, hFc Avi Tag binding reactions. The half maximal inhibitory concentration(IC50) is 11.7ng/ml.