

# Human PD-L1/B7-H1 Protein, Ultra Low Endotoxin

Cat. No. PDL-HM110-UL

## Description

<b>Source</b>	Recombinant Human PD-L1/B7-H1 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Phe19-Arg238.
<b>Accession</b>	Q9NZQ7-1
<b>Molecular Weight</b>	The protein has a predicted MW of 26 kDa. Due to glycosylation, the protein migrates to 35-42 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

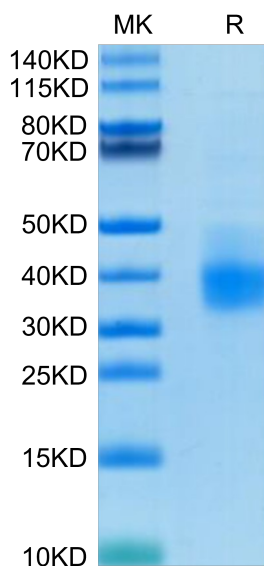
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
<b>Storage</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

B7-H1, also known as PD-L1 and CD274, is an approximately 65 kDa transmembrane glycoprotein in the B7 family of immune regulatory molecules. PD-L1 has been identified as the ligand for the immunoinhibitory receptor programmed death-1 (PD1/PDCD1) and has been demonstrated to play a role in the regulation of immune responses and peripheral tolerance.

## Assay Data

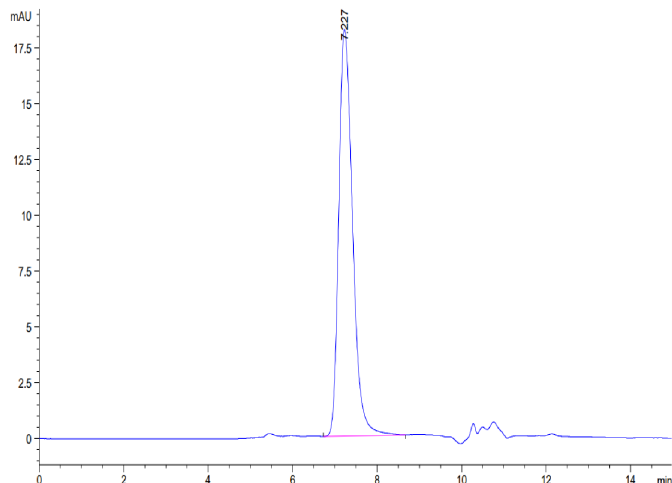
### Bis-Tris PAGE



Human PD-L1 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data

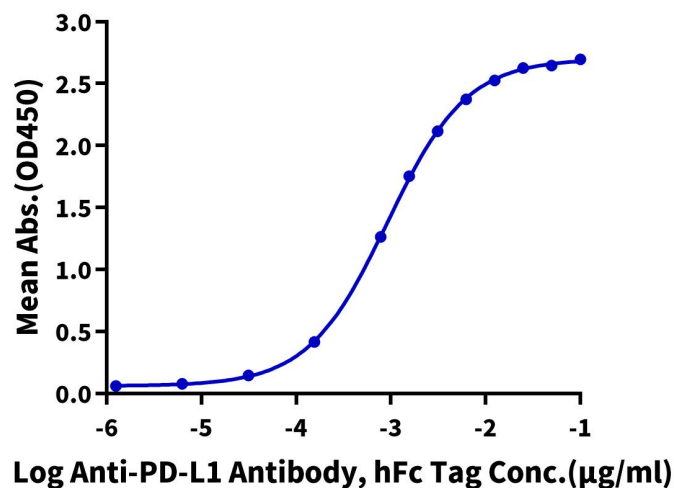


The purity of Human PD-L1 is greater than 95% as determined by SEC-HPLC.

ELISA Data

**Human PD-L1, His Tag ELISA**

0.1µg Human PD-L1, His Tag Per Well

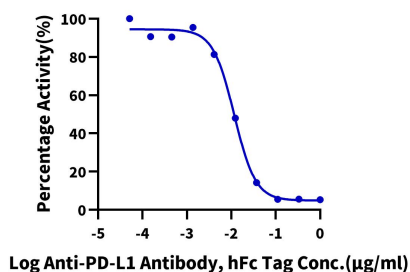


Immobilized Human PD-L1, His Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Anti-PD-L1 Antibody, hFc Tag with the EC50 of 0.92ng/ml determined by ELISA.

Blocking Data

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

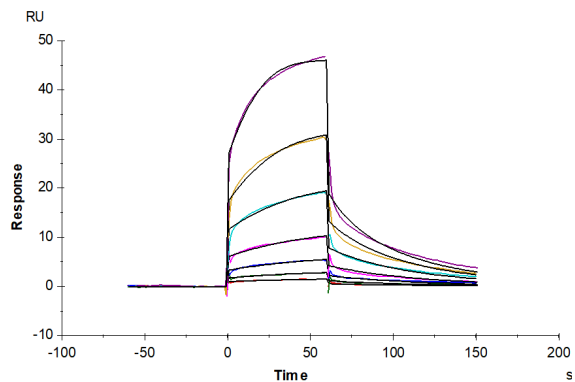
0.1µg Human PD-L1, His Tag Per Well



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.

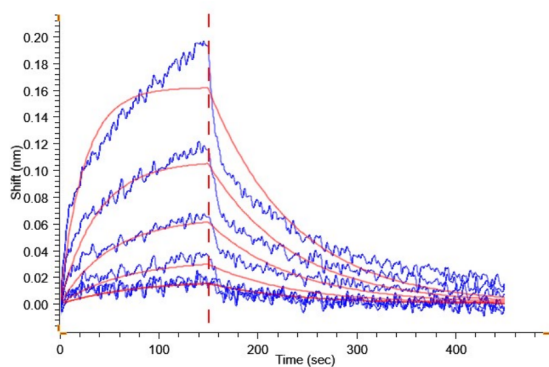
SPR Data

Assay Data



Human PD-1, hFc Tag captured on CM5 Chip via Protein A can bind Human PD-L1, His Tag with an affinity constant of 0.25  $\mu$ M as determined in SPR assay (Biacore T200).

BLI Data



Loaded Biotinylated Human PD-1, His Tag on Streptavidin-Biosensor can bind Human PD-L1, His Tag with an affinity constant of 0.20  $\mu$ M as determined in BLI assay .