



### Synonym

PD-L1,CD274,B7-H1,PDCD1L1,PDCD1LG1

### Source

Human PD-L1, His Tag(PD1-H5229) is expressed from human 293 cells (HEK293). It contains AA Phe 19 - Arg 238 (Accession # [NP\\_054862.1](#)).

Predicted N-terminus: Phe 19

### Molecular Characterization

PD-L1(Phe 19 - Arg 238)  
NP\_054862.1 Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 26.0 kDa. The protein migrates as 30-35 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

### Endotoxin

Less than 1.0 EU per µg by the LAL method.

### Purity

>98% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

### Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

### Reconstitution

Please see Certificate of Analysis for specific instructions.

*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

### Storage

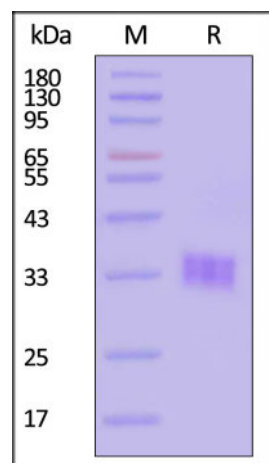
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 12 months under sterile conditions after reconstitution.

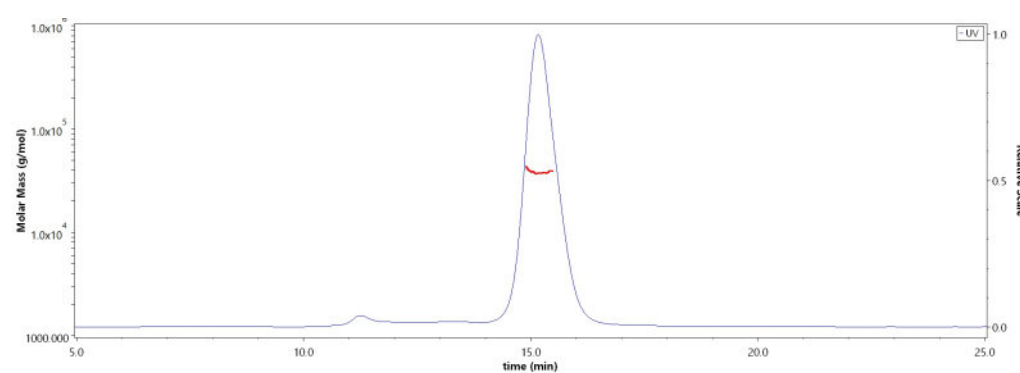
### SDS-PAGE



Human PD-L1, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 98% (With [Star Ribbon Pre-stained Protein Marker](#)).

### Bioactivity-ELISA

### SEC-MALS

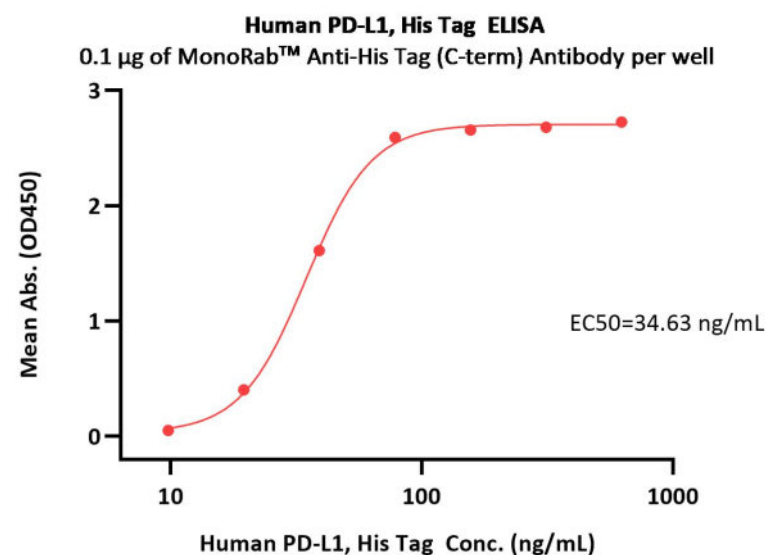
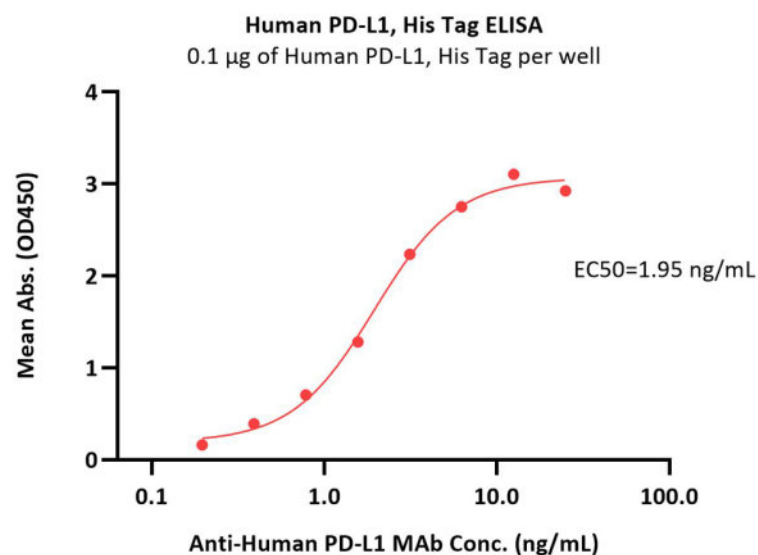


The purity of Human PD-L1, His Tag (Cat. No. PD1-H5229) is more than 90% and the molecular weight of this protein is around 30-50 kDa verified by SEC-MALS.

[Report](#)

Discounts, Gifts,  
and more!

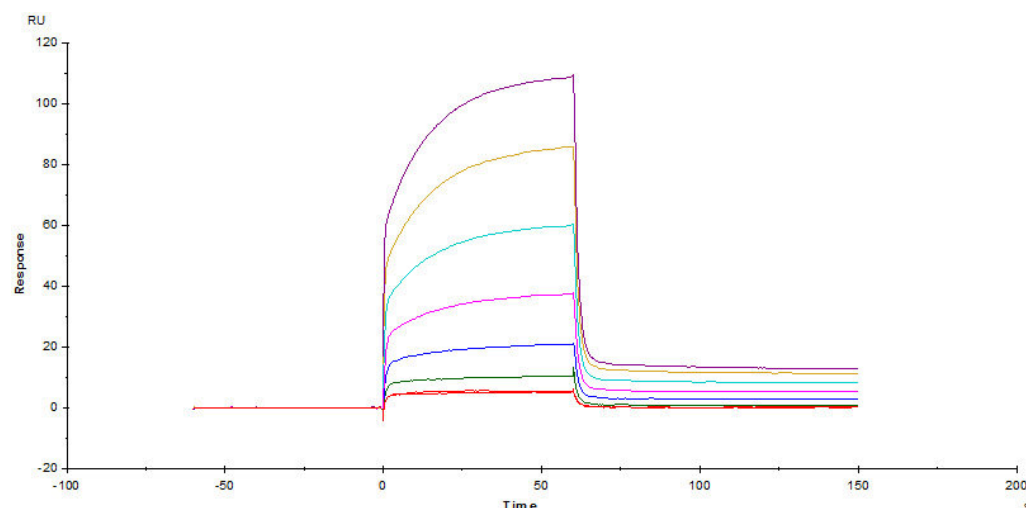




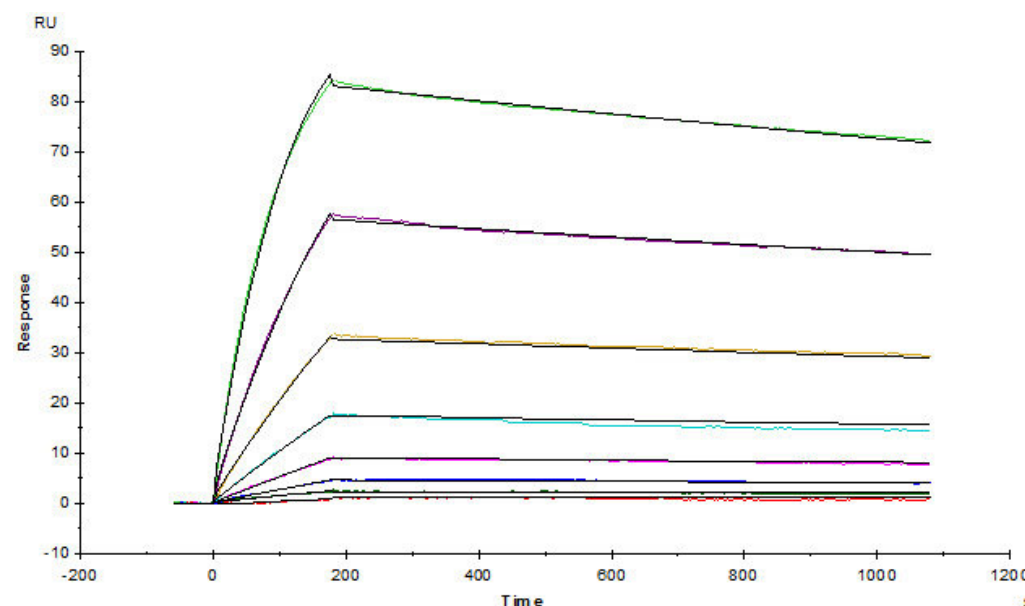
Immobilized Human PD-L1, His Tag (Cat. No. PD1-H5229) at 1  $\mu\text{g/mL}$  (100  $\mu\text{L/well}$ ) can bind Anti-Human PD-L1 MAb (Human IgG1) with a linear range of 0.1-3 ng/mL (QC tested).

Immobilized Human PD-L1, His Tag (Cat. No. PD1-H5229) at series of concentration on MonoRab™ Anti-His Tag (C-term) Antibody precoated (0.1  $\mu\text{g/well}$ ) plate, can bind Human PD-1, Mouse IgG2a Fc Tag (Cat. No. PD1-H5255) at 5  $\mu\text{g/mL}$  (100  $\mu\text{L/well}$ ) with a linear range of 10-78 ng/mL (Routinely tested).

**Bioactivity-SPR**



Human PD-1, Fc Tag (Cat. No. PD1-H5257) captured on CM5 chip via anti-human IgG Fc antibody, can bind Human PD-L1, His Tag (Cat. No. PD1-H5229) with an affinity constant of 3.6  $\mu\text{M}$  as determined in a SPR assay (Biacore T200) (Routinely tested).



Anti-Human PD-L1 Mab (Human IgG1) captured on CM5 chip via anti-human IgG Fc antibodies surface, can bind Human PD-L1, His Tag (Cat. No. PD1-H5229) with an affinity constant of 0.286 nM as determined in a SPR assay (Biacore T200) (Routinely tested).

**Bioactivity-BLI**

Discounts, Gifts,  
and more!

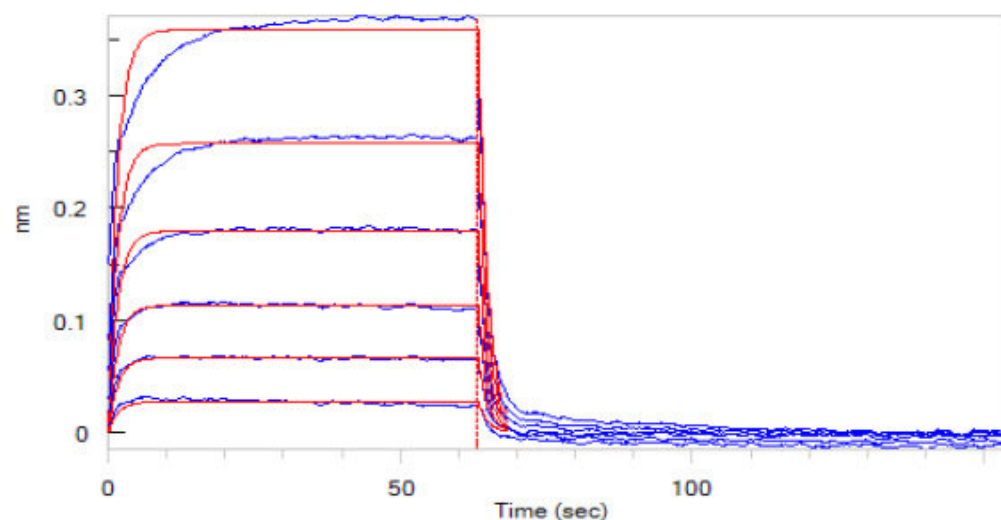


## Human PD-L1 / B7-H1 Protein, His Tag (MALS verified)

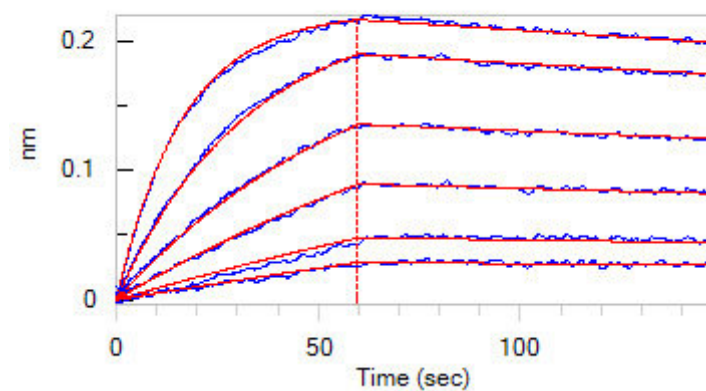
Catalog # PD1-H5229



BIOSYSTEMS  
**Acro**  
Surprise Inside!



Loaded Human PD-1, Fc Tag, low endotoxin (Cat. No. PD1-H5257) on ProteinA Biosensor, can bind Human PD-L1, His Tag (Cat. No. PD1-H5229) with an affinity constant of 5.3  $\mu$ M as determined in BLI assay (ForteBio Octet Red96e) (QC tested).



Loaded Anti-Human PD-L1 MAb (Human IgG1) on AHC Biosensor, can bind Human PD-L1, His Tag (Cat. No. PD1-H5229) with an affinity constant of 1.61 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

### Background

Programmed cell death 1 ligand 1 (PDL1) is also known as B7-H, B7H1, MGC142294, MGC142296, PD-L1, PDCD1L1 and PDCD1LG1, which is a member of the growing B7 family of immune molecules and is involved in the regulation of cellular and humoral immune responses. PDL1 is a cell surface immunoglobulin superfamily with two Ig-like domains within the extracellular region and a short cytoplasmic domain. This protein is broadly expressed in the majority of peripheral tissues as well as hematopoietic cells. Interaction between PDL1 and its receptors belonging to the CD28 family of molecules provide both stimulatory and inhibitory signals in regulating T cell activation and tolerance. PDL1 may inhibit ongoing T-cell responses by inducing apoptosis and arresting cell-cycle progression.

### Clinical and Translational Updates

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