

RP00068

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# Recombinant Human B7-H1/PD-L1/CD274 Protein

Catalog No.: RP00068

Recombinant

1 Publications

## Sequence Information

Species	Gene ID	Swiss Prot
Human	29126	Q9NZQ7

### Tags

C-His

### Synonyms

B7-H; B7H1; PDL1; PD-L1; hPD-L1; PDCD1L1; PDCD1LG1; CD274; PDL1; B7H1; PD-L1; PDCD1L1; PDCD1LG1; B7-H; CD274 molecule

## Product Information

Source	Purification
HEK293 cells	> 97% by SDS-PAGE.

### Endotoxin

< 0.1 EU/μg of the protein by LAL method.

### Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. Contact us for customized product form or formulation.

### 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 freeze-thaw cycles.

## Contact



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

## Background

This protein is an immune inhibitory receptor ligand that is expressed by hematopoietic and non-hematopoietic cells, such as T cells and B cells and various types of tumor cells. The protein is a type I transmembrane protein that has immunoglobulin V-like and C-like domains. Interaction of this ligand with its receptor inhibits T-cell activation and cytokine production. During infection or inflammation of normal tissue, this interaction is important for preventing autoimmunity by maintaining homeostasis of the immune response. In tumor microenvironments, this interaction provides an immune escape for tumor cells through cytotoxic T-cell inactivation.

## Basic Information

### Description

Recombinant Human B7-H1/PD-L1/CD274 Protein is produced by HEK293 expression system. The target protein is expressed with sequence (Phe19-Thr239) of human PD-L1/B7-H1 (Accession #NP\_054862.1) fused with a 6×His tag at the C-terminus.

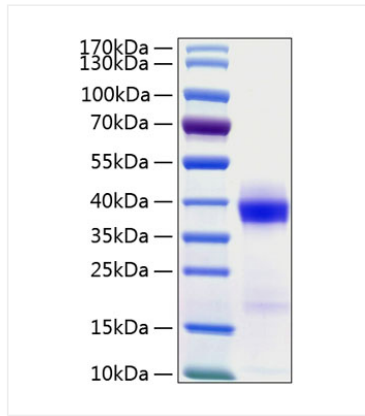
### Bio-Activity

1. Measured by its binding ability in a functional ELISA. Immobilized Recombinant Human PD-L1 at 10 μg/mL (100 μL/well) can bind Recombinant Human PD-1 with a linear range of 0.25-1.02 μg/mL. 2. Measured by its binding ability in a functional ELISA. Immobilized PE anti-human CD274 (B7-H1, PD-L1) Antibody at 1 μg/mL (25 μL/well) can bind Human CD274 with a linear range of 0.46-18 ng/mL.

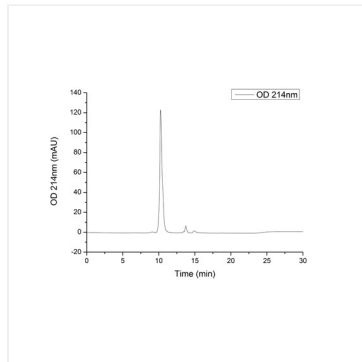
### Storage

Store the lyophilized protein at -20 °C to -80 °C for long term. 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.

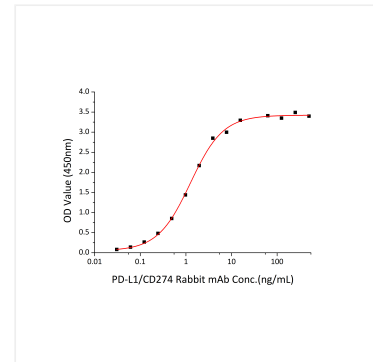
## Validation Data



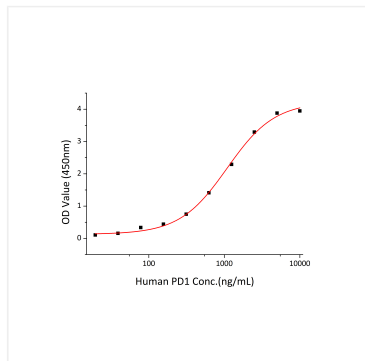
Recombinant Human B7-H1/PD-L1/CD274 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 31-41 kDa.



The purity of Human PD-L1/B7-H1 Protein (Cat.RP00068) was greater than 95% as determined by SEC-HPLC.



Immobilized Human PD-L1 (Catalog: RP00068) at 200ng/mL (100  $\mu$ L/well) can bind PD-L1/CD274 Rabbit mAb (Catalog: A20270) with a linear range of 0.06-1.25 ng/mL.



Immobilized Recombinant Human PD-L1 His Tag (Catalog: RP00068) at 5 $\mu$ g/mL (100 $\mu$ L/well) can bind Recombinant Human PD-1 with a linear range of 0.16-1.09  $\mu$ g/mL.