

## Recombinant Human PD-L1/B7-H1/CD274 Protein (ECD, Fc Tag)

**Catalog Number: PKSH030444**

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

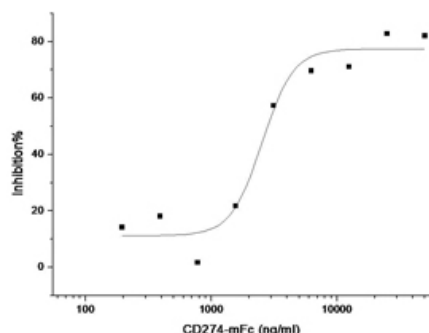
### Description

<b>Species</b>	Human
<b>Source</b>	HEK293 Cells-derived Human PD-L1/B7-H1/CD274 protein Met 1-Thr 239, with an C-terminal mFc
<b>Calculated MW</b>	51.7 kDa
<b>Accession</b>	NP_054862.1
<b>Bio-activity</b>	Measured by its ability to inhibit anti-CD3 antibody induced IFN $\gamma$ secretion in human T lymphocytes. The ED <sub>50</sub> for this effect is 2-10 $\mu$ g/mL.

### Properties

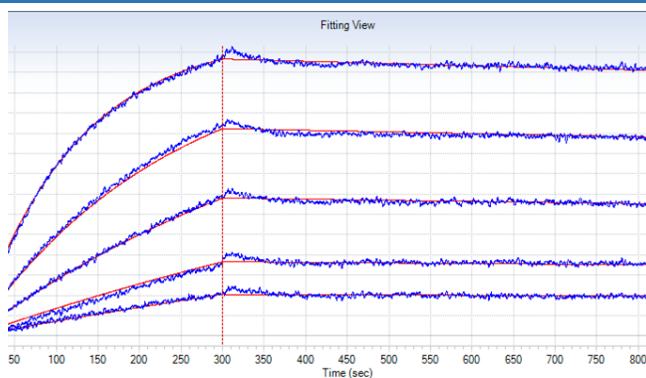
<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per $\mu$ g of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



Measured by its binding ability in a functional ELISA.

Immobilized recombinant Human PD1-His (Cat: PKSH031642) at 10  $\mu$ g/ml (100  $\mu$ l/well) can bind human PD-L1 (Cat: PKSH030444) with a linear range of 1.28-20  $\mu$ g/ml.



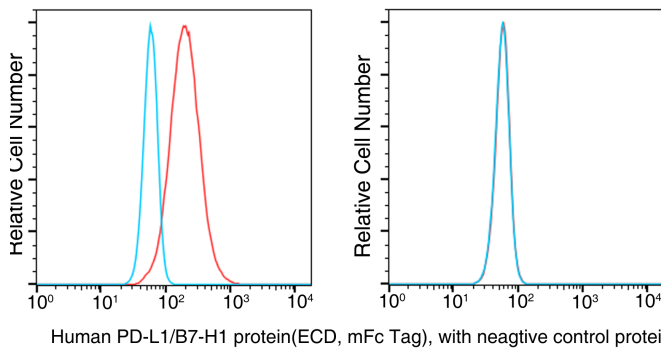
Labeled biotin to PD-L1 Protein, Human, Recombinant (ECD, Fc Tag) by a certain molar ratio; Using the Octet RED System, the affinity constant (Kd) of PD-L1 Protein, Human, Recombinant (ECD, Fc Tag), Biotinylated (Cat: PKSH030444-B) bound to Atezolizumab was 0.1 nM.

### For Research Use Only

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CHO cells were transduced with human PD1 and subjected to flow cytometric analysis using recombinant human PDL1 protein (mouse IgG2a Fc tag) (left, Cat. No. PKS030444, red) and a negative control protein (blue). The cells were then stained with an FITC-conjugated anti-mouse IgG2a Fc antibody. Non-transduced CHO cells were used as a control (right).

## Background

Programmed death-1 ligand-1 (PD-L1; CD274; B7-H1) 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. PD-L1/B7-H1 is a member of the growing B7 family of immune molecules and this protein contains one V-like and one C-like Ig domain within the extracellular domain; and together with PD-L2; are two ligands for PD1 which belongs to the CD28/CTLA4 family expressed on activated lymphoid cells. By binding to PD1 on activated T-cells and B-cells; PD-L1 may inhibit ongoing T-cell responses by inducing apoptosis and arresting cell-cycle progression. Accordingly; it leads to growth of immunogenic tumor growth by increasing apoptosis of antigen specific T cells and may contribute to immune evasion by cancers. PD-L1 thus is regarded as promising therapeutic target for human autoimmune disease and malignant cancers.

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