

## PD-L1 Protein, Human, Recombinant (hFc)

## General Information

|                       |   |
|-----------------------|---|
| Synonyms:             | PDCD1LG1;B7-H;PDCD1L1;PDL1;CD274 molecule;B7-H1;B7H1;PD-L1  |
| Protein Construction: | A DNA sequence encoding the N-terminal segment (Met 1-Thr 239) of the extracellular domain of human B7-H1 (NP_054862.1) was expressed with C-terminal fused Fc region of human IgG1. Predicted N terminal: Phe 19 |
| Species:              | Human   |
| Expression Host:      | HEK293 Cells  |
| Accession:            | Q9NZQ7-1  |
| Molecular Weight:     | 52 kDa (predicted); 65-70 kDa (reducing condition, due to glycosylation)  |

## QC Testing

|                      |  |
|----------------------|--|
| Biological Activity: | Immobilized Recombinant Human PD1 / PDCD1 Protein (His Tag) at 2 µg/mL (100 µL/well) can bind Recombinant Human PD-L1 / B7-H1 / CD274 Protein (Fc Tag) , the EC50 is 220-660 ng/mL.  |
| Purity:              | ≥ 95 % as determined by SDS-PAGE. ≥ 90 % as determined by SEC-HPLC.  |
| Endotoxin:           | < 1.0 EU/µg of the protein as determined by the LAL method.  |
| Formulation:         | Lyophilized from a solution filtered through a 0.22 µm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization. |

## Preparation and Storage

## Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

## Stability &amp; Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

*Actual storage temperature shall be subject to the COA.*

## Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

## Protein 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. Cancer Immunotherapy Co-inhibitory Immune Checkpoint Targets Immune Checkpoint Immune Checkpoint Blockade: Blocking Antibody Immune Checkpoint Blockade: PD-L1 / B7-H1 / CD274 Immune Checkpoint Detection: Antibodies Immune Checkpoint Detection: ELISA Antibodies Immune Checkpoint Detection: FCM Antibodies Immune Checkpoint Detection: ICC Antibodies Immune Checkpoint Detection: IHC Antibodies Immune Checkpoint Detection: WB Antibodies Immune Checkpoint Proteins Immune Checkpoint Targets Immunotherapy PD-L1 / B7-H1 / CD274 Immune Checkpoint Proteins Targeted Therapy

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