

## Technical Data Sheet

### Human PD-L1 Protein (C-Fc)

**Catalog Number:** 800901, 800902  
**Size:** 25 ug, 100 ug  
**Target Name:** PD-L1, CD274, B7-H1, PDCD1L1, PDCD1LG1,  
**Regulatory Status:** RUO

#### Product Details

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**Application:** ELISA, BLI  
**Format:** Liquid, Purified  
**Expression Host:** HEK293  
**Species:** Human  
**Sources:** Recombinant Human PD-L1 (Phe19-Thr239) with C-terminus Fc tag is expressed in HEK293 cells.  
**Accession Number:** Q9NZQ7  
**Molecular Weight:** The protein has a predicted molecular weight of 54 kDa and migrates at approximately 70 kDa on SDS-PAGE under DTT-reducing conditions.  
**Affinity Tag:** C-Fc  
**Purity:** >95% based on SDS-PAGE under reducing condition  
**Formulation:** 1xPBS buffer, pH7.4, 0.22 µm filtered  
**Endotoxin level:** Not tested  
**Protein Concentration:** 25µg size is bottled at 0.2mg/mL concentration. 100 µg size is supplied at a lot-specific concentration.  
**Storage and Handling:** Briefly centrifuge the vial upon receipt. An unopened vial can be stored at 4°C for up to 2 weeks, or at -20°C or below for up to six months. The protein may be further diluted to 0.1 mg/mL using 0.22 µm-filtered PBS buffer (pH 7.4). For long-term storage, the diluted stock solution should be aliquoted and stored at ≤ -70°C to minimize freeze-thaw cycles. If additional dilution is required, carrier proteins such as FBS or BSA should be added to maintain protein stability.

#### Background Information

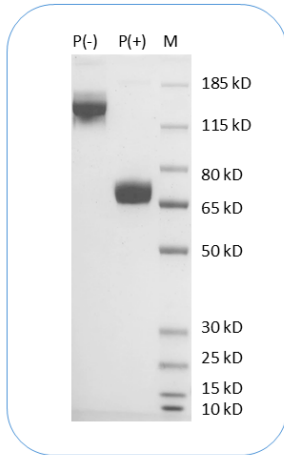
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Programmed death-ligand 1 (PD-L1, also known as CD274 or B7-H1) is a type I transmembrane glycoprotein and a key immune checkpoint molecule in the B7 family. It is broadly expressed on immune cells (such as T cells, B cells, macrophages, and dendritic cells) and in various tissues, as well as on many tumor types. PD-L1 interacts with its receptor PD-1, expressed on activated T and B cells, to deliver inhibitory signals that suppress T cell proliferation, cytokine production, and cytolytic function. This interaction plays a critical role in maintaining immune homeostasis, preventing autoimmunity, and enabling immune evasion by tumors. Therapeutic antibodies targeting PD-L1 or PD-1 have shown significant clinical benefit in cancer immunotherapy by restoring T cell activity. PD-L1 is also implicated in tolerance during pregnancy, chronic infections, and transplantation. It contains two extracellular Ig-like domains, and its expression can be induced by inflammatory

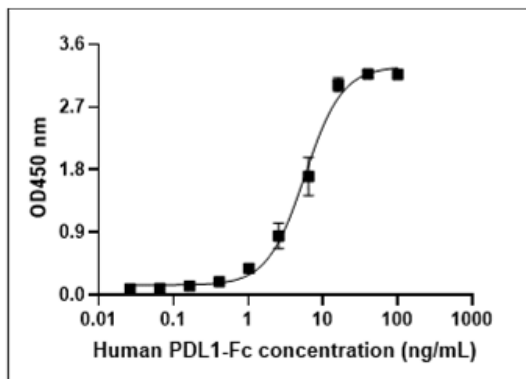
cytokines such as IFN- $\gamma$ .

**Product Data**

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Human PD-L1 Protein (C-Fc) on SDS-PAGE under reducing condition. The gel was stained for 1 hour with BlinkBlue (catalog 700102). The purity of this protein appears to be greater than 95%.



Streptavidin is immobilized at 2  $\mu\text{g}_\text{mL}$  (100  $\mu\text{L}_\text{well}$ ), followed by incubation with biotinylated human PD-1 (C-His-Avi, Catalog #802803) at 0.5  $\mu\text{g}_\text{mL}$ . A serial dilution of recombinant human PD-L1 (C-Fc) is then applied. Human PD-L1 (C-Fc) binds to the biotinylated human PD-1 protein in a dose-dependent manner.