

Technical Data Sheet

Biotinylated Human PD-L2 (C-His-Avi)

Catalog Number: 813103, 813104

Size: 25 ug, 100 ug

Target Name: PDL2, , Butyrophilin B7-DC, CD273, PDCD1 ligand 2

Regulatory Status: RUO

Product Details

Application: ELISA, BLI

Format: Liquid, Biotinylated

Expression Host: CHO

Species: Human

Sources: Recombinant Human PD-L2 (Leu20-Pro219) with C-terminus His-Avi-tag is expressed in CHO cell. This protein was site-specifically labeled with Biotin by BirA ligase.

Accession Number: Q9BQ51

Molecular Weight: The protein has a predicted molecular weight of 26.2 kDa. Under DTT-reducing conditions, it migrates at approximately 35 kDa on SDS-PAGE.

Affinity Tag: C-His-Avi

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.

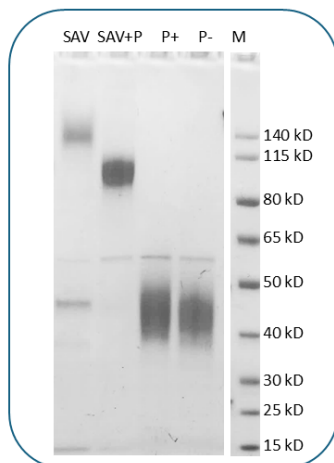
Storage and Handling: Briefly centrifuge the vial upon receipt. An unopened vial can be stored at 4°C for up to 2 weeks, or at -20°C or below for up to six months. The protein may be further diluted to 0.1 mg/mL using 0.22 µm-filtered PBS buffer (pH 7.4). For long-term storage, the diluted stock solution 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

Programmed death ligand 2 (PD-L2, also known as B7-DC or CD273) is a type I transmembrane protein and a member of the B7 family, containing one V-like and one C-like Ig domain in its extracellular region. It is mainly expressed on antigen-presenting cells, such as dendritic cells, macrophages, and B cells, and its expression can be induced by IFN-γ or LPS. PD-L2 serves as a high-affinity ligand for PD-1, a receptor expressed on activated T and B cells, and inhibits T cell activation, proliferation, and cytokine production, thus contributing to immune tolerance and evasion, particularly in tumors and autoimmunity. PD-L2 also plays a PD-1-independent role in asthma by regulating airway hyperresponsiveness through IL-12 production and binding to an alternative receptor, RGMb, involved in respiratory immune regulation. Its dual functions in both PD-1-dependent and independent pathways highlight PD-L2 as a critical immunoregulatory molecule

and a potential therapeutic target in cancer, autoimmunity, and allergic diseases.

Product Data



Biotinylated Human PD-L2 (C-His-Avi) Protein on SDS-PAGE under non-reducing (P-) conditions. The gel was stained for 1 hour with BlinkBlue Protein Staining Buffer (Catalog 700102). The purity of this protein appears to be greater than 95%. Based on Gel shift Assay by co-incubation with Streptavidin, biotinylation efficiency is >90% for Biotinylated PD-L2.