

## Technical Data Sheet

### PE conjugated Human PD-L2 (C-His)

**Catalog Number:** 813301, 813302

**Size:** 25 ug, 100 ug

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

**Regulatory Status:** RUO

#### Product Details

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**Application:** FC

**Format:** Liquid, PE

**Expression Host:** CHO

**Species:** Human

**Sources:** Recombinant Human PD-L2 (Leu20-Pro219) with C-terminus His-tag is expressed in CHO cell and conjugated to PE.

**Accession Number:** Q9BQ51

**Molecular Weight:** The protein has a predicted molecular weight of 24.2 kDa. Under DTT-reducing conditions, it migrates at approximately 35 kDa on SDS-PAGE prior to conjugation.

**Affinity Tag:** C-His

**Formulation:** 1xPBS buffer, pH7.4, 0.09% NaN<sub>3</sub> with a carrier protein

**Endotoxin level:** Not tested

**Protein Concentration:** 25µg size is bottled at 0.1mg/mL concentration. 100 µg size is bottled at lot specific concentration.

**Storage and Handling:** Briefly centrifuge the vial upon receipt. An unopened vial may be stored at 2–8°C for up to six months.

#### Background Information

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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- $\gamma$  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.