

## PE Human PD-L2 (CD273) Protein (C-His)

<b>Catalog Number:</b>	813301, 813302
<b>Size:</b>	25 ug, 100 ug
<b>Target Name:</b>	PDL2, , Butyrophilin B7-DC, CD273, PDCD1 ligand 2
<b>Regulatory Status:</b>	RUO

### PRODUCT DETAILS

---

<b>Application:</b>	Flow Cytometry
<b>Format:</b>	Liquid, PE
<b>Expression Host:</b>	CHO
<b>Species:</b>	Human
<b>Sources:</b>	Recombinant Human PD-L2 (Leu20-Pro219) with C-terminus His-tag is expressed in CHO cell and conjugated to PE.
<b>Accession Number:</b>	Q9BQ51
<b>Molecular Weight:</b>	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.
<b>Affinity Tag:</b>	C-His
<b>Formulation:</b>	1xPBS buffer, pH7.4, 0.09% NaN3 with a carrier protein
<b>Endotoxin level:</b>	Not tested
<b>Protein Concentration:</b>	25µg size is bottled at 0.1mg/mL concentration. 100 µg size is bottled at lot specific concentration.
<b>Storage and Handling:</b>	Briefly centrifuge the vial upon receipt. An unopened vial may be stored at 2-8°C for up to six months.

### 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- $\gamma$  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.