

APC Human PD-L2 (CD273) Protein (C-Fc)

Catalog Number:	813603, 813604
Size:	25 ug, 100 ug
Target Name:	PDL2, , Butyrophilin B7-DC, CD273, PDCD1 ligand 2
Regulatory Status:	RUO

PRODUCT DETAILS

Application:	Flow Cytometry
Format:	Liquid, APC
Expression Host:	CHO
Species:	Human
Sources:	Recombinant Human PD-L2 (Leu20-Pro219) with C-terminus Fc-tag is expressed in CHO cell and conjugated to APC.
Accession Number:	Q9BQ51
Molecular Weight:	The protein has a predicted molecular weight of 48.8 kDa. Under DTT-reducing conditions, it migrates at approximately 65 kDa on SDS-PAGE prior to conjugation.
Affinity Tag:	C-Fc
Formulation:	1xPBS buffer, pH7.4, 0.09% NaN3 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

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.