

Active Recombinant Human PDCD1LG2 protein, Fc/Avi-tagged, Biotinylated

Cat. No. PDCD1LG2-052H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Biotinylated Recombinant Human PDCD1LG2(Leu20-Pro219) protein, fused to Fc/Avi tag at the C-terminus, was expressed in HEK293 cells .
Species	Human
Source	HEK293
ProteinLength	Leu20-Pro219
Description	Programmed Death Ligand 2 (PDCD1LG2), also known as B7-DC and butyrophilin-like protein, is a member of the B7 family of proteins that provide signals for regulating T-cell activation and tolerance (1). Mature human PD-L2 consists of a 201 amino acid (aa) extracellular domain (ECD) with one V-like and one C-like Ig domain, a 21 aa transmembrane segment, and a 32 aa cytoplasmic domain (2, 3). Within the ECD, mouse and human PD-L2 share 72% aa sequence identity. Alternative splicing generates additional isoforms that lack the second Ig-like domain and may be substituted and truncated following the first Ig-like domain (4). PD-L2 is expressed on dendritic cells, subsets of activated CD4+ and CD8+ T cells, and memory B cells that differentiate into plasma cells (3, 5, 6). At inflammatory sites such as rheumatoid arthritis, allergen exposure, and virus infection, PD-L2 is up-regulated on

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synoviocytes, infiltrating macrophages, dendritic cells, and airway epithelial cells (7-11). PD-L2, along with B7-H1/PD-L1, binds to T cell PD-1 where it promotes IFN- γ production and CD40 Ligand up-regulation while inhibiting IL-4 production (2, 3, 12, 13). In addition, PD-L2 binds to RGM-B on macrophages and alveolar epithelial cells, supporting respiratory immune tolerance (14). In asthma, PD-L2 suppresses IL-5 and IL-13 production, promotes IL-12 production by dendritic cells, and supports allergen-induced airway hyper-responsiveness and mucus production (9, 11).

Predicted N Terminal	Leu20
Form	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose.
Bio-activity	Measured by its binding ability in a functional ELISA.
Molecular Mass	70-81 kDa, under reducing conditions
Endotoxin	<0.10 EU per 1 μ g of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Applications	Bioactivity
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 3 months, -20 to -70 °C under sterile conditions after reconstitution.
Reconstitution	Reconstitute at 500 μ g/mL in PBS.

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Conjugation Biotin

GENE INFORMATION

Gene Name PDCD1LG2 programmed cell death 1 ligand 2 [Homo sapiens]

Official Symbol PDCD1LG2

Synonyms

PDCD1LG2; programmed cell death 1 ligand 2; B7 dendritic cell molecule; B7 DC; bA574F11.2; Btdc; CD273; PD L2; PDL2; B7-DC; PD-1 ligand 2; PD-1-ligand 2; PDCD1 ligand 2; butyrophilin B7-DC; programmed death ligand 2; B7DC; PD-L2; PDCD1L2; MGC142238; MGC142240;

Gene ID 80380

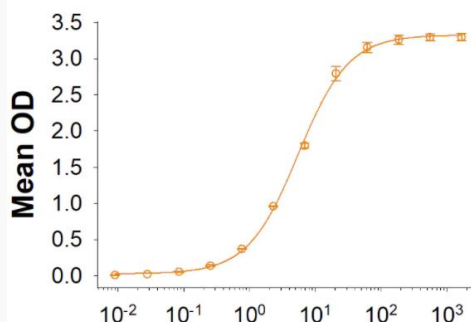
mRNA Refseq NM_025239

Protein Refseq NP_079515

MIM 605723

UniProt ID Q9BQ51

Binding Activity

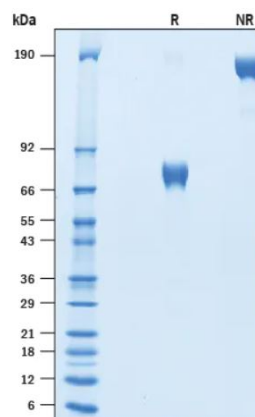


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SDS-PAGE



2 µg/lane Protein was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining.

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