

Active Recombinant Human CD274 Homodimer Protein, Fc tagged

Cat. No. CD274-53H **Lot. No.** (See product label)

SPECIFICATION

Product Overview Recombinant Human PD-L1 Protein dimer (Q9NZQ7), was expressed in HEK293T with C-terminal proprietary cis-dimer motif and Fc tag (contains PD-L1 extracellular domain).

Species Human

Source HEK293T

ProteinLength 19-238 aa

Description Human programmed death-ligand 1 (PD-L1), is a Type I transmembrane protein in the immunoglobulin superfamily and a member of the B7 Family of ligands. PD-L1 is also known as cluster of differentiation 274 (CD274), B7 homolog 1 (B7H1, B7-H1), PDCD1L1, PDCD1LG1, and CD274 molecule. PD-L1 contains an extracellular domain with a distal immunoglobulin V-like (Ig-V-like) domain and proximal immunoglobulin C-like (Ig-C-like) domain, a transmembrane domain, and a cytoplasmic domain. PD-L1 is expressed on T cells, NK cells, macrophages, myeloid DCs, B cells, epithelial cells, and vascular endothelial cells. PD-L1 serves as an immunosuppressive ligand for PD-1 and the overexpression of PD-L1 on many tumor cells can prevent the immune system from attacking tumors. Inhibition of the interaction between PD-1 and PD-L1 can enhance antitumor activity, which has led to a new class of drugs called PD-1 inhibitors to activate the immune system and treat certain types of cancer. PD-L1 is highly expressed in a variety of malignancies,

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particularly lung cancer. PD-L1 exists as both a monomer and a dimer. Therefore, a recombinant protein mimicking the PD-L1 dimer conformation can be crucial for cancer therapeutic discovery.

| | |
|-----------------------|--|
| Molecular Mass | 103 kDa |
| Purity | Greater than 90% dimer form as determined by SDS-PAGE under non-reducing condition |
| Application | Verified Applications: ELISA for PD-L1-specific antibody and PD-1 ligand protein binding assays. Suggested Applications: SPR & BLI for PD-L1-specific antibody and PD-1 protein binding assays. Animal immunization, RUO. Purity |
| Storage | Store at -80 centigrade. |
| Storage Buffer | 0.22µm filtered PBS, pH 7.4 |
| Shipping | Frozen Dry Ice |

GENE INFORMATION

| | |
|------------------------|---|
| Gene Name | CD274 CD274 molecule [Homo sapiens (human)] |
| Official Symbol | CD274 |
| Synonyms | CD274; CD274 molecule; CD274 antigen, PDCD1LG1, programmed cell death 1 ligand 1; programmed cell death 1 ligand 1; B7 homolog 1; B7 H; B7 H1; B7H1; PD L1; PDL1; CD274 antigen; PDCD1 ligand 1; programmed death ligand 1; B7-H; PD-L1; PDCD1L1; PDCD1LG1; MGC142294; MGC142296; |
| Gene ID | 29126 |

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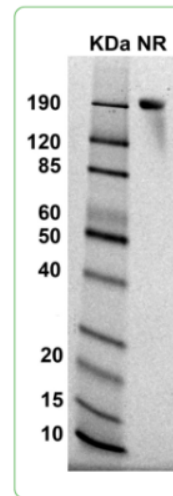
mRNA Refseq [NM_014143](#)

Protein Refseq [NP_054862](#)

MIM [605402](#)

UniProt ID [Q9NZQ7](#)

SDS-PAGE and WB



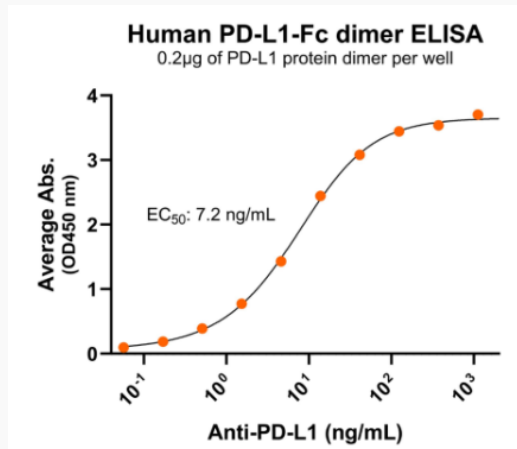
MW: Molecular Weight marker reduced condition NR: PD-L1 dimer under non-reduced condition

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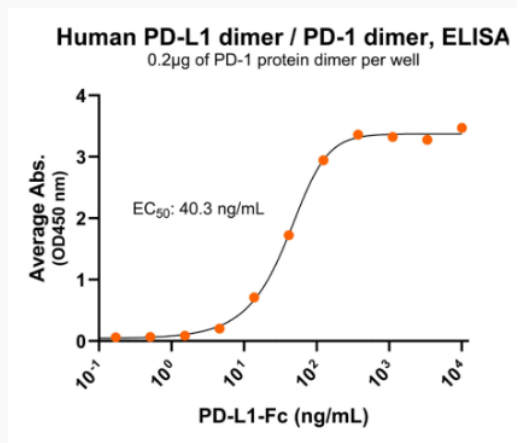
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Bioactivity-Antibody Binding



Immobilized human PD-L1-Fc protein dimer at 2 µg/mL (100 µL/well) can bind anti-human PD-L1 monoclonal antibody with half maximal effective concentration (EC₅₀) range of 3.6-14.4 ng/mL (QC tested).

Bioactivity-Ligand Binding



Immobilized human PD-1-His-Avi dimer protein at 2 µg/mL (100 µL/well) can bind human PD-L1-Fc dimer protein with half maximal effective concentration (EC₅₀) range of 20.1-80.5 ng/mL (QC tested).

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