10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# PD-L1

Catalog # PVGS1523

## Product Information

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|---|---|
| **Primary Accession** | Q9NZQ7-1 |
| **Species** | Human |
| **Sequence** | Phe19-Thr239 |
| **Purity** | > 95% as analyzed by SDS-PAGE |
| **Endotoxin Level** | |
| **Biological Activity** | Immobilized PD-L1, His, Human at 2.0 μg/ml (100 μl/well) can bind PD-1 Fc Chimera, Human(Cat. No.: Z03370). |
| **Expression System** | HEK 293 |
| **Formulation** | Lyophilized from a 0.2 μm filtered solution in PBS, 5% trehalose and mannitol. |
| **Reconstitution** | It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in dd$H_2O$ or PBS up to 100 μg/ml. |
| **Storage & Stability** | Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles. |

## Additional Information

**Target Background**

Programmed death-ligand 1 (PD-L1) also known as cluster of differentiation 274 (CD274) or B7 homolog 1 (B7-H1), is a protein that in humans is encoded by the CD274 gene. PD-L1 is a 40 kDa type 1 transmembrane protein that has been speculated to play a major role in suppressing the immune system during particular events such as pregnancy, tissue allografts, autoimmune disease and other disease states such as hepatitis. Normally the immune system reacts to foreign antigens where there is some accumulation in the lymph nodes or spleen which triggers a proliferation of antigen-specific $CD8^+$ T cell. The formation of PD-1 receptor / PD-L1 or B7.1 receptor /PD-L1 ligand complex transmits an inhibitory signal which reduces the proliferation of these $CD8^+$ T cells at the lymph nodes and supplementary to that PD-1 is also able to control the accumulation of foreign antigen specific T cells in the lymph nodes through apoptosis which is further mediated by a lower regulation of the gene Bcl-2. PD-L1 binds to its receptor, PD-1, found on activated T cells, B cells, and myeloid cells, to modulate activation or inhibition. Recombinant Human PD-L1(B7-H1) Fc Chimera produced in CHO cells is a polypeptide chain containing 457 amino acids. A fully biologically active molecule, rh PD-L1(B7-H1) has a molecular mass of 70-72 kDa analyzed

by reducing SDS-PAGE and is obtained by chromatographic techniques at .

## Protein Information

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.