

Synonym

PD-L1,CD274,B7-H1,PDCD1L1,PDCD1LG1

Source

Human PD-L1 Protein, Twin-Strep Tag(PD1-H5282) is expressed from human 293 cells (HEK293). It contains AA Phe 19 - Arg 238 (Accession # [NP_054862.1](#)).

Predicted N-terminus: Phe 19

Molecular Characterization



This protein carries a twin strep tag at the C-terminus.

The protein has a calculated MW of 28.2 kDa. The protein migrates as 34-45 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

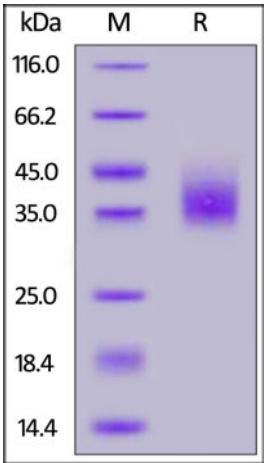
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

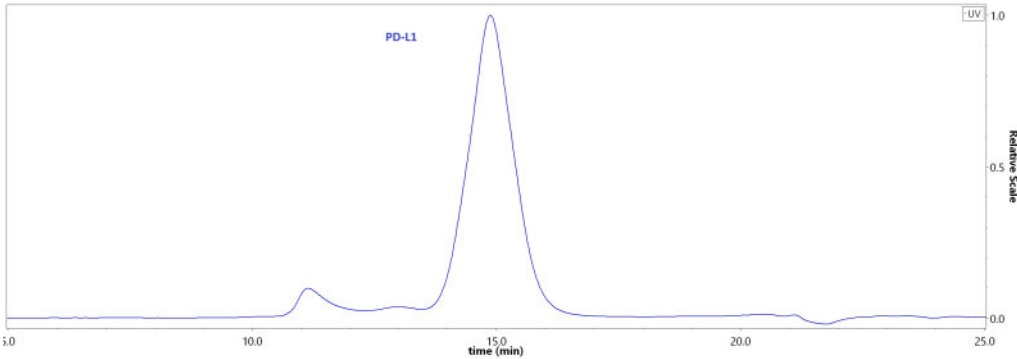
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human PD-L1 Protein, Twin-Strep Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

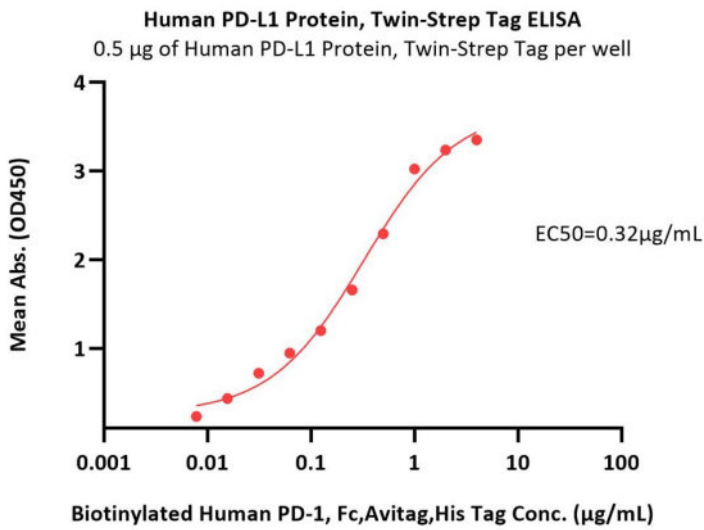
SEC-HPLC



The purity of Human PD-L1 Protein, Twin-Strep Tag (Cat. No. PD1-H5282) was greater than 85% as determined by SEC-HPLC.

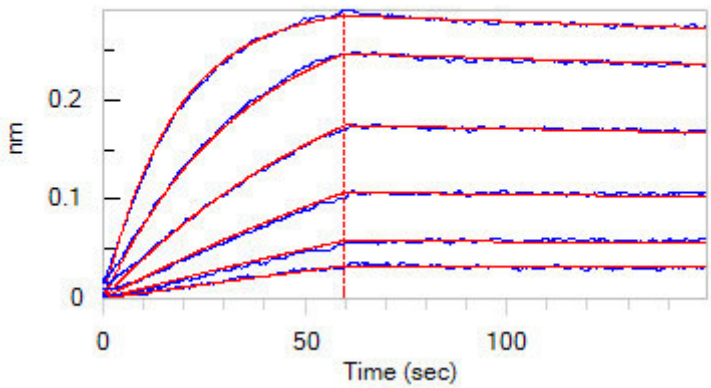
Bioactivity-ELISA



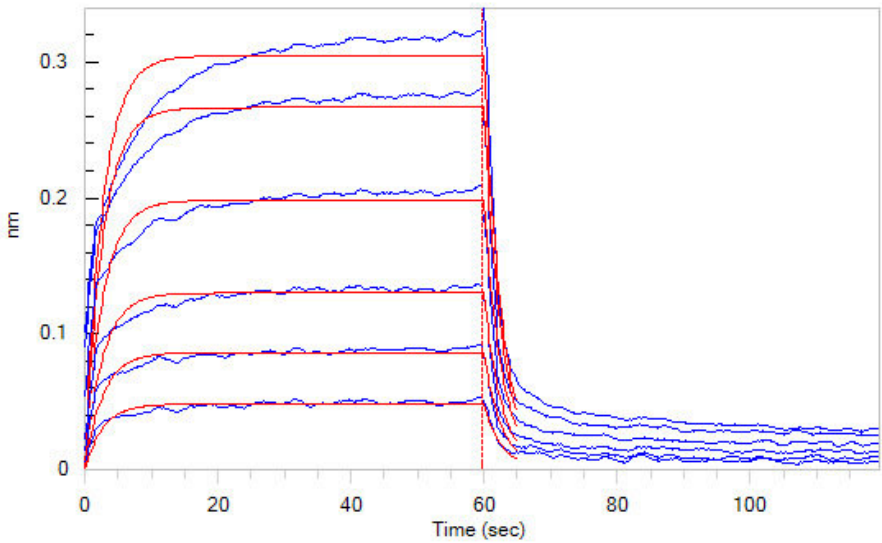


Immobilized Human PD-L1 Protein, Twin-Strep Tag (Cat. No. PD1-H5282) at 5 µg/mL (100 µL/well) can bind Biotinylated Human PD-1, Fc, Avitag, His Tag with a linear range of 0.008-0.5 µg/mL (QC tested).

Bioactivity-BLI



Loaded Anti-Human PD-L1 MAb (Human IgG1) on AHC Biosensor, can bind Human PD-L1 Protein, Twin-Strep Tag (Cat. No. PD1-H5282) with an affinity constant of 0.891 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Loaded Human PD-1 Protein, Fc Tag (Cat. No. PD1-H5257) on Protein A Biosensor, can bind Human PD-L1 Protein, Twin-Strep Tag (Cat. No. PD1-H5282) with an affinity constant of 2.2 µM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

Programmed cell death 1 ligand 1 (PDL1) is also known as B7-H, B7H1, MGC142294, MGC142296, PD-L1, PDCD1L1 and PDCD1LG1, which is a member of the growing B7 family of immune molecules and is involved in the regulation of cellular and humoral immune responses. PDL1 is a cell surface immunoglobulin superfamily with two Ig-like domains within the extracellular region and a short cytoplasmic domain. This protein is broadly expressed in the majority of peripheral tissues as well as hematopoietic cells. Interaction between PDL1 and its receptors belonging to the CD28 family of molecules provide both stimulatory and inhibitory signals in regulating T cell activation and tolerance. PDL1 may inhibit ongoing T-cell responses by inducing apoptosis and arresting cell-cycle progression.

Clinical and Translational Updates

