Biotinylated Human PD-L1 / B7-H1 Protein, Avitag™,His Tag (MALS verified)

Catalog # PD1-H82E5

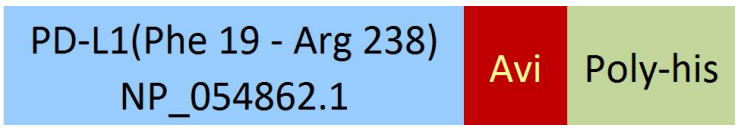
Synonym

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

Source

Biotinylated Human PD-L1, Avitag,His Tag(PD1-H82E5) 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 an Avi tag (Avitag™) at the C-terminus, followed by a polyhistidine tag.

The protein has a calculated MW of 27.8 kDa. The protein migrates as 33-40 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

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

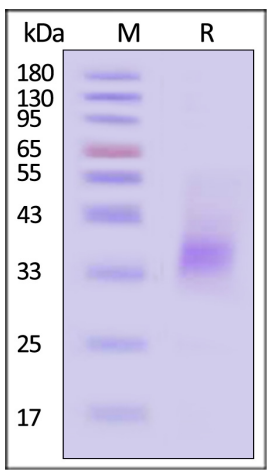
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

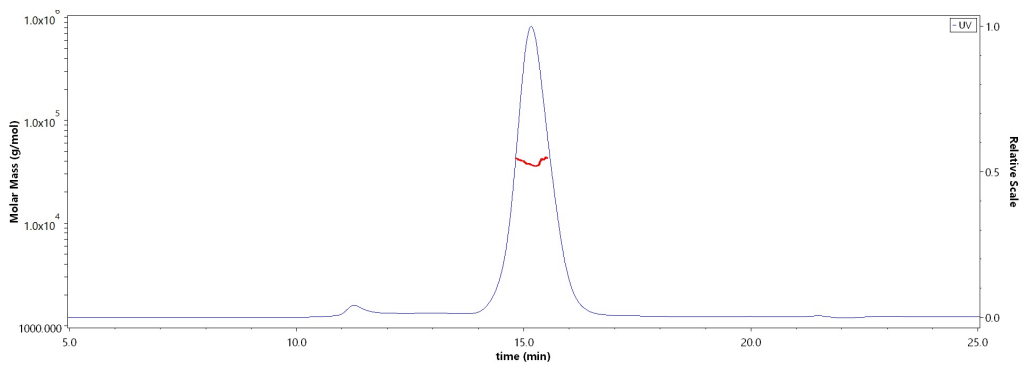
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Biotinylated Human PD-L1, Avitag,His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS

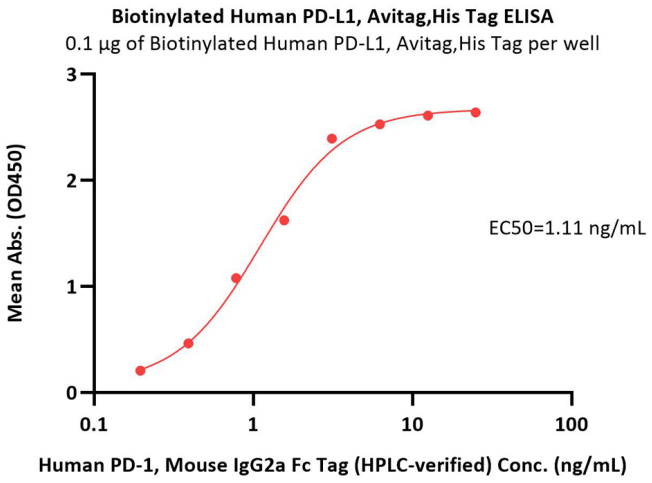


The purity of Biotinylated Human PD-L1, Avitag,His Tag (Cat. No. PD1-H82E5) is more than 90% and the molecular weight of this protein is around 30-45 kDa verified by SEC-MALS.
Report

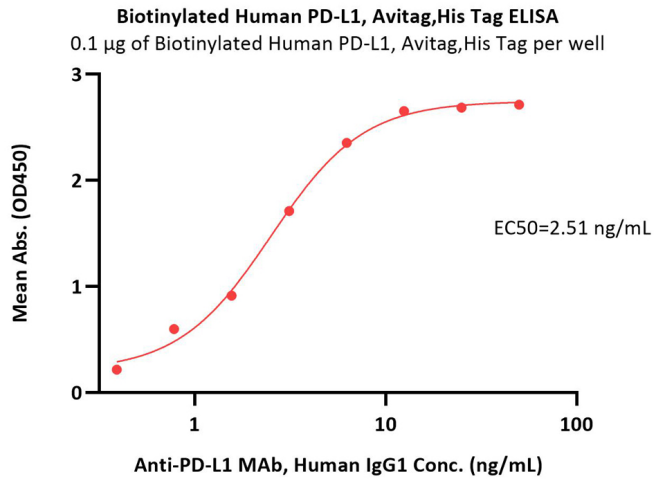
Bioactivity-ELISA

Biotinylated Human PD-L1 / B7-H1 Protein, Avitag™,His Tag (MALS verified)

Catalog # PD1-H82E5



Immobilized Biotinylated Human PD-L1, Avitag,His Tag (Cat. No. PD1-H82E5) at 1 μg/mL (100 μL/well) on Streptavidin (Cat. No. STN-N5116) precoated (0.5 μg/well) plate, can bind Human PD-1, Mouse IgG2a Fc Tag (HPLC-verified) (Cat. No. PD1-H5255) with a linear range of 0.1-2 ng/mL (QC tested).



Immobilized Biotinylated Human PD-L1, Avitag,His Tag (Cat. No. PD1-H82E5) at 1 μg/mL (100 μL/well) on Streptavidin (Cat. No. STN-N5116) precoated (0.5 μg/well) plate, can bind Anti-PD-L1 MAb, Human IgG1 with a linear range of 0.2-3 ng/mL (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.