

## Synonym

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

## Source

Biotinylated Human PD-L1, Mouse IgG2a Fc,Avitag(PD1-H82A3) 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 mouse IgG1 Fc tag at the C-terminus

The protein has a calculated MW of 53.8 kDa. The protein migrates as 65-80 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

# Labeling

Biotinylation of this product is performed using Avitag<sup>TM</sup> 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.

### Endotoxin

Less than 1.0 EU per µg by the LAL method.

# **Purity**

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

### **Formulation**

Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 100 mM Glycine, 25 mM Arginine, 150 mM NaCl, pH7.5 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

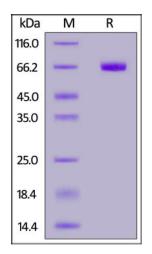
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

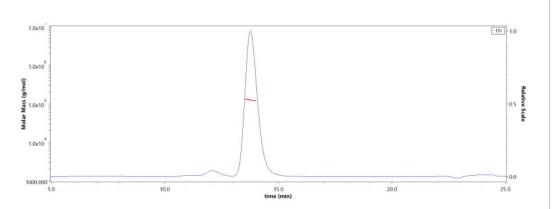
# SDS-PAGE



Biotinylated Human PD-L1, Mouse IgG2a Fc, Avitag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

## **Bioactivity-ELISA**

## **SEC-MALS**

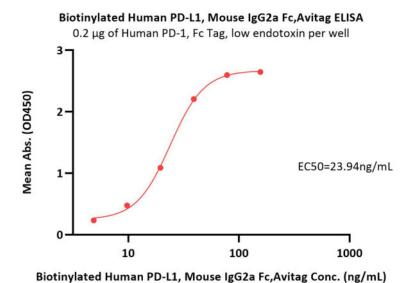


The purity of Biotinylated Human PD-L1, Mouse IgG2a Fc, Avitag (Cat. No. PD1-H82A3) is more than 90% and the molecular weight of this protein is around 120-135 kDa verified by SEC-MALS.

# Biotinylated Human PD-L1 / B7-H1 Protein, Mouse IgG2a Fc,Avitag™ (MALS verified)







Immobilized Human PD-1, Fc Tag (Cat. No. PD1-H5257) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Human PD-L1, Mouse IgG2a Fc,Avitag (Cat. No. PD1-H82A3) with a linear range of 5-39 ng/mL (QC 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**

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.