

Recombinant Human B7-H1/PD-L1/CD274 Protein

Catalog No.: RP00068 Recombinant 1 Publications

Sequence Information

Species Gene ID Swiss Prot Human 29126 09NZ07

Tags

C-His

Synonyms

B7-H; B7H1; PDL1; PD-L1; hPD-L1;

PDCD1L1;

PDCD1LG1;CD274;PDL1;B7H1;PD-L1;PDCD1L1;PDCD1LG1; B7-H; CD274

molecule

Product Information

Source Purification

HEK293 cells \geq 95 % as determined by SDS-PAGE; \geq 95 % as

determined by HPLC.

Calculated MW Observed MW

26.14 kDa 35-40 kDa

Endotoxin

 $< 0.1 \; \text{EU/}\mu\text{g}$ of the protein by LAL method.

Formulation

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.Contact us for customized product form or formulation.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

a 400-999-6126

Background

This protein is an immune inhibitory receptor ligand that is expressed by hematopoietic and non-hematopoietic cells, such as T cells and B cells and various types of tumor cells. The protein is a type I transmembrane protein that has immunoglobulin V-like and C-like domains. Interaction of this ligand with its receptor inhibits T-cell activation and cytokine production. During infection or inflammation of normal tissue, this interaction is important for preventing autoimmunity by maintaining homeostasis of the immune response. In tumor microenvironments, this interaction provides an immune escape for tumor cells through cytotoxic T-cell inactivation.

Basic Information

Description

Recombinant Human B7-H1/PD-L1/CD274 Protein is produced by HEK293 expression system. The target protein is expressed with sequence (Phe19-Thr239) of human PD-L1/B7-H1 (Accession #NP 054862.1) fused with a 6×His tag at the C-terminus.

Bio-Activity

1.Measured by its binding ability in a functional ELISA. Immobilized Recombinant Human PD-L1 at 10 μ g/mL (100 μ L/well) can bind Recombinant Human PD-1 with a linear range of 0.25-1.02 μ g/mL.|2.Measured by its binding ability in a functional ELISA.Immobilized PE anti-human CD274 (B7-H1, PD-L1) Antibody at 1 μ g/mL (25 μ L/well) can bind Human CD274 with a linear range of 0.46-18ng/mL.

Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

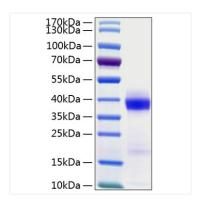
After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

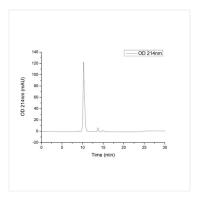
Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

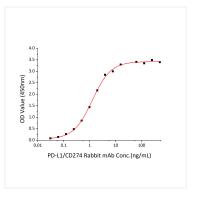
Validation Data



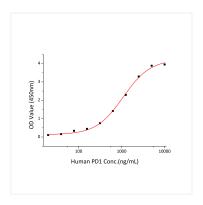
Recombinant Human B7-H1/PD-L1/CD274 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



The purity of Human PD-L1/B7-H1 Protein (Cat.RP00068) was greater than 95% as determined by SEC-HPLC.



Immobilized Human PD-L1 (Catalog: RP00068) at 200ng/mL (100 μ L/well) can bind PD-L1/CD274 Rabbit mAb (Catalog: A20270) with a linear range of 0.06-1.25 ng/mL.



Immobilized Recombinant Human PD-L1 His Tag (Catalog: RP00068) at 5ug/mL (100uL/well) can bind Recombinant Human PD-1 with a linear range of 0.16-1.09 $\mu g/mL$.