RP00184

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

Catalog No.: RP00184 Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
Human	29126	Q9NZQ7

Tags
C-hFc&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
HEK293 cells

Purification
> 95% by SDS-PAGE.

Endotoxin
< 0.1 EU/μg 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 votex 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

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Background

Programmed death-1 ligand-1 (PD-L1, CD274, B7-H1) has been identified as the ligand for the immunoinhibitory receptor programmed death-1(PD1/PDCD1). PD-L1/B7-H1 is expressed by hematopoietic and non-hematopoietic cells, such as T cells and B cells and various types of tumor cells. PD-L1/B7-H1 is a member of the growing B7 family of immune molecules 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. Expression of this gene in tumor cells is considered to be prognostic in many types of human malignancies, including colon cancer and renal cell carcinoma.

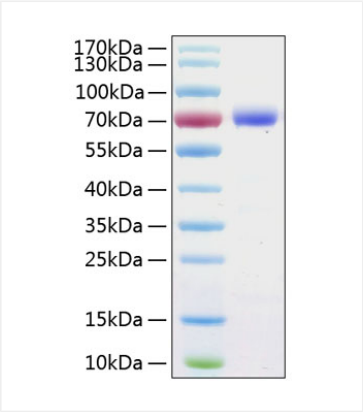
Basic Information

Description
Recombinant Human B7-H1/PD-L1/CD274 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Phe19-Thr239) of human PD-L1/B7-H1 (Accession #NP_054862.1) fused with an Fc, 6×His tag at the C-terminus.

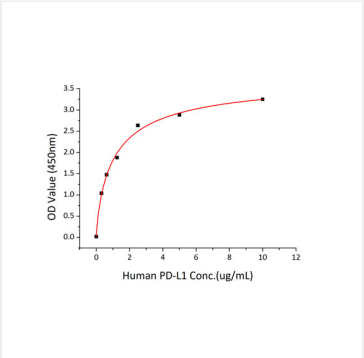
Bio-Activity
Measured by its binding ability in a functional ELISA. Immobilized Recombinant Human PD-1 at 5 μg/mL (100 μL/well) can bind Recombinant Human PD-L1 with a linear range of 0.5-2.2 μg/mL.

Storage
Store the lyophilized protein at -20°C to -80 °C for long term.
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.

Validation Data



Recombinant Human B7-H1/PD-L1/CD274 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 70-75 kDa.



Immobilized Recombinant Human PD-1 at 5 μg/mL (100μL/well) can bind Recombinant Human PD-L1 with a linear range of 0.5-2.2 μg/mL.