

RP00184

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

Catalog No.: RP00184

Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
HEK293 cells	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	Purification
HEK293 cells	≥ 95 % as determined 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 vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact



www.abclonal.com

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

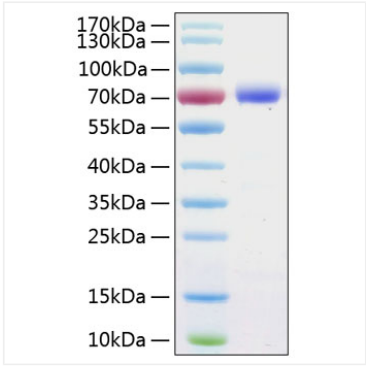
Measured by its binding ability in a functional ELISA. Immobilized Recombinant Human PD-1 at 5 μg/mL (100 μL/well) can bind Recombinant Human PD-L1 with a linear range of 0.5-2.2 μg/mL.

Storage

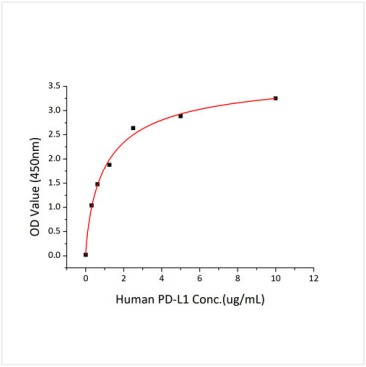
Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

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

Validation Data



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



Immobilized Recombinant Human PD-1 at 5 $\mu\text{g/mL}$ (100 μL /well) can bind Recombinant Human PD-L1 with a linear range of 0.5-2.2 $\mu\text{g/mL}$.