

Human PD-L1/B7-H1 Protein

Cat. No. PDL-HM110



Description

Source	Recombinant Human PD-L1/B7-H1 Protein is expressed from HEK293 with His tag at the C-Terminus.
	It contains Phe19-Arg238.
Accession	Q9NZQ7-1
Molecular Weight	The protein has a predicted MW of 26 kDa. Due to glycosylation, the protein migrates to 35-42 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1 EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE
	> 95% as determined by HPLC

Formulation and Storage

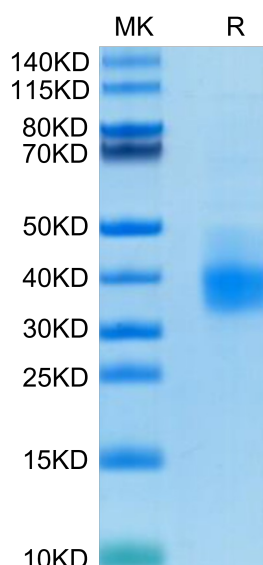
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

B7-H1, also known as PD-L1 and CD274, is an approximately 65 kDa transmembrane glycoprotein in the B7 family of immune regulatory molecules. PD-L1 has been identified as the ligand for the immunoinhibitory receptor programmed death-1(PD1/PDCD1) and has been demonstrated to play a role in the regulation of immune responses and peripheral tolerance.

Assay Data

Bis-Tris PAGE



Human PD-L1 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

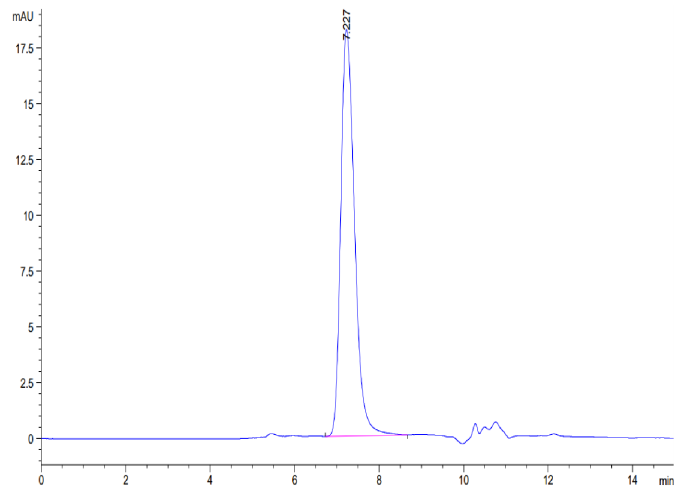
SEC-HPLC

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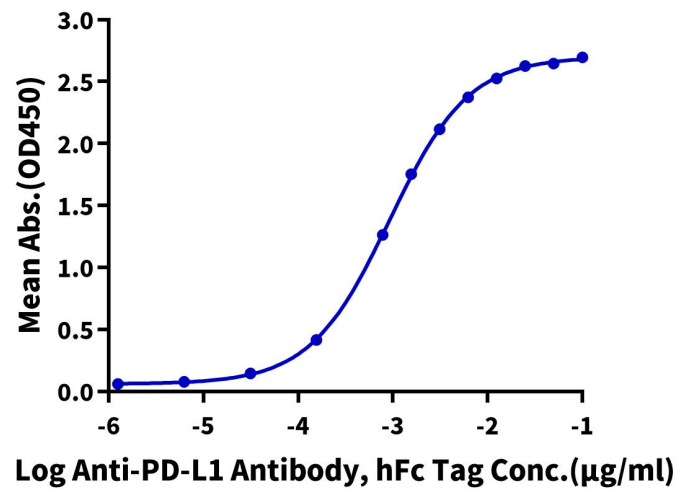
Assay Data



The purity of Human PD-L1 is greater than 95% as determined by SEC-HPLC.

ELISA Data

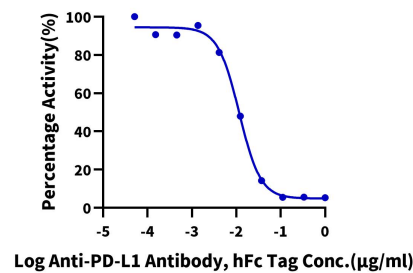
Human PD-L1, His Tag ELISA
0.1µg Human PD-L1, His Tag Per Well



Immobilized Human PD-L1, His Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Anti-PD-L1 Antibody, hFc Tag with the EC50 of 0.92ng/ml determined by ELISA.

Blocking Data

Inhibition of Human PD-L1 and Biotinylated Human PD-1 Binding
0.1µg Human PD-L1, His Tag Per Well



Serial dilutions of Anti-PD-L1 Antibody were added into Human PD-L1, His Tag : Biotinylated Human PD-1, hFc Avi Tag binding reactions. The half maximal inhibitory concentration(IC50) is 11.7ng/ml.

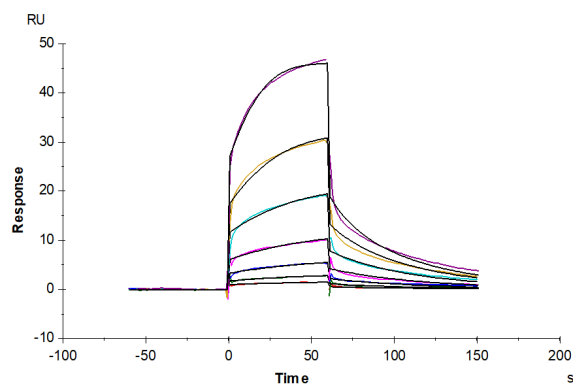
SPR Data

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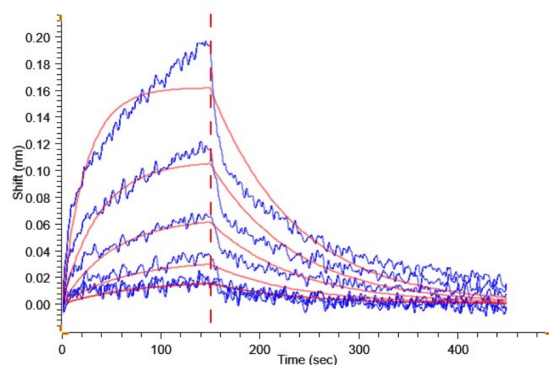


Assay Data



Human PD-1, hFc Tag captured on CM5 Chip via Protein A can bind Human PD-L1, His Tag with an affinity constant of $0.25 \mu\text{M}$ as determined in SPR assay (Biacore T200).

BLI Data



Loaded Biotinylated Human PD-1, His Tag on Streptavidin-Biosensor can bind Human PD-L1, His Tag with an affinity constant of $0.20 \mu\text{M}$ as determined in BLI assay (Gator® Prime).