

Human PD-1/PDCD1 Protein

Cat. No. PD1-HM101



Description

Source	Recombinant Human PD-1/PDCD1 Protein is expressed from HEK293 with His tag at the C-Terminus.
	It contains Leu25-Gln167.
Accession	Q15116-1
Molecular Weight	The protein has a predicted MW of 17 kDa. Due to glycosylation, the protein migrates to 38-50 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

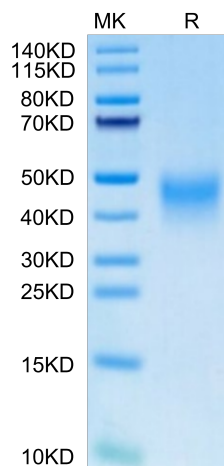
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 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

Programmed cell death protein 1, also known as PD-1 and CD279, is a protein found on the surface of cells that has a role in regulating the immune system's response to the cells of the human body by down-regulating the immune system and promoting self tolerance by suppressing T cell inflammatory activity.

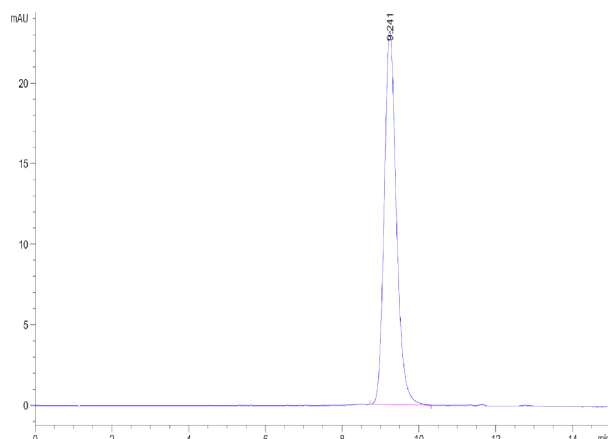
Assay Data

Bis-Tris PAGE



Human PD-1 on Bis-Tris PAGE under reduced.
The purity is greater than 95%.

SEC-HPLC



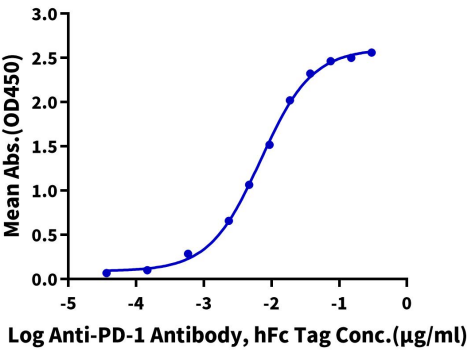
The purity of Human PD-1 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human PD-1, His Tag ELISA

0.1µg Human PD-1, His Tag Per Well

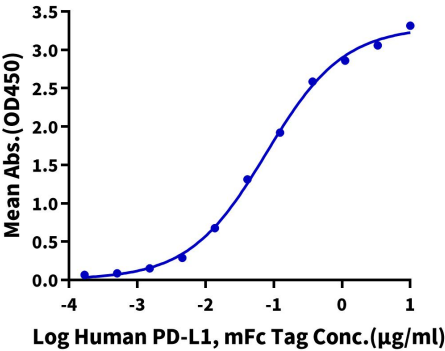


Immobilized Human PD-1, His Tag at 1µg/ml (100µl/Well). Dose response curve for Anti-PD-1 Antibody, hFc Tag with the EC50 of 6.9ng/ml determined by ELISA (QC Test).

ELISA Data

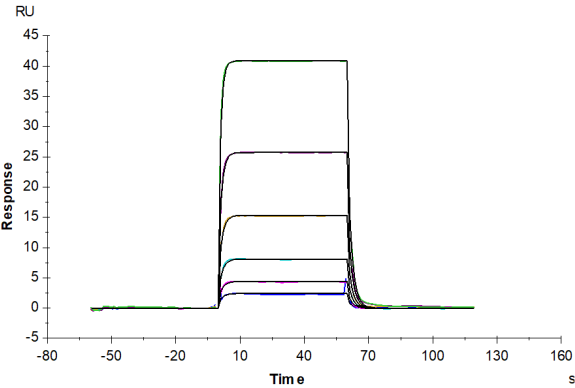
Human PD-1, His Tag ELISA

0.2µg Human PD-1, His Tag Per Well



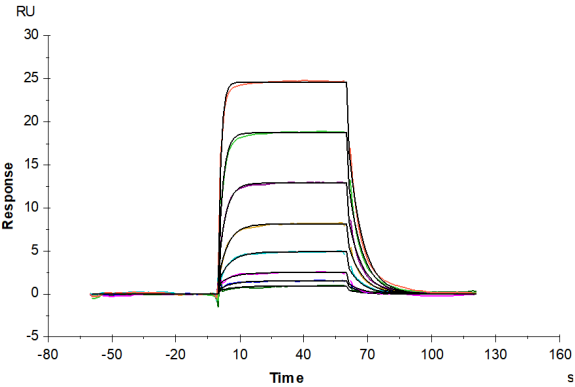
Immobilized Human PD-1, His Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Human PD-L1, mFc Tag with the EC50 of 77.8ng/ml determined by ELISA.

SPR Data



Human PD-L1, hFc Tag captured on CM5 Chip via Protein A can bind Human PD-1, His Tag with an affinity constant of 2.20 µM as determined in SPR assay (Biacore T200).

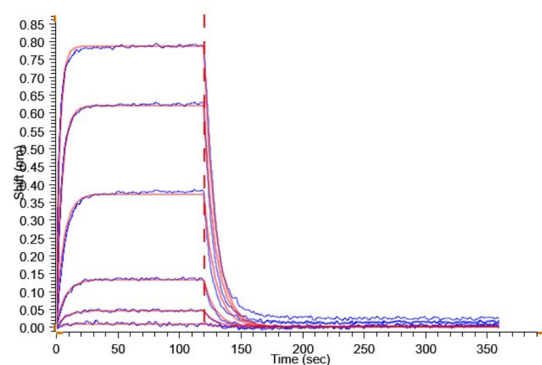
SPR Data



Human PD-L2, hFc Tag captured on CM5 Chip via Protein A can bind Human PD-1, His Tag with an affinity constant of 0.21 µM as determined in SPR assay (Biacore T200).

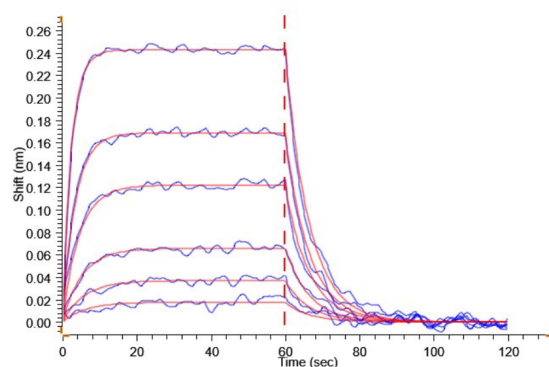
Assay Data

BLI Data



Loaded Biotinylated Human PD-L1, His Tag on Streptavidin-Biosensor can bind Human PD-1, His Tag with an affinity constant of 0.94 μM as determined in BLI assay (Gator® Prime).

BLI Data



Loaded Human PD-L2, hFc Tag on ProA-Biosensor can bind Human PD-1, His Tag with an affinity constant of 1.17 μM as determined in BLI assay (Gator® Prime).