Mouse PD-L1 / B7-H1 Protein, His Tag, low endotoxin (MALS verified)

Catalog # PD1-M5220

Synonym

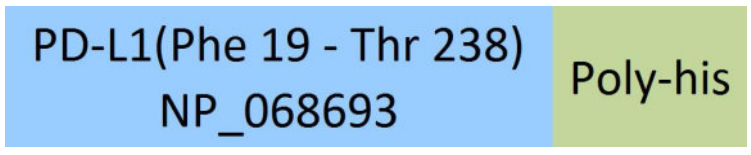
PD-L1, CD274, B7-H1, PDCD1L1, PDCD1LG1

Source

Mouse PD-L1, His Tag (PD1-M5220) is expressed from human 293 cells (HEK293). It contains AA Phe 19 - Thr 238 (Accession # NP_068693).

Predicted N-terminus: Phe 19

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 26.6 kDa. The protein migrates as 40-50 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.01 EU per μg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

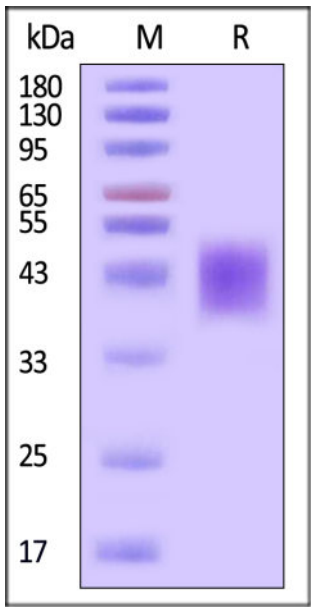
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

ACRO Quality Management System

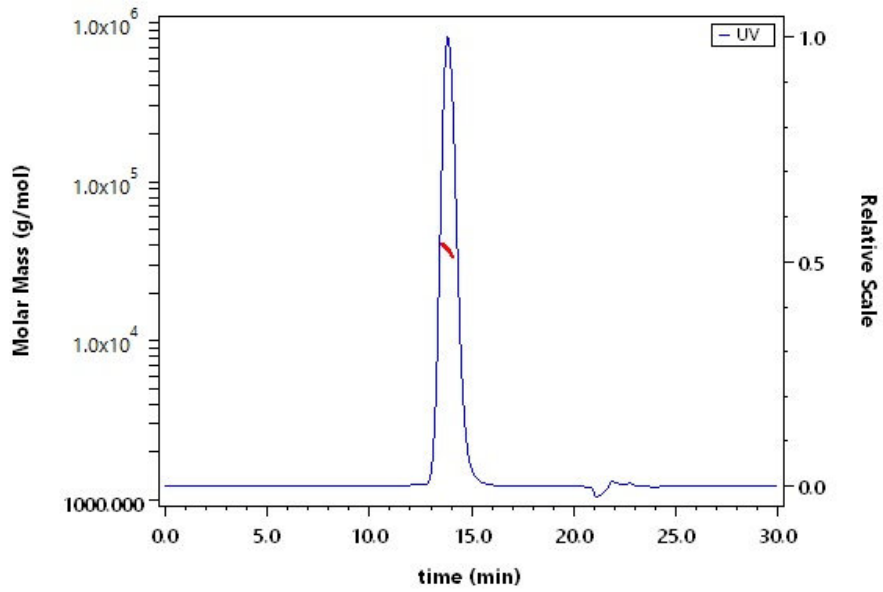
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

SDS-PAGE



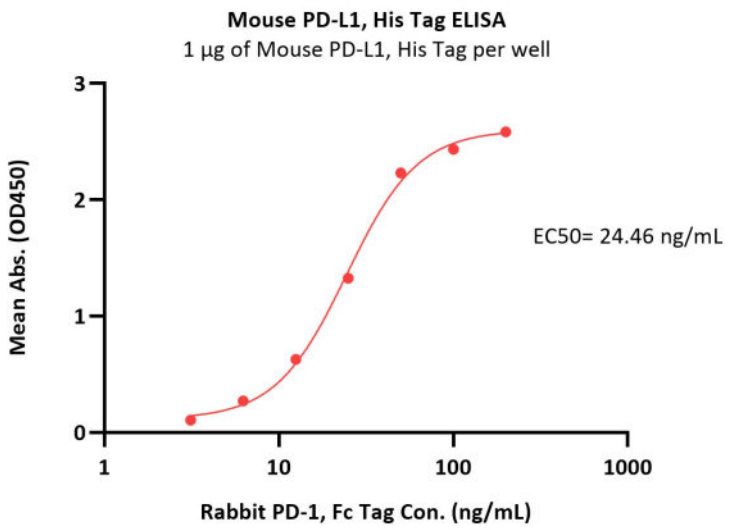
Mouse PD-L1, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS



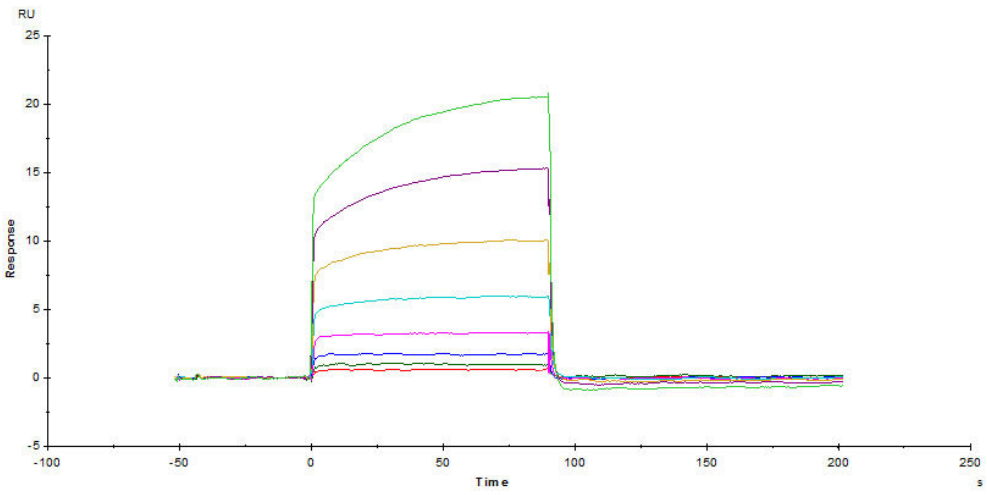
The purity of Mouse PD-L1, His Tag (Cat. No. PD1-M5220) is more than 95% and the molecular weight of this protein is around 34-46 kDa verified by SEC-MALS.

Bioactivity-ELISA

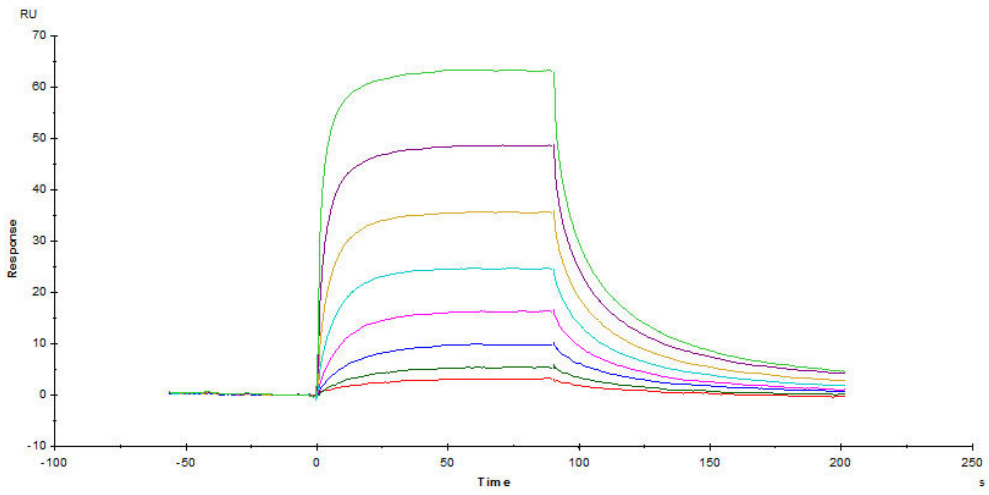


Immobilized Mouse PD-L1, His Tag (Cat. No. PD1-M5220) at 10 μg/mL (100 μL/well) can bind Rabbit PD-1, Fc Tag (Cat. No. PD1-RB5251) with a linear range of 3-50 ng/mL (Routinely tested).

Bioactivity-SPR

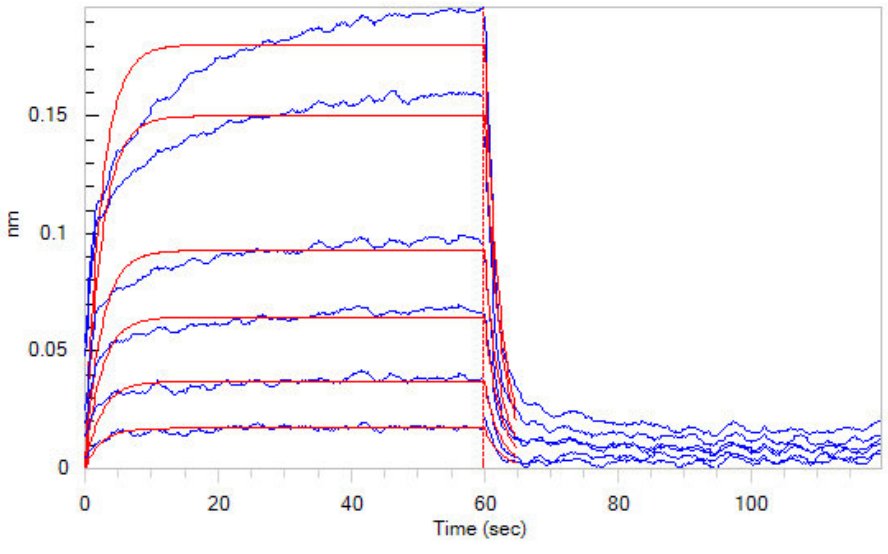


Captured Mouse PD-1, Fc Tag (Cat. No. PD1-M5259) on Protein A Chip can bind Mouse PD-L1, His Tag (Cat. No. PD1-M5220) with an affinity constant of 2.16 μM as determined in SPR assay (Biacore T200) (Routinely tested).



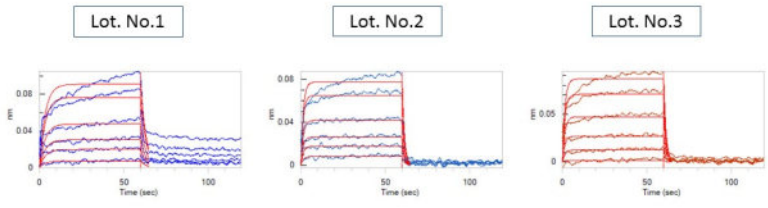
Captured Mouse PD-L1, His Tag (Cat. No. PD1-M5220) on CM5 Chip via Anti-His antibody can bind Mouse PD-1, Fc Tag (Cat. No. PD1-M5259) with an affinity constant of 1.37 μM as determined in SPR assay (Biacore T200) (Routinely tested).

Bioactivity-BLI

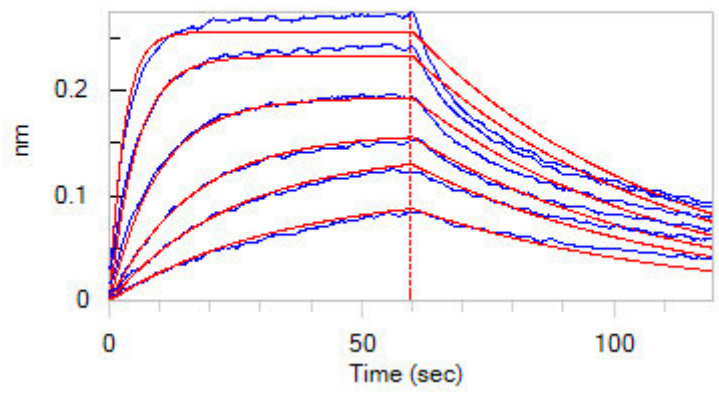


Loaded Biotinylated Mouse PD-1, Fc,Avitag (Cat. No. PD1-M82F4) on SA Biosensor, can bind Mouse PD-L1 / B7-H1 Protein, His Tag (Cat. No. PD1-M5220) with an affinity constant of 3.8 μM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Batch consistency



Ligand name	analyte	Analyte lot. No.	KD(M)	Rmax(nm)
Mouse PD-1	Mouse PD-L1	Lot. No. 1	1.5E-06	0.1286
		Lot. No. 2	1.5E-06	0.108
		Lot. No. 3	1.9E-06	0.1299



Loaded Mouse PD-L1 / B7-H1 Protein, His Tag (Cat. No. PD1-M5220) on HIS1K Biosensor, can bind Mouse PD-1 Protein, Mouse IgG2a Fc Tag (Cat. No. PD1-M5257) with an affinity constant of 0.227 μM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

Programmed cell death 1 ligand 1 (PDL1) is also known as B7-H, B7H1, MGC142294, MGC142296, PD-L1, PDCD1L1 and PDCD1LG1,which is a member of the growing B7 family of immune molecules and is involved in the regulation of cellular and humoral immune responses.PDL1 is a cell surface immunoglobulin superfamily with two Ig-like domains within the extracellular region and a short cytoplasmic domain. This protein is broadly expressed in the majority of peripheral tissues as well as hematopoietic cells. Interaction between PDL1 and its receptors belonging to the CD28 family of molecules provide both stimulatory and inhibitory signals in regulating T cell activation and tolerance. PDL1 may inhibit ongoing T-cell responses by inducing apoptosis and arresting cell-cycle progression.