

## Synonym

PDL2,PD-L2,Butyrophilin B7-DC,CD273,PDCD1 ligand 2,PDCD1L2,PDCD1LG2

#### Source

Human PD-L2 Protein, His Tag(PD2-H5220) is expressed from human 293 cells (HEK293). It contains AA Leu 20 - Pro 219 (Accession # AAI13679).

Predicted N-terminus: Leu 20

### **Molecular Characterization**

PD-L2(Leu 20 - Pro 219) AAI13679

Poly-his

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

The protein has a calculated MW of 23.4 kDa. The protein migrates as 34-46 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### Endotoxin

Less than 1.0 EU per  $\mu g$  by the LAL method / rFC method.

### **Purity**

>95% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from 0.22  $\mu m$  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**

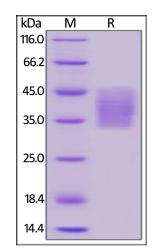
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

# **SDS-PAGE**

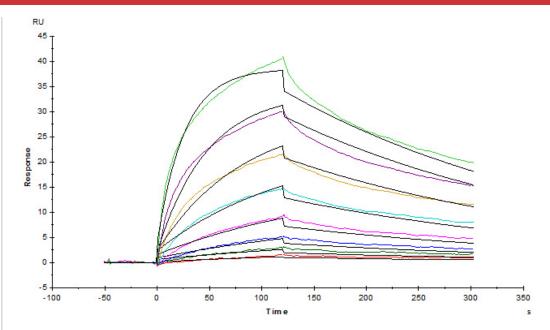


Human PD-L2 Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

### **Bioactivity-SPR**

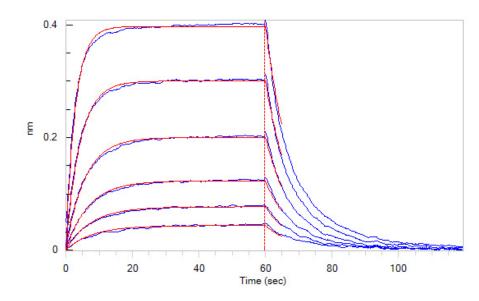




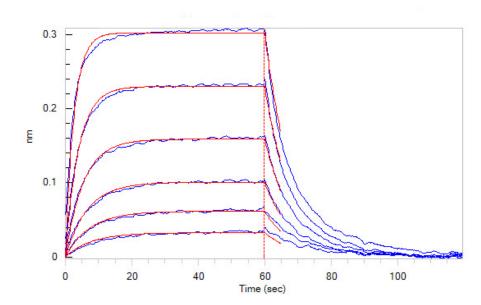


Captured Human PD-L2 Protein, His Tag (Cat. No. PD2-H5220) on CM5 Chip via anti-His antibody can bind Human PD-1, Fc Tag (Cat. No. PD1-H5257) with an affinity constant of 24.9 nM as determined in SPR assay (Biacore T200) (QC tested).

# **Bioactivity-BLI**



Loaded Human PD-1 Protein, Fc Tag (Cat. No. PD1-H5257) on Protein A Biosensor, can bind Human PD-L2 Protein, His Tag (Cat. No. PD2-H5220) with an affinity constant of 0.45  $\mu$ M as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Loaded Cynomolgus PD-1, Fc Tag (Cat. No. PD1-C5254) on Protein A Biosensor, can bind Human PD-L2 Protein, His Tag (Cat. No. PD2-H5220) with an affinity constant of 0.4  $\mu$ M as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

# Background

Programmed cell death 1 ligand 2 (PD-L2 or PDCD1 ligand 2) is also known as Butyrophilin B7-DC, CD antigen CD273, which belongs to the immunoglobulin superfamily or BTN/MOG family. The expression of PD-L2 is up-regulated by IFNG/IFN-gamma stimulation in monocytes and induced on dendritic cells grown from peripheral blood mononuclear cells with CSF2 and IL-4. PD-L2 Involved in the costimulatory signal, essential for T-cell proliferation and IFNG production in a PDCD1-independent manner. PD-L2 interaction with PDCD1 inhibits T-cell proliferation by blocking cell cycle progression and cytokine production.