

Synonym

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

Source

Human PD-L2, Mouse IgG1 Fc Tag (PD2-H52A5) 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	mFc(Val 98 - Lys 324) AAK53870.1
-------------------------------------	-------------------------------------

This protein carries a mouse IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 48.9 kDa. The protein migrates as 60-70 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in Tris with Glycine, Arginine and NaCl, pH7.5. Normally trehalose is added as protectant before lyophilization.

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.

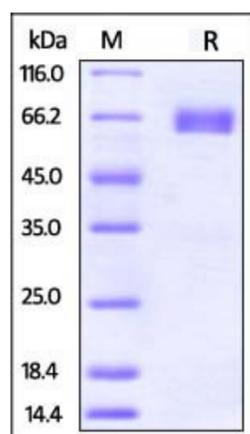
Storage

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

Please avoid repeated freeze-thaw cycles.

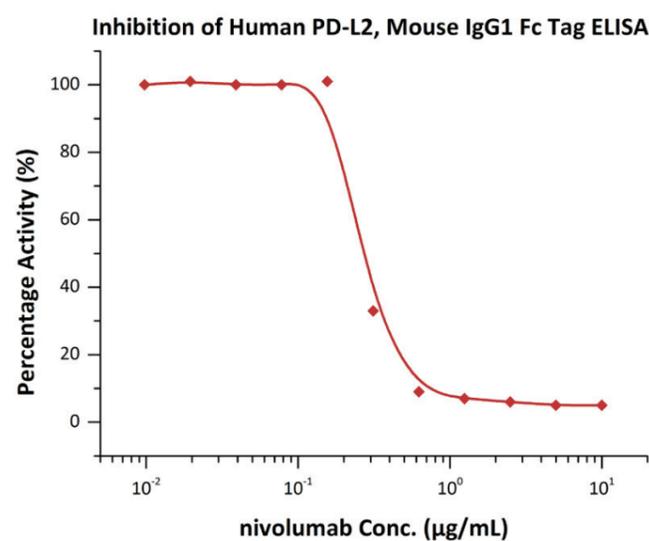
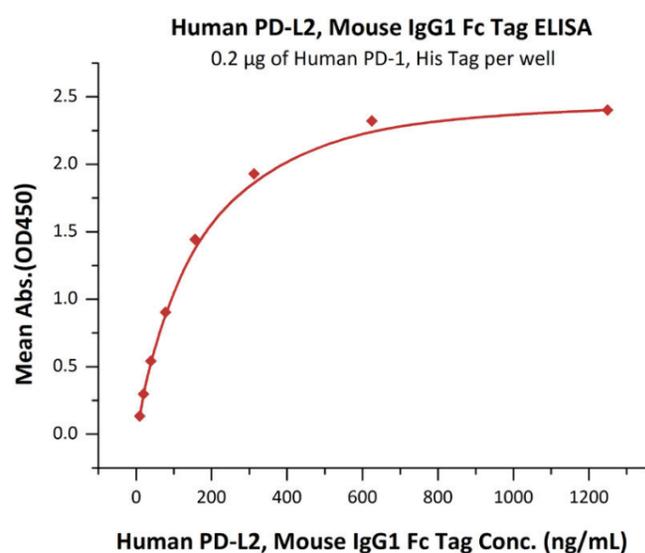
This product is stable after storage at:

- -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, Mouse IgG1 Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

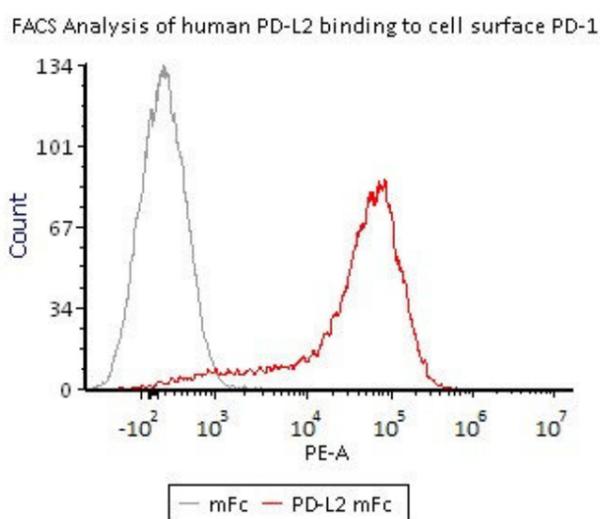
Bioactivity-ELISA



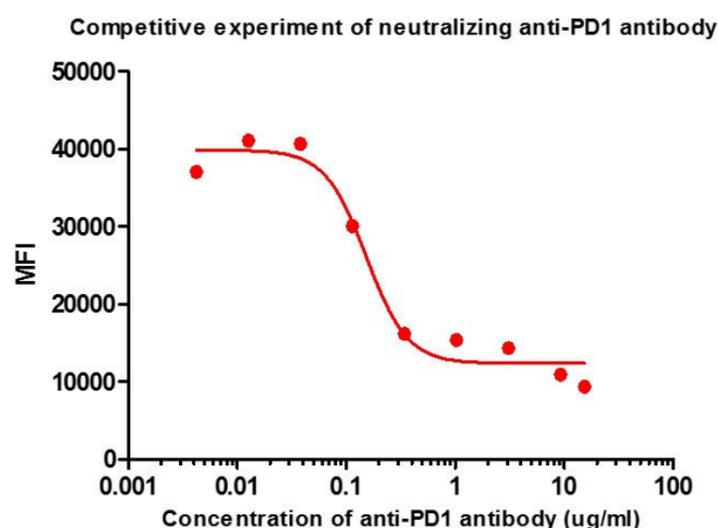
Immobilized Human PD-1, His Tag (Cat. No. [PD1-H5221](#)) at 2 µg/mL (100 µL/well) can bind Human PD-L2, Mouse IgG1 Fc Tag (Cat. No. [PD2-H52A5](#)) with a linear range of 10-156 ng/mL (QC tested).

Serial dilutions of nivolumab were added into Human PD-L2, Mouse IgG1 Fc Tag (Cat. No. [PD2-H52A5](#)): Biotinylated Human PD-1, Fc,Avitag (Cat. No. [PD1-H82F1](#)) binding reactions. The half maximal inhibitory concentration (IC50) is 0.2823 µg/mL (Routinely tested).

Bioactivity-FACS



Flow Cytometry assay shows that Human PD-L2, Mouse IgG1 Fc Tag (Cat. No. [PD2-H52A5](#)) can bind to 293 cell overexpressing human PD-1. The concentration of PD-L2 used is 0.1 µg/mL (Routinely tested).



FACS analysis shows that the binding of Human PD-L2, Mouse IgG1 Fc Tag (Cat. No. [PD2-H52A5](#)) to 293 overexpressing PD-1 was inhibited by increasing concentration of neutralizing Anti-PD-1 antibody. The concentration of PD-L2 used is 0.1 µg/mL. The IC50 is 1.3 µg/mL (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.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.