

## Recombinant Mouse B7-DC/PD-L2/CD273 Protein (Fc Tag)

**Catalog No.** PKSM041290

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

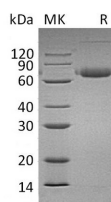
### Description

<b>Synonyms</b>	Programmed cell death 1 ligand 2;Pcd1lg2;PD-1 ligand 2;PD-L2;PDCD1 ligand 2;B7-DC;CD273;Btdc;F730015O22Rik;PD-L2
<b>Species</b>	Mouse
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Leu20-Arg219
<b>Accession</b>	Q9WUL5
<b>Calculated Molecular Weight</b>	49.7 kDa
<b>Observed molecular weight</b>	70-80 kDa
<b>Tag</b>	C-Fc
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

Programmed cell death 1 ligand 2 (PD-L2), also known as butyrophilin B7-DC or PDCD1 ligand 2, belongs to the

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member of B7 family which can regulate the activation and tolerance of T cells. PD-L2 is one ligand for Programmed cell death 1(PD-1), and the other is PD-L1. These two ligands shares 34% aa sequence identity. Mouse PD-L2 gene encodes a 273 amino acids (aa) protein with a putative 19 aa signal peptide, a 201 aa extracellular region , a 21 aa transmembrane domain and a 32 aa cytoplasmic region. The mouse PD-L2 gene is highly expressed in heart, placenta, pancreas, lung and liver while expressed weakly in spleen, lymph nodes and thymus. Besides, the expression of PD-L2 gene can be induced on dendritic cells grown from peripheral blood mononuclear cells under CSF2 and IL4/interleukin-4 treatment, and up-regulated by IFNG/IFN-gamma stimulation in monocytes. PD-L2 usually functions in a PDCD1-independent manner and is involved in regulating costimulatory signal which is essential for T-cell proliferation and IFNG production. Recent studies demonstrate that the expression of PD-L2 on the tumor cells promotes CD8 T cell-mediated rejection of tumor cells, at both the induction and effector phase of antitumor immunity. Moreover, PD-L2 binds to PD-1 cells and enhances T cell killing in a PD-1-independent mechanism.