

# Human B7-DC / PD-L2 / CD273 Protein (His & AVI Tag), Biotinylated

Catalog Number: 10292-H27H-B



Sino Biological  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

B7-DC; B7DC; bA574F11.2; Btdc; CD273; PD-L2; PDCD1L2; PDL2

### Protein Construction:

A DNA sequence encoding the human PDCD1LG2 (NP\_079515.2) (Met1-Pro219) was expressed with a c-terminal polyhistidine tagged AVI tag at the C-terminus. The expressed protein was biotinylated in vivo by the Biotin-Protein ligase (BirA enzyme) which is co-expressed.

**Source:** Human

**Expression Host:** Human Cells

## QC Testing

### Biotin/Protein Ratio:

0.5-1 as determined by the HABA assay.

**Purity:** > 95 % as determined by SDS-PAGE.

### Endotoxin:

< 1.0 EU per µg protein as determined by the LAL method.

**Predicted N terminal:** Leu 20

### Molecular Mass:

The recombinant human PDCD1LG2 consists of 226 amino acids and predicts a molecular mass of 25.8 kDa.

### Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

### Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

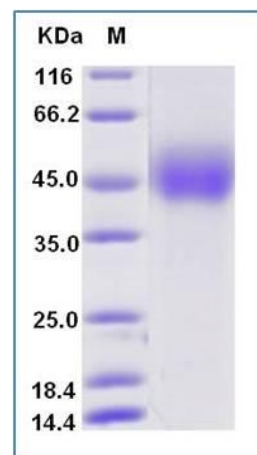
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

Programmed death ligand 2 (PD-L2), also referred to as B7-DC and CD273, is a member of the B7 family of proteins including B7-1, B7-2, B7-H2, B7-H1 (PD-L1), and B7-H3. PD-L2 is a type I membrane protein and structurally consists of an extracellular region containing one V-like and one C-like Ig domain, a transmembrane region, and a short cytoplasmic domain. PD-L2 is expressed on antigen presenting cells, placental endothelium and medullary thymic epithelial cells, and can be induced by LPS in B cells, INF-γ; in monocytes, or LPS plus IFN-γ; in dendritic cells. The CD28 and B7 protein families are critical regulators of immune responses. PD-L2 and PD-L1 are two ligands for PD-1, member of the CD28/CTLA4 family expressed on activated lymphoid cells, and thus provide signals for regulating T cell activation and immune tolerance. The interaction of B7-DC/PD-1 exhibited a 2-6-fold higher affinity compared with the interaction of B7-H1/PD-1.

## References

1.Latchman Y, *et al.* (2001) PD-L2 is a second ligand for PD-1 and inhibits T cell activation. *Nat Immunol.* 2: 261-8. 2.Carreno BM, *et al.* (2005) Therapeutic opportunities in the B7/CD28 family of ligands and receptors. *Curr Opin Pharmacol.* 5(4): 424-30. 3.Radhakrishnan S, *et al.* (2007) B7-DC/PD-L2 cross-linking induces NF-κB-dependent protection of dendritic cells from cell death. *J Immunol.* 178(3): 1426-32.

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