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

Catalog Number: 10292-H08H-B

General Information

Gene Name Synonym:

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

Protein Construction:

A DNA sequence encoding the extracellular domain (Met1-Pro219) of human PD-L2 (NP_079515.2) was expressed with a C-terminal polyhistidine tag. The purified protein was biotinylated in vitro.

Source: Human

Expression Host: HEK293 Cells

QC Testing

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

Bio Activity:

Measured by its binding ability in a functional ELISA. Immobilized Human PD-1 hFc(Cat:10377-H02H) at 2 μg/ml (100 μl/well) can bind Human PD-L2 His, Biotinylated(Cat:10292-H08H-B), the EC_{50}?of Human PD-L2 His, Biotinylated is 300-900 ng/mL.

Endotoxin:

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

Predicted N terminal: Leu 20

Molecular Mass:

The recombinant human PD-L2 consists of 211 amino acids and predicts a molecular mass of 24 kDa.

Formulation:

Lyophilized from sterile PBS,pH7.4.

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℃ to -80℃.

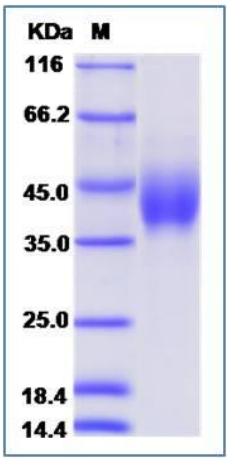
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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-kappaB-dependent protection of dendritic cells from cell death. J Immunol. 178(3): 1426-32.