# ABclonal Name AB

# Recombinant Human B7-DC/PD-L2/CD273 Protein

Catalog No.: RP00150 Recombinant

# **Sequence Information**

**Species Gene ID Swiss Prot** HEK293 cells 80380 Q9BQ51

Tags C-His

Synonyms

B7DC;Btdc;CD273;PD-L2;PDCD1L2;PDL2;bA574F11.2;PDCD1L G2

#### **Product Information**

Source

**Purification** 

> 95% by SDS-PAGE.

#### **Endotoxin**

 $< 0.1 \; \text{EU/}\mu\text{g}$  of the protein by LAL method.

#### **Formulation**

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.Contact us for customized product form or formulation.

### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

#### **Contact**

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# **Background**

Programmed Death Ligand 2 (PD-L2), also known as B7-DC and butyrophilin-like protein, is a member of the B7 family of proteins that provide signals for regulating T-cell activation and tolerance .PD-L2 is expressed on dendritic cells, subsets of activated CD4+ and CD8+ T cells, and memory B cells that differentiate into plasma cells. At inflammatory sites such as rheumatoid arthritis, allergen exposure, and virus infection, PD-L2 is up-regulated on synoviocytes, infiltrating macrophages, dendritic cells, and airway epithelial cells. PD-L2, along with B7-H1/PD-L1, binds to T cell PD-1 where it promotes IFN-gamma production and CD40 Ligand up-regulation while inhibiting IL-4 production. In addition, PD-L2 binds to RGM-B on macrophages and alveolar epithelial cells, supporting respiratory immune tolerance. In asthma, PD-L2 suppresses IL-5 and IL-13 production, promotes IL-12 production by dendritic cells, and supports allergeninduced airway hyper-responsiveness and mucus production.

#### **Basic Information**

#### Description

Recombinant Human B7-DC/PD-L2/CD273 Protein is produced by HEK293 expression system. The target protein is expressed with sequence (Leu20-Pro219) of human B7-DC/PD-L2/CD273 (Accession  $\#NP_079515.2$ ) fused with a  $6\times His$  tag at the C-terminus.

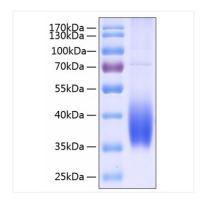
#### **Bio-Activity**

Measured by its binding ability in a functional ELISA. Immobilized Recombinant Human PD-L2 at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Recombinant Human PD-1 with a linear range of 0.3-1.2  $\mu$ g/mL.

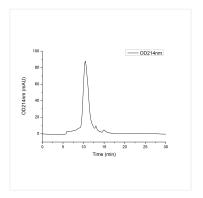
#### Storage

Store at  $-20^{\circ}$ C. Store the lyophilized protein at  $-20^{\circ}$ C to  $-80^{\circ}$ C up to 1 year from the date of receipt. <br/> <br/> After reconstitution, the protein solution is stable at  $-20^{\circ}$ C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

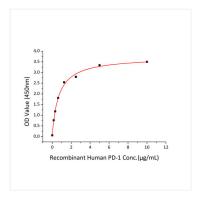
## **Validation Data**



Active Recombinant Human B7-DC/PD-L2/CD273 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 35-50 kDa.



The purity of Human B7-DC/PD-L2/CD273 Protein (Cat.RP00150) was greater than 90% as determined by SEC-HPLC.



Immobilized Recombinant Human PD-L2 at  $5\mu g/mL$  (100  $\mu L/well$ ) can bind Recombinant Human PD-1 with a linear range of 0.3-1.2  $\mu g/mL$ .