Mouse PD-L1 / B7-H1 / CD274 Protein (His Tag)

Catalog Number: 50010-M08H

General Information

Gene Name Synonym:
A530045L16Rik; B7h1; Pdcd111; Pdcd11lg1; Pdl1

Protein Construction:
A DNA sequence encoding the mouse CD274 (NP_068693.1) extracellular domain (Met 1-Thr 238) was fused with a polyhistidine tag at the C-terminus.

Source: Mouse
Expression Host: HEK293 Cells

QC Testing
Purity: > 98 % as determined by SDS-PAGE

Bio Activity:
Measured by its binding ability in a functional ELISA. Immobilized recombinant mouse PD-L1 at 1 μg/ml (100 μl/well) can bind mouse PD1 with a linear range of 6.25-400 ng/ml.

Endotoxin:
< 1.0 EU per μg of the protein as determined by the LAL method

Stability:
Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Phe 19

Molecular Mass:
The secreted recombinant mouse CD274 comprises 231 amino acids and has a predicted molecular mass of 26.3 kDa. As a result of glycosylation, it migrates as an approximately 40-45 kDa band in SDS-PAGE under reducing conditions.

Formulation:
Lyophilized from sterile PBS, pH 7.4

SDS-PAGE:

Protein Description

Programmed death-1 ligand-1 (PD-L1, CD274, B7-H1) has been identified as the ligand for the immunoinhibitory receptor programmed death-1 (PD1/PDCD1) and has been demonstrated to play a role in the regulation of immune responses and peripheral tolerance. PD-L1/B7-H1 is a member of the growing B7 family of immune molecules and this protein contains one V-like and one C-like Ig domain within the extracellular domain, and together with PD-L2, are two ligands for PD1 which belongs to the CD28/CTLA4 family expressed on activated lymphoid cells. By binding to PD1 on activated T-cells and B-cells, PD-L1 may inhibit ongoing T-cell responses by inducing apoptosis and arresting cell-cycle progression. Accordingly, it leads to growth of immunogenic tumor growth by increasing apoptosis of antigen specific T cells and may contribute to immune evasion by cancers. PD-L1 thus is regarded as promising therapeutic target for human autoimmune disease and malignant cancers.

References

Usage Guide

Storage:
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.