**Rat PD-L1 / B7-H1 / CD274 Protein (Fc Tag)**

**Catalog Number:** 80450-R02H

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**General Information**

**Gene Name Synonym:** CD274

**Protein Construction:**
A DNA sequence encoding the rat CD274 (NP_001178883.1)(Met1-Thr238) was expressed with the Fc region of human IgG1 at the C-terminus.

**Source:** Rat

**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 rat CD274-Fc at 10 μg/ml (100 μl/well) can bind biotinylated rat PDCD1-Fc (Cat:80448-R02H). The EC50 of biotinylated rat PDCD1-Fc (Cat:80448-R02H) is 0.14-0.34 μg/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:** Ala 18

**Molecular Mass:**
The recombinant rat CD274/Fc is a disulfide-linked homodimer. The reduced monomer comprises 459 amino acids and has a predicted molecular mass of 51.8 kDa. The apparent molecular mass of the protein is approximately 73.2 kDa in SDS-PAGE under reducing conditions.

**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.

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**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.

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**SDS-PAGE:**

![SDS-PAGE Image]

**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**