**General Information**

**Gene Name Synonym:**
CD274

**Protein Construction:**
A DNA sequence encoding the cynomolgus/rhesus CD274 (XP_015292694.1) (Met1-Thr239) was expressed with a polyhistidine tag at the C-terminus. Cynomolgus and Rhesus CD274 sequences are identical. The purified protein was biotinylated in vitro.

**Source:** Cynomolgus

**Expression Host:** HEK293 Cells

**QC Testing**

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

**Endotoxin:** < 1.0 EU per μg 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 recombinant cynomolgus/rhesus CD274 consists of 232 amino acids and predicts a molecular mass of 26.7 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**

**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 belong 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**