CD274
Recombinant Human B7-H1/PD-L1/CD274:Fc Chimera Non-Lytic

Catalog No.	CRH037	**Quantity:**	100 µg

Alternate Names: B7-H, B7H1, PD-L1, PDCD1L1, PDCD1LG1, PDL1

Description: Programmed death ligand 1 (PD-L1, B7-H1 or CD274) is a member of the growing B7 family of immune proteins that provide signals for both stimulating and inhibiting T cell activation. CD274 has been identified as one of two ligands for programmed death 1 (PD -1), a member of the CD28 family of immunoreceptors. CD274 is widely expressed in several organs such as heart, skeletal muscle, placenta and lung, and in lower amounts in thymus, spleen, kidney and liver. CD274 expression is upregulated in a small fraction of activated T and B cells and a much larger fraction of activated monocytes. CD274 expression is also induced in dendritic cells and keratinocytes after IFN-γ stimulation. CD274 expression is also upregulated in a variety of tumor cell lines. Interaction of CD274 with PD-1 results in inhibition of TCR mediated proliferation and cytokine production, suggesting an inhibitory role in regulating immune responses.. The CD274 - PD-1 pathway is involved in the negative regulation of some immune responses and may play an important role in the regulation of peripheral tolerance.

The extracellular domain of human CD274 [B7-H1] (aa 19-238) is fused to the N-terminus of the Fc region of a mutant human IgG1.

The chimera is non-lytic and acts as a long lasting fusion protein that only binds to the receptor. Mutations to the complement (C1q) and FcgR I binding sites of the IgGs Fc fragment render the fusion proteins incapable of antibody directed cytotoxicity (ADCC) and complement directed cytotoxicity (CDC).

Gene ID: 29126

Protein Accession No: NP_054862.1

Source: CHO cells

Formulation: Lyophilized from a 0.2 µm filtered solution containing PBS.

Purity: ≥98% (SDS-PAGE)

Endotoxin Level: <0.06 EU/µg purified protein as determined by LAL test (Lonza).

Biological Activity: Shows the biological function of the CD274 moiety and exerts a prolonged circulating halflife caused by the modified Fc domain.

Reconstitution: Reconstitute with 1 ml (100 µg/ml) sterile water. Add 1X PBS to the desired protein concentration.

Storage & Stability: Store at 4°C upon arrival and at -20°C for long term. Lyophilized product is stable for at least 1 year after receipt when stored at -20°C. After reconstitution, prepare aliquots and store at -20°C. Stable for up to 3 month at -20°C. **Avoid repeated freeze-thaw cycles.**

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