

21-1001-B: Human PD-L1 Recombinant Fc fusion Protein (Active) Biotin conjugated

Application : Functional Assay

Alternative Name : B7 homolog 1, CD274, B7H1, PDCD1L1, PDCD1LG1, PDL1

Description

Host: CHO-K1 celline. PD-L1 (CD274/B7-H1) is a critical membrane-bound costimulatory molecule belongs to the B7 superfamily that inhibits immune responses through its receptor, PD-1 and PD-L1 play a key role in the pathogenesis of inflammatory diseases (programmed death 1). It is widely expressed in the mononuclear phagocyte system (MPS), may co-stimulate T cells and regulates inflammatory responses. PD-L1 exerts inflammation regulatory functions via a negative co-stimulatory effect on T cell functions to inhibit cytokine secretion, facilitate apoptosis of activated T cells and induce T cell energy. Aberrant expression and dysregulation of CD274 have been reported during bacterial infection, inflammation and in numerous autoimmune diseases.

Product Info

Amount : 100 µg

Purification : 99% Purity SDS -PAGE and HPLC.

Content : Lyophilized sterile PBS, 5% trehalose and 0.01% tween 80 are added as protectant before lyophilization.

Storage condition : Store it under sterile conditions at -4°C. It is recommended that the protein be aliquoted for optimal storage.

Amino Acid : Human PD-L1 (ECD): MRIFAVFIFMTYWHLNNAFTVTVPKDLVVEYGSNMTIECKFPV
EKQLDLAALIVWEMEDKNIIQFVHGEECLKVQHSSYRQRARLL
KDQLSLGNAALQITDVKLDAGVYRCMISYGGADYKRITVKVNA
PYNKINQRILVVDPTSEHELTCAEGYPKAEVIWTSDDHQVLS
GKTTTTNSKREEKLFNVTSTLRINTTTNEIFYCTFRRLDPEENH TAEVIPELPLAHPNER

Application Note

Functional assay: Measured by its binding ability in a functional FLOW . Binding assay was tested using CHO-K1/PD-1 (cat no. 14-500ACL).

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

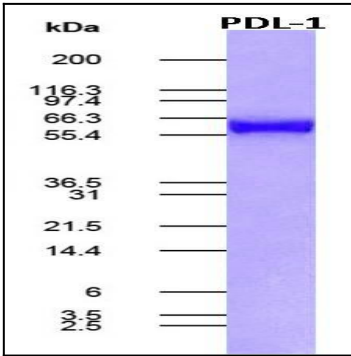


Figure-1: Human PD-L1/hFc recombinant protein. 0.5 ug protein was run on a 4-20% SDS-PAGE gel followed by Coomassie blue staining.

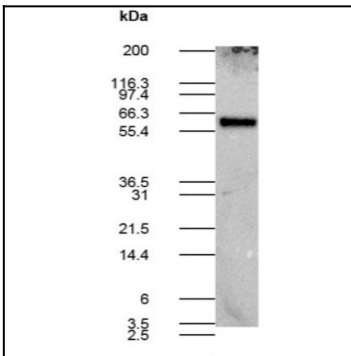


Figure-2: Western blot analysis of PDL-1/hFc recombinant protein (0.5ug) using anti-human PD-L1 antibody (Cat. No. 10-7599).

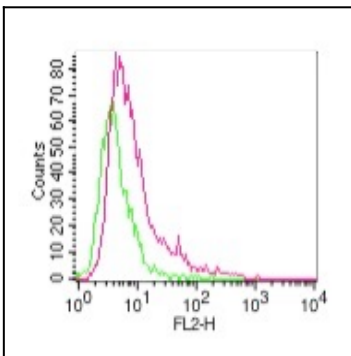


Figure-3: Binding activity of Biotin conjugated PD-L1/hFc recombinant protein to PD-1 was analyzed by flow cytometry. 0.05 ug of PD-L1/h Fc recombinant protein was incubated with PD-1/CHO-K1 stable cells (Cat. No. 14-500ACL) or with parental CHO-K1 cells at 1 x 10⁶ cells/reaction on ice for 1 h. Cells were washed once and then further incubated with PE-conjugated Streptavidin antibody on ice for 30 min. Cells were washed and then analyzed by flow cytometry. PD-1/CHO-K1 stable cells (Red); Parental CHO-K1 cells (Green).

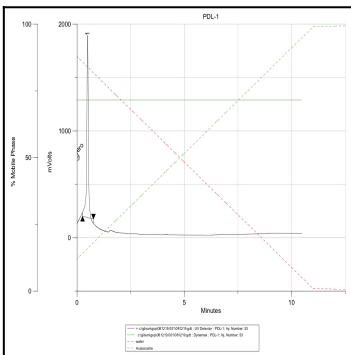


Figure-4: HPLC analysis of PD-L1/hFc recombinant protein.