InnoCyto Inc.
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Technical Data Sheet

Biotinylated Human PD-L1 Protein (C-Fc-Avi)

Catalog Number: 801003, 801004
Size: 25 ug, 100 ug
Target Name: PD-L1, CD274, B7-H1, PDCD1L1, PDCD1LG1,
Regulatory Status: RUO

Product Details

Application: ELISA, BLI
Format: Liquid, Biotinylated
Expression Host: HEK293
Species: Human
Sources: Recombinant Human PD-L1 (Phe19-Thr239) with C-terminus Fc-Avi tag is expressed in HEK293 cells. This protein was site-specifically labeled with Biotin by BirA ligase.
Accession Number: Q9NZQ7
Molecular Weight: The protein has a predicted molecular weight of 54 kDa and migrates at approximately 70 kDa on SDS-PAGE under DTT-reducing conditions.
Affinity Tag: C-Fc-Avi
Purity: >95% based on SDS-PAGE under reducing condition
Formulation: 1xPBS buffer, pH7.4, 0.22 μm filtered
Endotoxin level: Not tested
Protein Concentration: 25μg size is bottled at 0.2mg/mL concentration. 100 μg size is supplied at a lot-specific concentration.
Storage and Handling: Briefly centrifuge the vial upon receipt. An unopened vial can be stored at 4°C for up to 2 weeks, or at -20°C or below for up to six months. The protein may be further diluted to 0.1 mg/mL using 0.22 μm-filtered PBS buffer (pH 7.4). For long-term storage, the diluted stock solution should be aliquoted and stored at <= –70°C to minimize freeze-thaw cycles. If additional dilution is required, carrier proteins such as FBS or BSA should be added to maintain protein stability.

Background Information

Programmed death-ligand 1 (PD-L1, also known as CD274 or B7-H1) is a type I transmembrane glycoprotein and a key immune checkpoint molecule in the B7 family. It is broadly expressed on immune cells (such as T cells, B cells, macrophages, and dendritic cells) and in various tissues, as well as on many tumor types. PD-L1 interacts with its receptor PD-1, expressed on activated T and B cells, to deliver inhibitory signals that suppress T cell proliferation, cytokine production, and cytolytic function. This interaction plays a critical role in maintaining immune homeostasis, preventing autoimmunity, and enabling immune evasion by tumors. Therapeutic antibodies targeting PD-L1 or PD-1 have shown significant clinical benefit in cancer immunotherapy by restoring T cell activity. PD-L1 is also implicated in tolerance during pregnancy, chronic infections, and transplantation. It contains two extracellular Ig-like domains, and its expression can be induced by inflammatory

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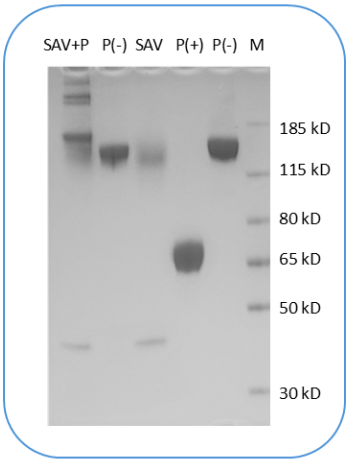
cytokines such as IFN-?.

Product Data



Human PD-L1 (C-Fc-Avi) was biotinylated in vitro using BirA ligase. SDS-PAGE analysis under reducing (P+) and non-reducing (P–) conditions shows the protein has a purity greater than 95%. A gel shift assay using co-incubation with streptavidin indicates that the biotinylation efficiency of the PD-L1 protein exceeds 85%.