InnoCyto Inc.
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Technical Data Sheet

PE Human CD137/4-1BB/TNFRSF9 (C-Fc)

Catalog Number: 808901, 808902
Size: 25 ug, 100 ug
Target Name: TNFRSF9, 4-1BB, CD137
Regulatory Status: RUO

Product Details

Application: Flow Cytometry
Format: Liquid, PE
Expression Host: CHO
Species: Human
Sources: Recombinant Human CD137/4-1BB Protein (Leu24-Gln186) with C-terminus Fc-tag is expressed in CHO cell and conjugated to PE.
Accession Number: Q07011
Molecular Weight: The protein has a predicted molecular weight of 43.5 kDa. Under DTT-reducing conditions, it migrates at approximately 50-60 kDa on SDS-PAGE prior to conjugation.
Affinity Tag: C-Fc
Formulation: 1xPBS buffer, pH7.4, 0.09% NaN3 with a carrier protein
Endotoxin level: Not tested
Protein Concentration: 25μg size is bottled at 0.1mg/mL concentration. 100 μg size is bottled at lot specific concentration.
Storage and Handling: Briefly centrifuge the vial upon receipt. An unopened vial may be stored at 2–8°C for up to six months.

Background Information

CD137 (4-1BB) is a co-stimulatory glycoprotein from the tumor necrosis factor (TNF) receptor superfamily, expressed on activated CD4+ and CD8+ T cells. It binds to its ligand, 4-1BBL, found on antigen-presenting cells like macrophages and activated B cells. The interaction between CD137 and 4-1BBL triggers signaling through tumor necrosis factor receptor-associated factors (TRAFs), activating pathways like NF-kappaB and cytokine production. This process promotes T cell activation, proliferation, and immune responses, as well as monocyte and B-cell activation. CD137 and 4-1BBL are present in various human tumors, suggesting they may influence tumor progression. Crosslinking CD137 has shown promise in enhancing anti-tumor immunity in preclinical models, and agonistic anti-CD137 antibodies are currently being tested in phase I clinical trials. Additionally, soluble CD137 (sCD137) can antagonize the membrane-bound form's function, reducing T cell proliferation and IL-2 secretion.