

## Technical Data Sheet

### APC conjugated Human CD137/4-1BB/TNFRSF9 (C-His)

**Catalog Number:** 808603, 808604  
**Size:** 25 ug, 100 ug  
**Target Name:** TNFRSF9, 4-1BB, CD137  
**Regulatory Status:** RUO

#### Product Details

---

**Application:** FC

**Format:** Liquid, APC

**Expression Host:** CHO

**Species:** Human

**Sources:** Recombinant Human CD137/4-1BB Protein (Leu24-Gln186) with C-terminus His-tag is expressed in CHO cell and conjugated to APC.

**Accession Number:** Q07011

**Molecular Weight:** The protein has a predicted molecular weight of 18.9 kDa. Under DTT-reducing conditions, it migrates at approximately 26 kDa on SDS-PAGE prior to conjugation.

**Affinity Tag:** C-His

**Formulation:** 1xPBS buffer, pH7.4, 0.09% NaN<sub>3</sub> 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.