

APC 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:	Flow Cytometry
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 ₃ 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.