

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

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

### PRODUCT DETAILS

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<b>Application:</b>	Flow Cytometry
<b>Format:</b>	Liquid, PE
<b>Expression Host:</b>	CHO
<b>Species:</b>	Human
<b>Sources:</b>	Recombinant Human CD137/4-1BB Protein (Leu24-Gln186) with C-terminus Fc-tag is expressed in CHO cell and conjugated to PE.
<b>Accession Number:</b>	Q07011
<b>Molecular Weight:</b>	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.
<b>Affinity Tag:</b>	C-Fc
<b>Formulation:</b>	1xPBS buffer, pH7.4, 0.09% NaN <sub>3</sub> with a carrier protein
<b>Endotoxin level:</b>	Not tested
<b>Protein Concentration:</b>	25µg size is bottled at 0.1mg/mL concentration. 100 µg size is bottled at lot specific concentration.
<b>Storage and Handling:</b>	Briefly centrifuge the vial upon receipt. An unopened vial may be stored at 2-8°C for up to six months.

### BACKGROUND INFORMATION

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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.