



## CD137 Recombinant Protein

CATALOG NUMBER: 90-410

### Specifications

<b>SPECIES:</b>	Human
<b>SOURCE SPECIES:</b>	E. coli
<b>SEQUENCE:</b>	Human CD137 (aa 19-184) is fused at the C-terminus to a His-tag.
<b>FUSION TAG:</b>	His Tag
<b>APPLICATIONS:</b>	This recombinant proteins is for research use only.
<b>BIOLOGICAL ACTIVITY:</b>	N/A

### Properties

<b>PURITY:</b>	≥95% (SDS-PAGE)
<b>PHYSICAL STATE:</b>	Lyophilized
<b>BUFFER:</b>	Lyophilized from a concentrated sterile solution containing 50mM Tris-HCl buffer (pH 8.0) and 500mM NaCl.
<b>STORAGE CONDITIONS:</b>	Stable for at least 1 year after receipt when stored at -20°C. Working aliquots are stable for up to 3 months when stored at -20°C.

### Additional Info

<b>ALTERNATE NAMES:</b>	Tumor Necrosis Factor Receptor Superfamily Member 9, TNFRSF9, 4-1BB, 4-1BB Ligand Receptor T Cell, Antigen 4-1BB Homolog, T Cell Antigen ILA, CD137 Antigen, CDw137, ILA, MGC2172
<b>ACCESSION NO.:</b>	AAH06196
<b>PROTEIN GI NO.:</b>	13623201

### Background

Human CD137 (4-1BB) is a costimulatory molecule of the tumor necrosis factor (TNF) receptor superfamily. The glycoprotein 4-1BB is expressed mainly on activated CD4+ and CD8+ T cells and binds to a high-affinity ligand (4-1BBL) expressed on several antigen-presenting cells such as macrophages and activated B cells. Upon ligand binding, 4-1BB is associated with the tumor receptor-associated factors (TRAF), the adaptor protein and mediates downstream signaling events including the activation of NF-kappaB and cytokine production. 4-1BB signaling either by binding to 4-1BBL or by antibody ligation delivers signals for T cell activation and growth as well as monocyte proliferation and B cell survival, and plays a important role in the amplification of T cell-mediated immune responses. In contrast, it can also enhance activation-induced T cell apoptosis when triggered by engagement of the TCR/CD3 complex. In addition, the 4-1BB/4-1BBL costimulatory pathway has been shown to augment secondary CTL responses to several viruses and increase antitumor immunity. 4-1BB is therefore a promising candidate for immunotherapy of human cancer.

**FOR RESEARCH USE ONLY**

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