

**Recombinant Human CD137 / 4-1BB / TNFRSF9 Protein (His tag)****Cat.NO.: TP06277**

3th Edition

**Synonyms:**4-1BB;CD137;CDw137;ILA

**Description:**CD137 (also known as 4-1BB) is a surface co-stimulatory glycoprotein originally described as present on activated T lymphocytes, which belongs to the tumor necrosis factor (TNF) receptor superfamily. It 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 necrosis factor receptor-associated factors (TRAFs), the adaptor protein which 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 an important role in the amplification of T cell-mediated immune responses. In addition, CD137 and CD137L are expressed in different human primary tumor tissues, suggesting that they may influence the progression of tumors. Crosslinking of CD137 on activated T cells has shown promise in enhancing anti-tumor immune responses in murine models, and agonistic anti-CD137 antibodies are currently being tested in phase I clinical trials.

Immune Checkpoint  
Immune Checkpoint Detection: Antibodies  
Immune Checkpoint Detection: ELISA  
Antibodies  
Immune Checkpoint Proteins  
Immune Checkpoint Targets  
Co-stimulatory  
Immune Checkpoint Targets  
Immunotherapy  
Cancer Immunotherapy  
Targeted Therapy

**Form:**PBS**Molecular Weight:**18.8 kDa**Sequences:**Met 1-Gln 186**Purity:**> 95% by HPLC**Concentration:****Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.