

### Datasheet for ABIN7199381

# CD137 Protein (AA 87-186) (His-Avi Tag, Biotin)



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Quantity:	200 μg
Target:	CD137 (TNFRSF9)
Protein Characteristics:	AA 87-186
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CD137 protein is labelled with His-Avi Tag,Biotin.

### **Product Details**

Purpose:	Biotinylated Human 4-1BB / TNFRSF9 (87-186) Protein, His,Avitag™ (MALS verified)	
Sequence:	Asp 87 - Gln 186	
Characteristics:	Biotinylated Human 4-1BB (87-186), His, Avitag (41B-H82E4) is expressed from human 293 cells (HEK293). It contains AA Asp 87 - Gln 186 (Accession # Q07011-1).	
Purity:	>90 % as determined by SDS-PAGE.	
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.	
Grade:	MALS verified	

# Target Details

Target:	CD137 (TNFRSF9)
Alternative Name:	4-1BB / TNFRSF9 (TNFRSF9 Products)

#### Target Details

Background:

Synonyms: TNFRSF9,4-1BB,CD137,CDw137,ILA,

Description: 4-1BB is also known as CD137, tumor necrosis factor receptor superfamily member 9 (TNFRSF9), induced by lymphocyte activation (ILA), is a co-stimulatory molecule of the tumor necrosis factor (TNF) receptor superfamily. CD137 can be expressed by activated T cells, but to a larger extent on CD8 than on CD4 T cells. In addition, CD137 expression is found on dendritic cells, follicular dendritic cells, natural killer cells, granulocytes and cells of blood vessel walls at sites of inflammation. The best characterized activity of CD137 is its costimulatory activity for activated T cells. Crosslinking of CD137 enhances T cell proliferation, IL-2 secretion survival and cytolytic activity. Further, it can enhance immune activity to eliminate tumors in mice. CD137 can enhance activation-induced T cell apoptosis when triggered by engagement of the TCR/CD3 complex. In addition, 4-1BB/4-1BBL co-stimulatory pathway has been shown to augment secondary CTL responses to several viruses, and meanwhile augment anti-tumor immunity. 4-1BB thus is a promising candidate for immunotherapy of human cancer. CD137 has been shown to interact with TRAF2.

Molecular Weight:

14.1 kDa

NCBI Accession:

NP 001552

Pathways:

Cancer Immune Checkpoints

#### **Application Details**

Application Notes:

This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™). The protein has a calculated MW of 14.1 kDa. The protein migrates as 20-32 kDa under reducing (R) condition due to glycosylation.

Comment:

Ready-to-use Avitag<sup>™</sup> biotinylated protein:

The product is exclusively produced using the Avitag™ technology. Briefly, a unique 15 amino acid peptide, the Avi tag, is introduced into the recombinant protein during expression vector construction. The single lysine residue in the Avi tag is enzymatically biotinylated by the E. Coli biotin ligase BirA.

This single-point enzymatic labeling technique brings many advantages for commonly used binding assays. The biotinylation happens on the lysine residue of Avi tag, and therefore does NOT interfere with the target protein's natural binding activities. In addition, when immobilized on an avidin-coated surface, the protein orientation is uniform because the position of the Avi tag in the protein is precisely controlled.

Restrictions:

For Research Use only

## Handling

Format:	Lyophilized
Buffer:	PBS, pH 7.4
Storage:	-20 °C
Storage Comment:	-20°C