Datasheet for ABIN6972936

CD137 Protein (AA 24-186) (His tag,AVI tag,Biotin)

3 Images

Go to Product page

Overview

Quantity:	200 µg
Target:	CD137 (TNFRSF9)
Protein Characteristics:	AA 24-186
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This CD137 protein is labelled with His tag,AVI tag,Biotin.

Product Details

Specificity:	Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.
Characteristics:	Biotinylated Human 4-1BB / TNFRSF9 Protein, His,Avitag™(MALS verified)
Purity:	>90 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	CD137 (TNFRSF9)
Alternative Name:	4-1BB (TNFRSF9 Products)
Background:	4-1BB is also known as CD137, tumor necrosis factor receptor superfamily member 9

Target Details

	(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:	20.9 kDa
NCBI Accession:	NP_001552
Pathways:	Cancer Immune Checkpoints

Application Details

Application Notes:	MALS verified
Comment:	Ready-to-use Avitag™ 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

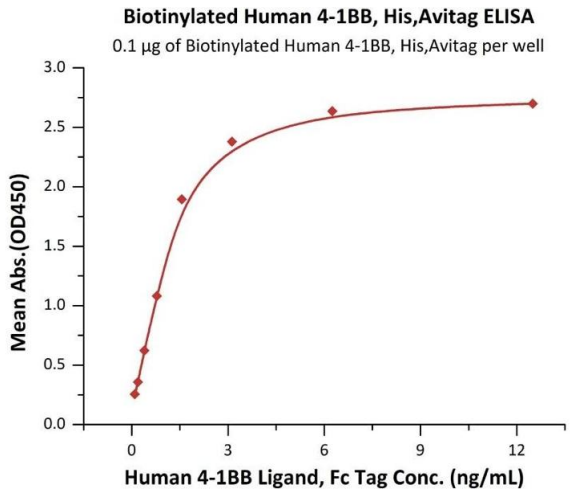
Handling

Format:	Lyophilized

Handling

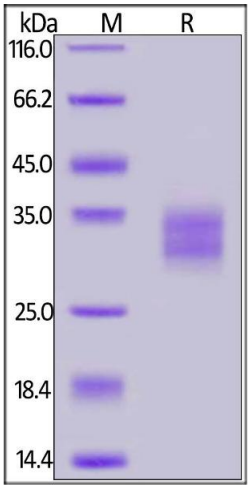
Buffer:	PBS, pH 7.4
Storage:	-20 °C

Images



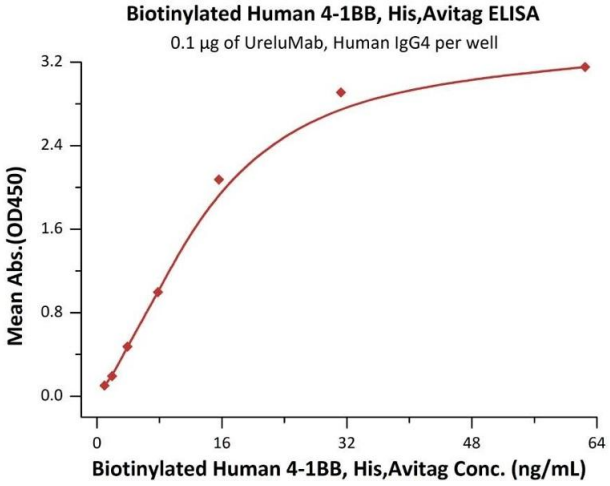
ELISA

Image 1. Immobilized Biotinylated Human 4-1BB, His,Avitag™(MALS verified) (ABIN6972936) at 1 μg/mL (100 μL/well) on Recombinant Streptavidin precoated (0.5 μg/well) plate, can bind Human 4-1BB Ligand, Fc Tag (ABIN2870602,ABIN2870603) with a linear range of 0.1-2 ng/mL (Routinely tested).



SDS-PAGE

Image 2. Biotinylated Human 4-1BB, His,Avitag™(MALS verified) on under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90 % .



ELISA

Image 3. Immobilized Human 4-1BB Ligand (71-254), His,Flag Tag (active trimer) (MALS verified) (ABIN6951005,ABIN6952261) at 1 μg/mL (100 μL/well) can bind Biotinylated Human 4-1BB, His,Avitag™(MALS verified) (ABIN6972936) with a linear range of 1-39 ng/mL (QC tested).