

CD137 Active Protein | TNFRSF9 active protein

CD137 Protein, Mouse, Recombinant (soluble form, hFc Tag)

CATALOG #
AAA258206

HOST
HEK293 Cells

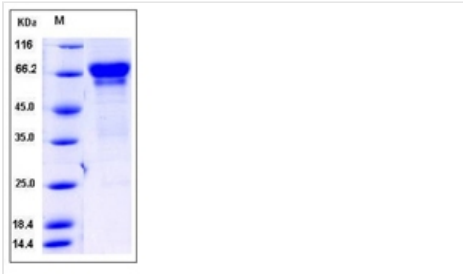
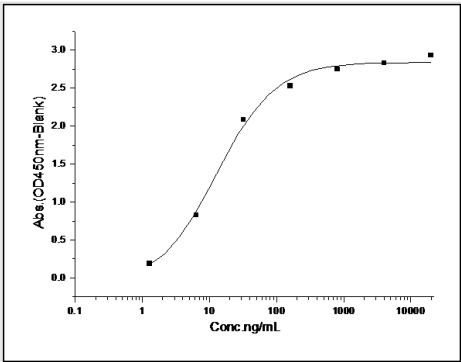
PRODUCT SYNONYMS

CD137; CD137 Protein; Mouse; Recombinant (soluble form; hFc Tag); Mouse CD137/4-1BB/TNFRSF9 Protein (soluble form; Fc Tag); 4-1BB Protein; A930040I11Rik Protein; AA408498 Protein; AI325004 Protein; Cd137 Protein; CDw137 Protein; ILA Protein; Ly63 Protein; tumor necrosis factor receptor superfamily; member 9; TNFRSF9 active protein

PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>90% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, pH7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.
Sequence	Met1-Leu21 1
Species	Mouse
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Val 24
Tag	C-human IgG1-Fc
Protein Construction	A DNA sequence encoding the mouse TNFRSF9 (NP_001070976.1)(Met 1-Leu 211) was fused with the Fc region of human IgG1 at the C-terminus.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.
Activity	Measured by its binding ability in a functional ELISA. Immobilized mouse His-TNFSF9 at 10ug/ml (100uL/well) can bind mouse TNFRSF9-Fc. The EC50 of mouse TNFRSF9-Fc is 12.0-29.0ng/mL.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice.

IMAGES



SDS-PAGE

Application Data
Measured by its binding ability in a functional ELISA. Immobilized mouse His-TNFSF9 at 10 ug/ml (100 ul/well) can bind mouse TNFRSF9-Fc, The EC50 of mouse TNFRSF9-Fc is 12.0-29.0 ng/ml.

ADDITIONAL INFORMATION

Related Product Information for TNFRSF9 active protein	Background: 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. Soluble forms of CD137 (sCD137) are generated by differential splicing. sCD137 can bind to CD137 ligand to antagonize the costimulatory activities of the membrane-bound CD137 and reduce T cell proliferation and IL-2 secretion.
Product Categories/Family for TNFRSF9 active protein	Cancer Drug Targets
References	Sica G, et al. (1999) Biochemical and immunological characteristics of 4-1BB (CD137) receptor and ligand and potential applications in cancer therapy. Arch Immunol Ther Exp (Warsz). 47(5): 275-9.Nam KO, et al. (2005) The therapeutic potential of 4-1BB (CD137) in cancer. Curr Cancer Drug Targets. 5(5): 357-63.Wang Q, et al. (2008) Analysis of CD137 and CD137L expression in human primary tumor tissues. Croat Med J. 49(2): 192-200.Melero I, et al. (2008) Multi-layered action mechanisms of CD137 (4-1BB)-targeted immunotherapies. Trends Pharmacol Sci. 29(8): 383-90.Thum E, et al. (2009) CD137, implications in immunity and potential for therapy. Front Biosci. 14: 4173-88.

NCBI AND UNIPROT INFORMATION

NCBI GI #	1174222435
NCBI GeneID	21942
NCBI Accession #	NP_001070976.1
NCBI GenBank Nucleotide #	NM_001077508.1
Molecular Weight	27,598 Da
NCBI Official Full Name	tumor necrosis factor receptor superfamily member 9 isoform 2
NCBI Official Synonym Full Names	tumor necrosis factor receptor superfamily, member 9
NCBI Official Symbol	Tnfrsf9

NCBI Official Synonym Symbols	ILA; Ly63; 4-1BB; Cd137; CDw137; AA408498; AI325004; A930040I11Rik
NCBI Protein Information	tumor necrosis factor receptor superfamily member 9

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/hek293-tnfrsf9-active-protein/cd137/258206>