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CD137/4-1BB Antibody

Rabbit Polyclonal Antibody
Catalog # ABV11781

Product Information

Application	IHC
Primary Accession	Q07011
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	27899

Additional Information

Gene ID	3604
Positive Control	IHC: Rat tissue lysate
Application & Usage	IHC: 1:100-1:500
Alias Symbol	TNFRSF9
Other Names	ILA; 4-1BB; CD137; CDw137; Tumor necrosis factor receptor superfamily member 9; 4-1BB ligand receptor; T-cell antigen 4-1BB homolog; T-cell antigen ILA; TNFRSF9
Appearance	Colorless liquid
Formulation	0.01M TBS (pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glycerol
Reconstitution & Storage	-20 °C
Background Descriptions	
Precautions	CD137/4-1BB Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TNFRSF9
Synonyms	CD137, ILA
Function	Receptor for TNFSF9/4-1BBL. Conveys a signal that enhances CD8(+) T-cell survival, cytotoxicity, and mitochondrial activity, thereby promoting immunity against viruses and tumors (Probable).
Cellular Location	Cell membrane; Single-pass type I membrane protein

Tissue Location	Expressed on the surface of activated T-cells.

Background

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 activationinduced 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 TRAF.