abcam

ab86575

Anti-4-1BBL/CD137L antibody [RM0067-3H19]

Key facts

Isotype	IgG2
Host species	Rat
Storage buffer	Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Mouse 4-1BBL/CD137L. The exact immunogen used to generate this antibody is proprietary information. Database link P41274
Clone number	RM0067-3H19
Purification technique	Affinity purification Protein A
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

WB

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information 4-1BBL/CD137L

Function	Cytokine that binds to TNFRSF9. Induces the proliferation of activated peripheral blood T-cells. May have a role in activation-induced cell death (AICD). May play a role in cognate interactions between T-cells and B-cells/macrophages.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	The 4-1BBL protein also known as CD137L or 4-1BB ligand acts mechanically as a member of the tumor necrosis factor (TNF) superfamily. The 4-1BBL with a mass of around 36 kDa exists as a type II transmembrane protein. It gets expressed on activated antigen-presenting cells like dendritic cells macrophages and B cells. This costimulatory molecule primarily interacts with its receptor 4-1BB (CD137) on T cells promoting their activation.
Biological function summary	The 4-1BBL protein plays an important role in mediating the co-stimulatory signal needed for T-cell proliferation survival and cytokine production. This protein contributes to the formation of the immunological synapse and doesn't exist alone but rather interacts directly with its receptor CD137 forming a receptor-ligand complex. The 4-1BBL-CD137 interaction strengthens signals delivered by the T-cell receptor enhancing immune responses.

Pathways	The 4-1BBL protein integrates into immune-related signaling pathways. It significantly impacts the NF-kB and MAPK pathways important for T cell survival and activation. The interaction between 4-1BBL and its related proteins such as the 4-1BB/CD137 receptor initiates downstream cascades that lead to the activation of transcription factors involved in immune response.
Associated diseases and disorders	The 4-1BBL protein connects to conditions such as cancer and autoimmune diseases. Overexpression or dysregulation of 4-1BBL has associations with autoimmune conditions like rheumatoid arthritis due to prolonged T cell activation. In cancer 4-1BBL's interaction with CD137 has potential therapeutic implications with efforts to harness this axis to bolster anti-tumor immunity. The modulation of 4-1BBL activity can influence disease outcomes highlighting its significance as a target for therapeutic interventions.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

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