abcam

ab274387

Anti-4-1BBL/CD137L antibody [EPR21995-147] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR21995-147
Purification technique	Affinity purification Protein A
Concentration	1.028 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Not recommended

Species	Human, Mouse, Rat
Dilution info	-

Notes	-

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
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	+4°C
Storage information	Do Not Freeze

Notes

ab274387 is the carrier-free version of ab254385.

Patented technology

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

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.

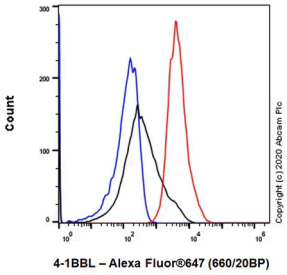
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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

Full details and terms and conditions can be found here:
Terms & Conditions.

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2 product images



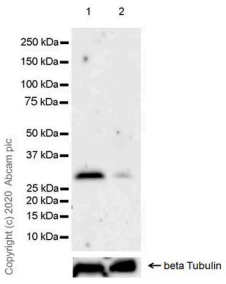
Flow Cytometry - Anti-4-1BBL/CD137L antibody [EPR21995-147] - BSA and Azide free (ab274387)

4-1BBL/CD137L Flow Cytometry staining using rabbit Anti-4-1BBL/CD137L antibody

Flow cytometric analysis of Raji (Human Burkitt's lymphoma B lymphocyte) cells labelling 4-1BBL with ab254385 at 1/50 dilution (1µg) (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).
Goat anti rabbit IgG (Alexa Fluor® 647, ab150079) at 1/2000 dilution was used as the secondary antibody.

Gated on viable cells.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab254385).



Western blot - Anti-4-1BBL/CD137L antibody [EPR21995-147] - BSA and Azide free (ab274387)

4-1BBL/CD137L Western blot staining using rabbit Anti-4-1BBL/CD137L antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST.
Low expression control: K562 (PMID: 20670353).

Exposure time:3 minutes.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab254385).
All lanes:
Western blot - Anti-4-1BBL/CD137L antibody [EPR21995-147] (ab254385) at 1/1000 dilution

Lane 1:
Raji (human Burkitts lymphoma cell line) whole cell lysate at 30 µg

Lane 2:
K562 (Human chronic myelogenous leukemia cell line from bone marrow) whole cell lysate at 60 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1/20000 dilution

Predicted band size: 27 kDa

Observed band size: 26 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.