abcam

ab76243

Anti-CTNNBL1 antibody [EP2669Y]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EP2669Y
Purification technique	Affinity purification Protein A
Concentration	0.102 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/100
Notes	Perform heat-mediated antigen retrieval before commencing with IHC staining protocol.

WB

Tested

Species	Human
Dilution info	1/5000
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/50
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	1/20
Notes	-

Target data

See full target information CTNNBL1

Function	Component of the PRP19-CDC5L complex that forms an integral part of the spliceosome and is required for activating pre-mRNA splicing. Participates in AID/AICDA-mediated somatic hypermutation (SHM) and class-switch recombination (CSR), 2 processes resulting in the production of high-affinity, mutated isotype-switched antibodies (PubMed:32484799).

Storage

Shipped at conditions	Conditional Ambient
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

Notes

This product has switched from a hybridoma to recombinant production method on 18th September 2023

Species reactivity
Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

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.

Supplementary info

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

Activity summary	CTNNBL1 also known as Catenin beta-like protein 1 is a protein involved in cellular processes with a molecular mass of approximately 62 kDa. The protein shows a wide expression pattern across various tissues including the heart liver and kidney but it is especially present in the nucleus and cytoplasm of cells. CTNNBL1 belongs to the armadillo/beta-catenin family which implies a role in intracellular signaling and structural functions within cells.
Biological function summary	CTNNBL1 plays a role in mRNA processing and the regulation of gene expression. It is a component of the spliceosomal complex which is essential in the process of splicing precursor mRNA into mature mRNA. This indicates its involvement in the control of mRNA stability and accurate gene expression. By participating in these molecular processes CTNNBL1 contributes to efficient protein synthesis and cellular regulation.
Pathways	CTNNBL1 influences several signaling cascades notably its role in the Wnt signaling and RNA splicing pathways. In the Wnt signaling pathway CTNNBL1 interacts with other proteins such as beta-catenin to regulate gene transcription

	related to cell proliferation and differentiation. Furthermore its involvement in the spliceosomal pathway connects it with proteins essential in mRNA splicing including components like small nuclear ribonucleoproteins.
Associated diseases and disorders	CTNNBL1 has been associated with conditions such as cancer and neurodegenerative disorders. Its interaction with beta-catenin and the Wnt pathway suggests a potential role in tumorigenesis given the pathway's importance in cell proliferation and survival. Additionally disruptions in RNA splicing and processing can link CTNNBL1 to neurological conditions where precise gene regulation is critical. These associations indicate its possible involvement in both promoting abnormal cell growth and contributing to neural dysfunction.

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

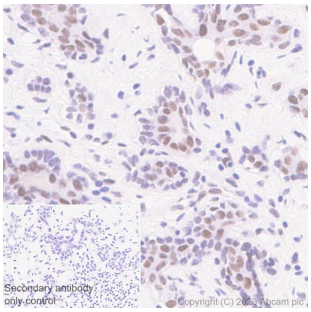
We do not recommend this combination. It is not covered by our product promise.

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.

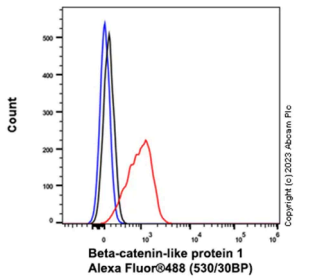
4 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CTNNBL1 antibody [EP2669Y] (ab76243)

CTNNBL1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CTNNBL1 antibody

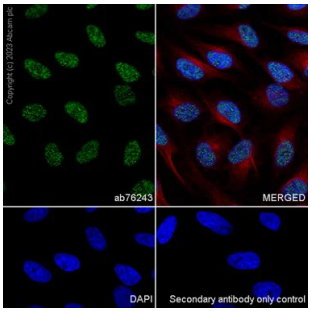
Immunohistochemical analysis of human breast tissue staining CTNNBL1 with ab76243 at 1/100 dilution. The human breast sections were performed by LeicaDS9800 (Bond™ Polymer Refine Detection). The sections were using Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins, then labeling ab76243 at 1/100 dilution for 30 mins at room temperature. Counterstained with hematoxylin. The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



Flow Cytometry - Anti-CTNNBL1 antibody [EP2669Y] (ab76243)

CTNNBL1 Flow Cytometry staining using rabbit Anti-CTNNBL1 antibody

Flow cytometry analysis showing positive staining in HeLa cells using ab76243 at 1:20 dilution, 5 µg/mL. Cells were fixed with 100µl 4% PFA for 10 min at RT, then permeabilized with 100µl 90% methanol for 30 min (-20° C) followed by blocking with 10% goat serum for 1h at room temperature. Incubate ab76243 for 30 min at room temperature (RT) and then incubate Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150081) for 30 min at room temperature.



Immunocytochemistry - Anti-CTNNBL1 antibody [EP2669Y] (ab76243)

HeLa cells were fixed in 4% PFA and permeabilized with 0.1% Triton X-100. Primary antibody, ab76243 at 1:50 was incubated overnight at 4° C, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed (ab150081) at 1/1000 dilution at RT for 45 min. Alexa Fluor® 594 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (ab195889) at 1/200 dilution, was co-incubated with ab76243 overnight at 4° C. Nucleus were visualized using DAPI.



Western blot - Anti-CTNNBL1 antibody [EP2669Y] (ab76243)

Blocking and diluting buffer and concentration: 5% NFDM/TBST, Primary antibody: incubated for 1h at room temperature. Secondary antibody: incubated for 1h at 1:20,000 at room temperature (ab97051)
All lanes:
Western blot - Anti-CTNNBL1 antibody [EP2669Y] (ab76243) at 1/5000 dilution

Lane 1:
HeLa (Human cervix adenocarcinoma epithelial cell) whole lysate at 15 µg

Lane 2:
MCF7 (Human breast adenocarcinoma epithelial cell) whole lysate at 15 µg

Exposure time: 180s

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