abcam

ab246325

Anti-NOLC1 antibody [EPR14896] - 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	EPR14896
Purification technique	Affinity purification Protein A

Reactivity data

WB

Expected

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

Predicted

Species	Mouse
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

Target data

See full target information NOLC1

Function

Nucleolar protein that acts as a regulator of RNA polymerase I by connecting RNA polymerase I with enzymes responsible for ribosomal processing and modification (PubMed:10567578, PubMed:26399832). Required for neural crest specification: following monoubiquitination by the BCR(KBTBD8) complex, associates with TCOF1 and acts as a platform to connect RNA polymerase I with enzymes responsible for ribosomal processing and modification, leading to remodel the translational program of differentiating cells in favor of neural crest specification (PubMed:26399832). Involved in nucleologenesis, possibly by playing a role in the maintenance of the fundamental structure of the fibrillar center and dense fibrillar component in the nucleolus (PubMed:9016786). It has intrinsic GTPase and ATPase activities (PubMed:9016786).

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

ab246325 is the carrier-free version of ab184550.

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	NOLC1 which also goes by the alternative name nucleolar and coiled-body phosphoprotein 1 has an important role in cellular mechanics. This protein weighs around 76 kDa. NOLC1 localizes in the nucleolus which means it has a strong connection to ribosome biogenesis in the cell. You will often find NOLC1 expressed in various human tissues particularly those with high proliferative capacity.
Biological function summary	Nucleolus assembly and maintenance depend notably on pathways involving NOLC1. It acts as part of an essential multiprotein complex. NOLC1 interacts with other nucleolar proteins to maintain nucleolar structure and facilitate ribosomal RNA (rRNA) synthesis. Its activities support the structural and functional integrity needed for efficient ribosome production.
Pathways	Ribosome biogenesis forms the critical framework where NOLC1 operates. This protein interacts closely within the RNA polymerase I transcription machinery and rRNA processing pathways working alongside proteins like fibrillarin and UBF1. NOLC1's presence within these pathways helps in coordinating the transcriptional and structural elements necessary for ribosome assembly.
Associated diseases and disorders	Aberrant NOLC1 function links to cancer and neurodegenerative diseases. Elevated NOLC1 levels sometimes correlate with increased tumor growth connecting it to malignant processes. Its interactions with proteins such as tumor protein p53 highlight its importance in regulating cell cycle and stress responses. Additionally

disruptions in its nucleolar roles have potential associations with neurodegenerative disorders indicating its critical role beyond normal cellular functions.

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

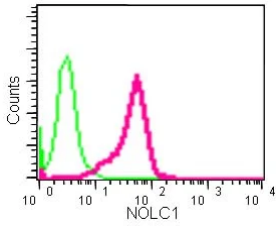
We do not recommend this combination. It is not covered by our product promise.

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.

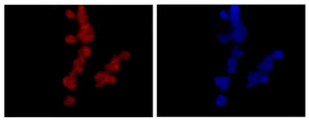
3 product images



Flow Cytometry (Intracellular) - Anti-NOLC1 antibody [EPR14896] - BSA and Azide free (ab246325)

NOLC1 Flow Cytometry (Intracellular) staining using rabbit Anti-NOLC1 antibody

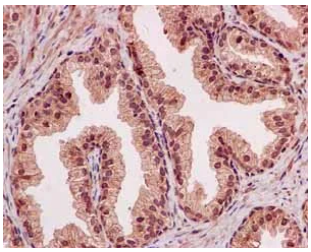
Intracellular flow cytometric analysis of 2% paraformaldehyde fixed HeLa cells labeling NOLC1 with ab184550 at a 1/300 dilution (red) or a rabbit IgG isotype control (green), followed by secondary Goat anti rabbit IgG (FITC) at 1/150 dilution.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab184550).



Immunocytochemistry/ Immunofluorescence - Anti-NOLC1 antibody [EPR14896] - BSA and Azide free (ab246325)

NOLC1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-NOLC1 antibody

Immunofluorescence staining of -20°C Acetone fixed K562 cells labeling NOLC1 using ab184550 at a 1/500 dilution (Red). Goat anti rabbit IgG (Alexa Fluor® 555) secondary at a 1/200 dilution. Counterstained with Dapi (blue).
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab184550).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NOLC1 antibody [EPR14896] - BSA and Azide free (ab246325)

NOLC1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-NOLC1 antibody

Immunohistochemical analysis of paraffin-embedded Human prostate tissue labeling NOLC1 at a 1/100 dilution, counterstained with Hematoxylin.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab184550).

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