abcam

ab249634

Anti-NAF1 antibody [EPR11516] - 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	EPR11516
Purification technique	Affinity purification

Reactivity data

ICC/IF

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

IP

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information H/ACA ribonucleoprotein complex non-core subunit NAF1

Function	RNA-binding protein required for the maturation of box H/ACA snoRNPs complex and ribosome biogenesis. During assembly of the H/ACA snoRNPs complex, it associates with the complex and disappears during maturation of the complex and is replaced by NOLA1/GAR1 to yield mature H/ACA snoRNPs complex. Probably competes with NOLA1/GAR1 for binding with DKC1/NOLA4.

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

ab249634 is the carrier-free version of ab171078.

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	NAF1 also known as NHP2L1 is a protein involved in essential mechanical processes in the cell. It weighs approximately 83 kDa and mainly localizes to the nucleus specifically within Cajal bodies and nucleolus. The protein plays a role in the assembly and maturation of small nucleolar ribonucleoproteins (snoRNPs) which are important for RNA processing. NAF1 expression occurs across diverse tissues indicating its importance in general cellular function.
Biological function summary	NAF1 is a component of the H/ACA ribonucleoprotein complex. It participates in guiding the chemical modification of ribosomal and other small nuclear RNAs. NAF1 acts as a scaffold facilitating the attachment of small RNAs and interacting with other proteins like NOP10 and GAR1 within the snoRNP complex. This organization is essential for the stability and function of the complex which impacts RNA folding and maturation ultimately regulating protein synthesis.
Pathways	The involvement of NAF1 in RNA modification is critical in the RNA splicing and ribosome biogenesis pathways. It plays a role in the maturation of ribosomal RNA an important step in assembling functioning ribosomes. NAF1's activity indirectly influences the translation process with links to additional proteins such as dyskerin which also have essential functions in ribosome assembly and RNA stability.
Associated diseases and disorders	Studies have connected NAF1 function to conditions like dyskeratosis congenita and certain cancers. The link to dyskeratosis congenita arises from its association with the stability and function of telomerase RNA a pathway shared with proteins such as dyskerin. In some cancers abnormalities in NAF1 expression or function have been implicated in tumor progression highlighting its potential role in maintaining genomic stability and cellular proliferation.

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.

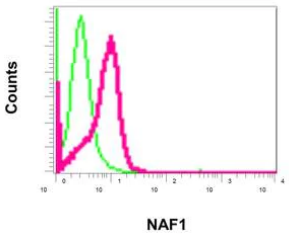
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

---

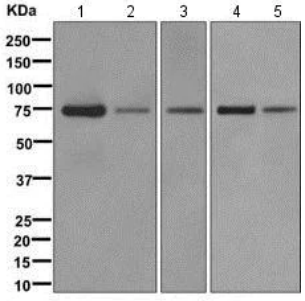
2 product images



Flow Cytometry (Intracellular) - Anti-NAF1 antibody [EPR11516] - BSA and Azide free (ab249634)

NAF1 Flow Cytometry (Intracellular) staining using rabbit Anti-NAF1 antibody

This data was developed using ab171078, the same antibody clone in a different buffer formulation.
Intracellular flow cytometric analysis of permeabilized HeLa cells labeling NAF1 with ab171078 at 1/10 dilution (red), compared to a rabbit IgG negative control (green).



Western blot - Anti-NAF1 antibody [EPR11516] - BSA and Azide free (ab249634)

This data was developed using ab171078, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-NAF1 antibody [EPR11516] (ab171078) at 1/1000 dilution

Lane 1:
HeLa cell lysate at 10 µg

Lane 2:
A431 cell lysate at 10 µg

Lane 3:
A549 cell lysate at 10 µg

Lane 4:
Namalwa cell lysate at 10 µg

Lane 5:
Caco-2 cell lysate at 10 µg

Predicted band size: 54 kDa

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