abcam

ab251226

Anti-SNAPC1 antibody [EPR16466] - 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	EPR16466

Reactivity data

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information SNAPC1

Function Part of the SNAPc complex required for the transcription of both RNA polymerase II and III small-nuclear RNA genes. Binds to the proximal sequence element (PSE), a non-TATA-box basal promoter element common to these 2 types of genes. Recruits TBP and BRF2 to the U6 snRNA TATA box.

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

ab251226 is the carrier-free version of ab197015.

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	SNAPC1 also known as small nuclear RNA activating complex polypeptide 1 is a component of the snRNA-activating protein complex. It has a mass of about 43 kDa. SNAPC1 plays an important role in the transcription initiation of small nuclear RNA (snRNA) genes. It functions through interaction with other components of the SNAPc complex. Researchers observe its expression in various tissues but it appears particularly active in cells with high transcriptional demand.
Biological function summary	The role of SNAPC1 lies in the assembly and regulation of the SNAPc complex. This complex functions primarily in the transcription of snRNA essential for mRNA processing and gene expression regulation. By participating in the formation of the snRNA-activating protein complex SNAPC1 facilitates the correct transcription and processing of snRNA a critical component in the spliceosomal machinery. It achieves this by forming stable interactions with other SNAPc components including SNAPC2 and SNAPC3 contributing to pre-mRNA splicing.
Pathways	SNAPC1 integrates into two major cellular pathways: transcription initiation and RNA splicing. It closely interacts with elements such as RNA polymerase II and SNAPC4 within these pathways. By securing a stable interaction with these elements SNAPC1 supports efficient transcription of snRNA and its subsequent processing. The proper function of SNAPC1 and related proteins ensures the accuracy of mRNA splicing impacting overall gene expression and cellular function.
Associated diseases and disorders	Defects or dysregulations involving SNAPC1 can link to disorders like Spinal Muscular Atrophy (SMA) and systemic lupus erythematosus (SLE). In SMA disruptions in snRNA processing lead to defects in the creation of essential proteins needed for motor neuron survival wherein SNAPC1 may hold a supporting role. In SLE abnormal snRNA processing can contribute to the production of autoantibodies linking SNAPC1 to the autoimmune pathway. SNAPC1's functional

interactions with proteins like SMN (Survival of Motor Neuron) protein in SMA further illustrate its involvement in these disorders.

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

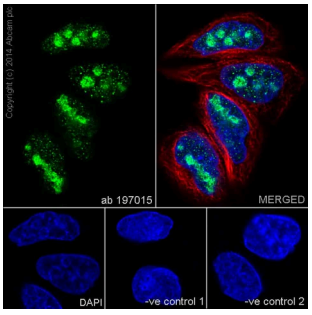
We do not recommend this combination. It is not covered by our product promise.

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

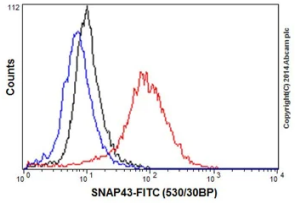


Immunocytochemistry/ Immunofluorescence - Anti-SNAPC1 antibody [EPR16466] - BSA and Azide free (ab251226)

SNAPC1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-SNAPC1 antibody

This data was developed using ab197015, the same antibody clone in a different buffer formulation.
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa cells (Human epithelial cells from cervix adenocarcinoma) labeling SNAPC1 with ab197015 at 1/250 dilution, followed by Alexa Fluor®488 Goat Anti-Rabbit IgG H&L (ab150077) secondary antibody at 1/500 dilution (green). Nuclear staining on HeLa cell line is observed. The nuclear counter stain is DAPI (blue). Tubulin is detected with ab7291 (anti-Tubulin mouse mAb) at 1/1000 dilution and ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution (red).
The negative controls are as follows:
-ve control 1: ab197015 at 1/250 dilution followed by ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution.

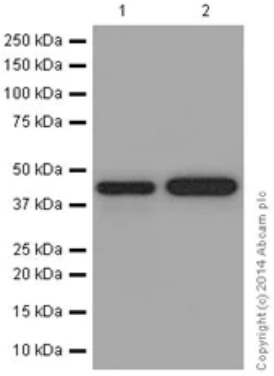
-ve control 2: ab7291 (anti-Tubulin mouse mAb) at 1/1000 dilution followed by ab150077 (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/500 dilution.



Flow Cytometry (Intracellular) - Anti-SNAPC1 antibody [EPR16466] - BSA and Azide free (ab251226)

SNAPC1 Flow Cytometry (Intracellular) staining using rabbit Anti-SNAPC1 antibody

This data was developed using ab197015, the same antibody clone in a different buffer formulation.
Intracellular flow cytometric analysis of U-87 MG (Human glioblastoma-astrocytoma epithelial cell line) cells labeling SNAPC1 with ab197015 at 1/60 dilution (red) compared with a rabbit monoclonal IgG isotype control (black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit IgG (FITC) at 1/150 dilution was used as the secondary antibody.



Western blot - Anti-SNAPC1 antibody [EPR16466] - BSA and Azide free (ab251226)

SNAPC1 Western blot staining using rabbit Anti-SNAPC1 antibody

This data was developed using ab197015, the same antibody clone in a different buffer formulation.
Blocking and dilution buffer: 5% NFDM/TBST.

All lanes:
Western blot - Anti-SNAPC1 antibody [EPR16466] (ab197015) at 1/5000 dilution

Lane 1:
Human testis tissue lysate at 20 µg

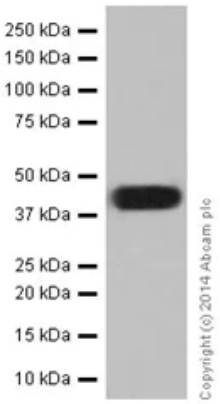
Lane 2:
HeLa (Human epithelial cells from cervix adenocarcinoma) cell lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 43 kDa

Observed band size: 43 kDa



Western blot - Anti-SNAPC1 antibody [EPR16466] - BSA and Azide free (ab251226)

SNAPC1 Western blot staining of Human fetal brain tissue lysate using rabbit Anti-SNAPC1 antibody

This data was developed using ab197015, the same antibody clone in a different buffer formulation.
Blocking and dilution buffer: 5% NFDM/TBST.

All lanes:
Western blot - Anti-SNAPC1 antibody [EPR16466] (ab197015) at 1/5000 dilution

All lanes:
Human fetal brain tissue lysate at 10 µg

Secondary

All lanes:
Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

Predicted band size: 43 kDa

Observed band size: 43 kDa

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