abcam

ab236121

Anti-HNRNPA0 antibody [EP16085] - BSA and Azide free

Recombinant | RabMAb | KO Validated

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	EP16085
Purification technique	Affinity purification Protein A

Reactivity data

WB

Tested

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-P

Tested

Species	Human, Mouse
Dilution info	-
Notes	-

Expected

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

Target data

See full target information HNRNPA0

Function	mRNA-binding component of ribonucleosomes. Specifically binds AU-rich element (ARE)-containing mRNAs. Involved in post-transcriptional regulation of cytokines mRNAs.

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

ab236121 is the carrier-free version of ab197023.

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 heterogeneous nuclear ribonucleoprotein A0 (HNRNPA0) is a protein involved in RNA binding and regulation of RNA metabolism. Commonly referred to as HNRNPA0 it has a molecular mass close to 34 kDa. This protein is expressed in a variety of tissues including brain liver and spleen suggesting its widespread functional relevance. HNRNPA0 plays a role in the post-transcriptional regulation of gene expression by influencing mRNA stability and splicing.
Biological function summary	HNRNPA0 modulates RNA processing and is actively involved in mRNA decay and stabilization processes. It forms complexes with other hnRNP proteins and interacts with mRNA substrates to regulate their fate within the cell. This protein contributes to gene expression regulation under stress conditions by altering the stability of specific mRNAs. Such regulation is important for maintaining proper cellular responses to external stress factors.
Pathways	HNRNPA0 is involved in the p38 MAPK signaling pathway where it influences the stability of mRNAs encoding inflammatory mediators. It also plays a part in the apoptotic pathway where it interacts with proteins such as TRAF2 and apoptosis as death domain-like protein (ADRP). Through these pathways HNRNPA0 contributes to cellular stress responses inflammation and programmed cell death linking it to essential cellular processes.
Associated diseases and disorders	HNRNPA0 has been implicated in neurodegenerative diseases like amyotrophic lateral sclerosis (ALS) where protein aggregates may form due to dysregulation of HNRNPA0 activity. It is also associated with certain types of cancer such as leukemia where altered expression levels may impact mRNA stability and cell proliferation. Through these disease contexts HNRNPA0 interacts with proteins like TDP-43 in ALS and has connections to proto-oncogenes in cancer highlighting its potential role as a therapeutic target.

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.

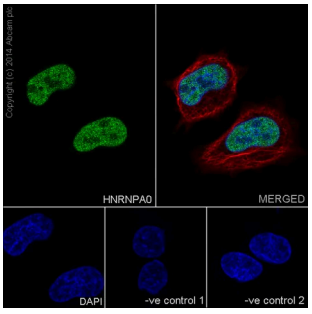
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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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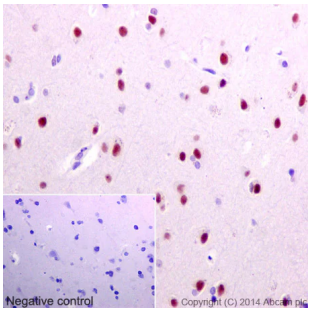
5 product images



Immunocytochemistry/ Immunofluorescence - Anti-HNRNPA0 antibody [EP16085] - BSA and Azide free (ab236121)

HNRNPA0 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-HNRNPA0 antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling HNRNPA0 with ab197023 at 1/1000 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (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: ab197023 at 1/1000 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 1/400 dilution.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab197023).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HNRNPA0 antibody [EP16085] - BSA and Azide free (ab236121)

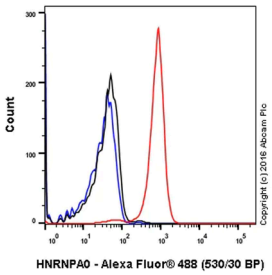
HNRNPA0 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-HNRNPA0 antibody

Immunohistochemical analysis of paraffin-embedded Human cerebral cortex labeling HNRNPA0 with ab197023 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Nuclear staining on Human cerebral cortex tissue is observed. Counter stained with Hematoxylin.

Negative control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab197023).

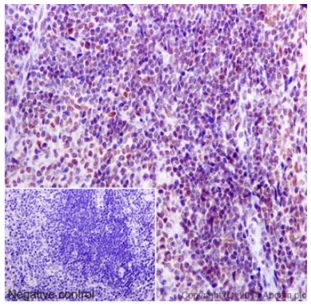
Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-HNRNPA0 antibody [EP16085] - BSA and Azide free (ab236121)

HNRNPA0 Flow Cytometry (Intracellular) staining using rabbit Anti-HNRNPA0 antibody

Intracellular Flow Cytometry analysis of HeLa cells labelling HNRNPA0 (red) with purified ab197023 at dilution of 1/150. The secondary antibody used was Alexa Fluor® 488 goat-anti-rabbit IgG (1/2000). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Isotype control antibody was Rabbit monoclonal IgG (black). The blue line shows cells without incubation with primary antibody and secondary antibody.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab197023).



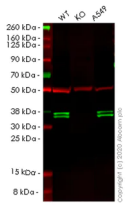
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HNRNPA0 antibody [EP16085] - BSA and Azide free (ab236121)

HNRNPA0 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-HNRNPA0 antibody

Immunohistochemical analysis of paraffin-embedded Mouse spleen labeling HNRNPA0 with ab197023 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Nuclear staining on Mouse spleen tissue is observed. Counter stained with Hematoxylin. Negative control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab197023).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Western blot - Anti-HNRNPA0 antibody [EP16085] - BSA and Azide free (ab236121)

HNRNPA0 Western blot staining using rabbit Anti-HNRNPA0 antibody

This data was developed using the same antibody clone in a different buffer formulation (ab197023).
Lanes 1-3: Merged signal (red and green). Green - ab197023 observed at 32,34 kDa. Red - loading control ab8245 observed at 36 kDa.

ab197023 Anti-HNRNPA0 antibody [EP16085] was shown to specifically react with HNRNPA0 in wild-type HEK293T cells. Loss of signal was observed when knockout cell line ab266314 (knockout cell lysate ab257989) was used. Wild-type and HNRNPA0 knockout samples were subjected to SDS-

PAGE. ab197023 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.
All lanes:
Western blot - Anti-HNRNPA0 antibody [EP16085] (ab197023) at 1/1000 dilution

Lane 1:
Wild-type HEK293T cell lysate at 20 µg

Lane 2:
HNRNPA0 knockout HEK293T cell lysate at 20 µg

Lane 2:
Western blot - Human HNRNPA0 knockout HEK-293T cell line (ab266314)

Lane 3:
A549 cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) at 1/10000 dilution

Predicted band size: 31 kDa

Observed band size: 32 kDa, 34 kDa

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