abcam

ab199724

Anti-HNRPAB antibody [EPR16944]

Recombinant | RabMAb | KO Validated

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	EPR16944
Purification technique	Affinity purification Protein A
Concentration	0.335 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	1/30
Notes	-

Expected

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

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Species	Rat
Dilution info	1/1000
Notes	-

Species	Human
Dilution info	1/1000
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/500
Notes	-

Expected

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

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1 µg/mL
Notes	-

Expected

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

IHC-P

Tested

Species	Mouse
Dilution info	1/1000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Rat
Dilution info	1/1000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Human
Dilution info	1/1000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target data

See full target information HNRNPAB

Function	Binds single-stranded RNA. Has a high affinity for G-rich and U-rich regions of hnRNA. Also binds to APOB mRNA transcripts around the RNA editing site.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
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

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	Heterogeneous nuclear ribonucleoprotein A/B often called HNRPAB functions as a part of the ribonucleoprotein complex. This protein interacts with pre-mRNA in the nucleus and influences its processing. HNRPAB has a molecular mass of about 37 kilodaltons. Scientists find it highly expressed in various tissues including the brain and testis indicating its significant role in these areas. The protein contains RNA-binding domains and plays a part in the regulation of alternative splicing.
Biological function summary	HNRPAB influences the splicing and transport of pre-mRNA impacting the maturation process of mRNA. It collaborates with other hnRNPs and splicing factors to modulate gene expression. The protein sometimes forms part of larger complexes that are essential for RNA processing. This complex helps to stabilize RNA molecules assisting in their proper transport and translation in the cytoplasm.

Pathways	HNRPAB is involved in the regulation of RNA metabolism and processing pathways. It forms a network with other proteins like hnRNP F and hnRNP H impacting gene expression by influencing mRNA stability and availability. In conjunction with these proteins HNRPAB plays a role in the signal transduction pathways affecting cellular responses and adaptations.
Associated diseases and disorders	HNRPAB has connections to cancer and neurodegenerative disorders. Its dysregulation can lead to abnormal splicing patterns contributing to oncogenesis. In cancer associations with proteins like c-Myc indicate a role in tumorigenesis. In neurodegenerative diseases altered HNRPAB activity could impact neuronal survival contributing to the progression of disorders like Alzheimer's disease. The protein's interaction with tau suggests a potential link to tauopathies which are related to abnormal protein aggregations within neurons.

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

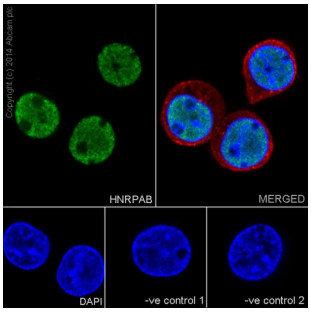
We do not recommend this combination. It is not covered by our product promise.

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.

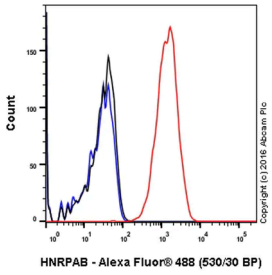
10 product images



Immunocytochemistry/ Immunofluorescence - Anti-HNRPAB antibody [EPR16944] (ab199724)

HNRPAB Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-HNRPAB antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized Jurkat (Human T cell leukemia cells from peripheral blood) cells labeling HNRPAB with ab199724 at 1/500 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/500 dilution (green). Nuclear staining on Jurkat cell line is observed. The nuclear counterstain 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: ab199724 at 1/500 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.

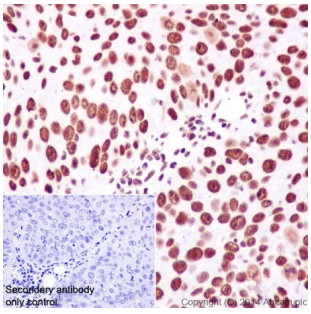


Flow Cytometry (Intracellular) - Anti-HNRPAB antibody [EPR16944] (ab199724)

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

ab199724 staining HNRPAB in Jurkat (human acute T cell leukemia) cellsby intracellular flow cytometry. Cells were fixed with 4% paraformaldehyde and the sample was incubated with the primary antibody at a dilution of 1/2700. A goat anti rabbit IgG (Alexa Fluor® 488) at a dilution of 1/2000 was used as the secondary antibody.
Isoytype control: Rabbit monoclonal IgG (Black)

Unlabelled control: Cell without incubation with primary antibody and secondary antibody (Blue)

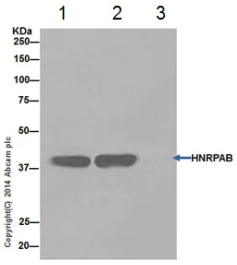


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HNRPAB antibody [EPR16944] (ab199724)

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

Immunohistochemical analysis of paraffin-embedded Human cervix carcinoma tissue labeling HNRPAB with ab199724 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) secondary antibody at 1/500 dilution. Nuclear staining on Human cervix carcinoma tissue is observed. Counter stained with Hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051).

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-HNRPAB antibody [EPR16944] (ab199724)

HNRPAB was immunoprecipitated from 1mg of K562 (Human chronic myelogenous leukemia cells from bone marrow) whole cell lysate with ab199724 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab199724 at 1/1000 dilution. Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG, was used as secondary antibody at 1/1500 dilution.
Lane 1: K562 whole cell lysate 10 µg (Input). Lane 2: ab199724 IP in K562 whole cell lysate. Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab199724 in K562 whole cell lysate.

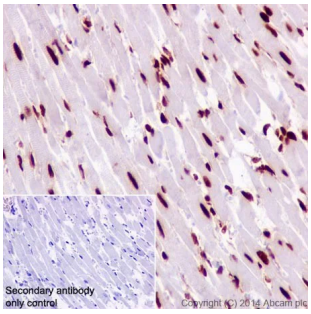
Blocking and dilution buffer and concentration: 5% NFDM/TBST.

All lanes:
Immunoprecipitation - Anti-HNRPAB antibody [EPR16944] (ab199724)

Predicted band size: 36 kDa, 50 kDa

Observed band size: 24 kDa

Exposure time: 3s

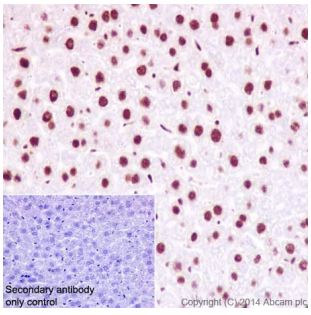


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HNRPAB antibody [EPR16944] (ab199724)

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

Immunohistochemical analysis of paraffin-embedded rat cardiac muscle tissue labeling HNRPAB with ab199724 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) secondary antibody at 1/500 dilution. Nuclear staining on rat cardiac muscle tissue is observed. Counter stained with Hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051).

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

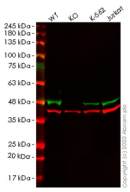


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HNRPAB antibody [EPR16944] (ab199724)

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

Immunohistochemical analysis of paraffin-embedded mouse liver tissue labeling HNRPAB with ab199724 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) secondary antibody at 1/500 dilution. Nuclear staining on mouse liver tissue is observed. Counter stained with Hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051).

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Western blot - Anti-HNRPAB antibody [EPR16944] (ab199724)

HNRPAB Western blot staining using rabbit Anti-HNRPAB antibody

Lanes 1-4: Merged signal (red and green). Green - ab199724 observed at 48 kDa. Red - loading control ab8245 observed at 36 kDa.
ab199724 Anti-HNRPAB antibody [EPR16944] was shown to specifically react with HNRPAB in wild-type HEK293T cells. Loss of signal was observed when knockout cell line ab266459 (knockout cell lysate ab257467) was used. Wild-type and HNRPAB knockout samples were subjected to SDS-PAGE. ab199724 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated at room temperature for 2. 5 hours 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-HNRPAB antibody [EPR16944] (ab199724) at 1/1000 dilution

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

Lane 2:
Western blot - Human HNRNPAB knockout HEK-293T cell lysate (ab257467) at 20 µg

Lane 3:
K-562 cell lysate at 20 µg

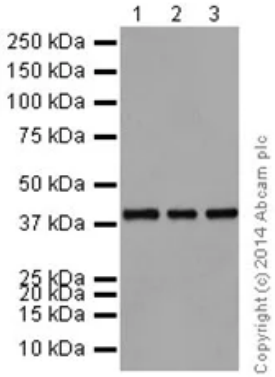
Lane 4:
Jurkat cell lysate at 20 µg

Secondary

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

Predicted band size: 36 kDa

Observed band size: 48 kDa



Western blot - Anti-HNRPAB antibody [EPR16944] (ab199724)

The expression profile observed is consistent with what has been described in the literature PMID: 22332140.
Blocking/Dilution buffer: 5% NFDM/TBST.

All lanes:
Western blot - Anti-HNRPAB antibody [EPR16944] (ab199724) at 1/5000 dilution

Lane 1:
K562 (Human chronic myelogenous leukemia cells from bone marrow) whole cell lysate at 20 µg

Lane 2:
Jurkat (Human T cell leukemia cells from peripheral blood) whole cell lysate at 20 µg

Lane 3:
HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate at 20 µg

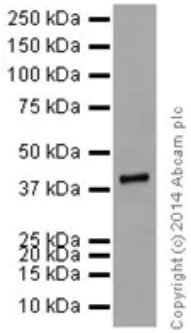
Secondary

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

Predicted band size: 36 kDa

Observed band size: 42 kDa

Exposure time: 5s



Western blot - Anti-HNRPAB antibody [EPR16944] (ab199724)

The expression profile observed is consistent with what has been described in the literature PMID: 22332140.
Blocking/Dilution buffer: 5% NFDM/TBST.

All lanes:
Western blot - Anti-HNRPAB antibody [EPR16944] (ab199724) at 1/5000 dilution

All lanes:
Human fetal brain lysate at 20 µg

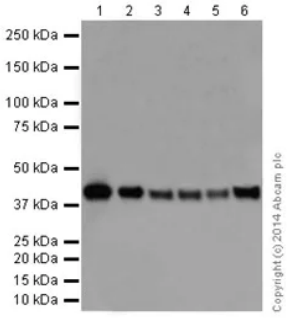
Secondary

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

Predicted band size: 36 kDa

Observed band size: 42 kDa

Exposure time: 10s



Western blot - Anti-HNRPAB antibody [EPR16944] (ab199724)

The expression profile observed is consistent with what has been described in the literature PMID: 22332140.
Blocking/Dilution buffer: 5% NFDM/TBST.

All lanes:
Western blot - Anti-HNRPAB antibody [EPR16944] (ab199724) at 1/1000 dilution

Lane 1:
Mouse brain lysates at 10 µg

Lane 2:
Rat brain lysates at 10 µg

Lane 3:
C6 (Rat glial tumor cells) whole cell lysate at 10 µg

Lane 4:
RAW 264.7 (Mouse macrophage cells transformed with Abelson murine leukemia virus) whole cell lysate at 10 µg

Lane 5:
PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysate at 10 µg

Lane 6:
NIH/3T3 (Mouse embyro fibroblast cells) whole cell lysate at 10 µg

Secondary

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

Predicted band size: 36 kDa

Observed band size: 42 kDa

Exposure time: 10s

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