

Anti-RNA Helicase A antibody [EPR13521] - BSA and Azide free ab238985

Recombinant RabMAb

13 Images

Overview

Product name	Anti-RNA Helicase A antibody [EPR13521] - BSA and Azide free
Description	Rabbit monoclonal [EPR13521] to RNA Helicase A - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HeLa, MCF7 and THP-1 cell lysates; Mouse and rat brain, liver and testis tissue lysates. IHC-P: Human kidney carcinoma and lung adenocarcinoma tissue, Human and mouse breast carcinoma, human, mouse and rat testis tissue. ICC/IF: HeLa cells Flow Cyt (intra): HeLa cells
General notes	ab238985 is the carrier-free version of ab183731 .

Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

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.

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.

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 production

For more information [see here](#).

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb[®] patents](#).

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR13521
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab238985 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 141 kDa (predicted molecular weight: 141 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See <u>IHC antigen retrieval protocols</u> .
ICC/IF		Use at an assay dependent concentration.

Target

Function Unwinds double-stranded DNA and RNA in a 3' to 5' direction. Alteration of secondary structure may subsequently influence interactions with proteins or other nucleic acids. Functions as a transcriptional activator. Component of the CRD-mediated complex that promotes MYC mRNA stability.

Sequence similarities Belongs to the DEAD box helicase family. DEAH subfamily.
Contains 2 DRBM (double-stranded RNA-binding) domains.
Contains 1 helicase ATP-binding domain.
Contains 1 helicase C-terminal domain.

Domain The MTAD domain mediates interaction with the RNA polymerase II holoenzyme. The NTD domain is necessary and sufficient for nucleo-cytoplasmic shuttling and interaction with HRMT1L2 and SMN1.

Post-translational modifications

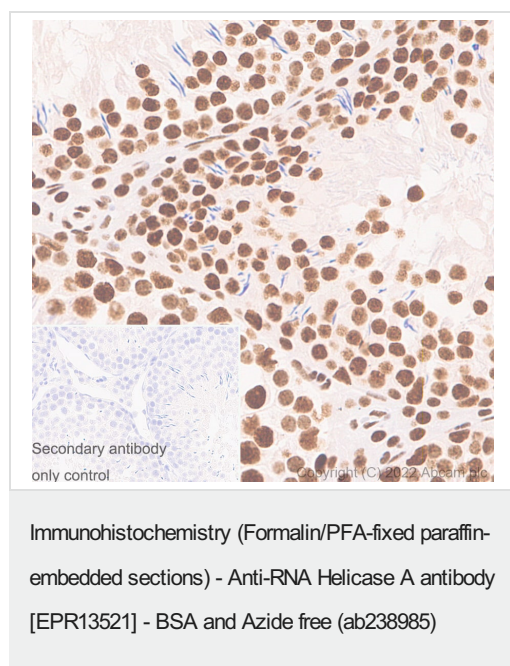
Methylated. HRMT1L2 mediated methylation of undefined Arg residues in the NTD is required for nuclear localization.

May be phosphorylated by PRKDC/XRCC7. Phosphorylated upon DNA damage, probably by ATM or ATR.

Cellular localization

Nucleus > nucleolus. Cytoplasm. Localized in cytoplasmic mRNP granules containing untranslated mRNAs. Can shuttle between nucleus and cytoplasm.

Images



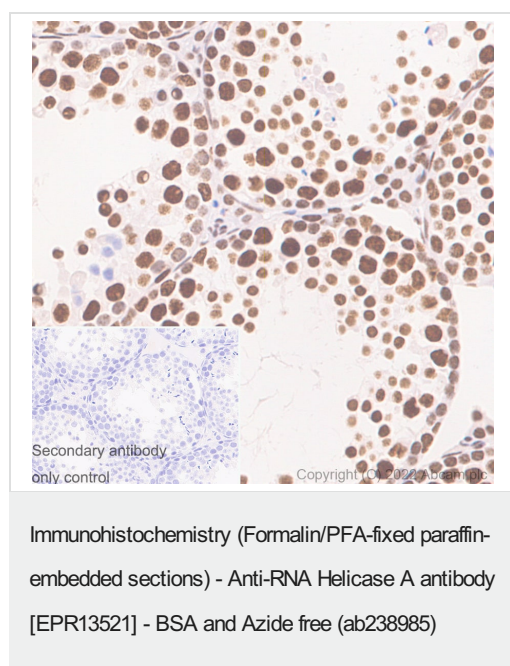
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab183731](#)).

Immunohistochemical analysis of paraffin-embedded Rat testis tissue labeling RNA Helicase A with [ab183731](#) at 1/1000 (0.11 µg/ml) dilution followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). This section was counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.

Nuclear staining on rat testis. The section was incubated with [ab183731](#) for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



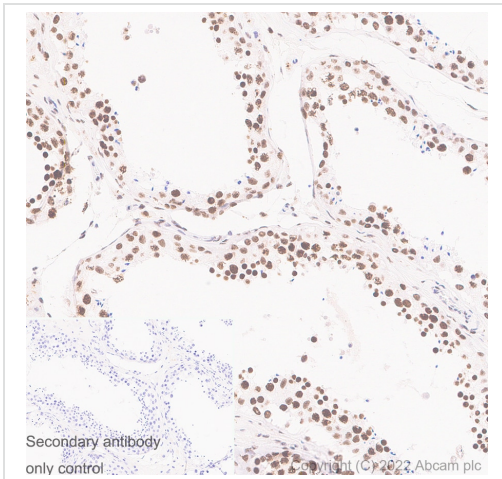
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab183731](#)).

Immunohistochemical analysis of paraffin-embedded Mouse testis tissue labeling RNA Helicase A with [ab183731](#) at 1/1000 (0.11 µg/ml) dilution followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). This section was counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.

Nuclear staining on mouse testis. The section was incubated with [ab183731](#) for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RNA Helicase A antibody [EPR13521] - BSA and Azide free (ab238985)

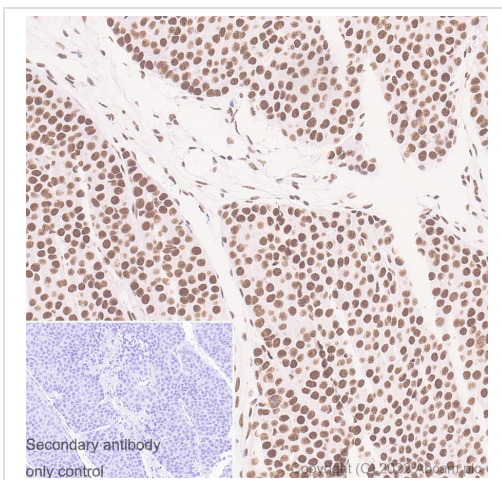
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab183731](#)).

Immunohistochemical analysis of paraffin-embedded Human testis tissue labeling RNA Helicase A with [ab183731](#) at 1/1000 (0.11 µg/ml) dilution followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). This section was counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.

Nuclear staining on human testis. The section was incubated with [ab183731](#) for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RNA Helicase A antibody [EPR13521] - BSA and Azide free (ab238985)

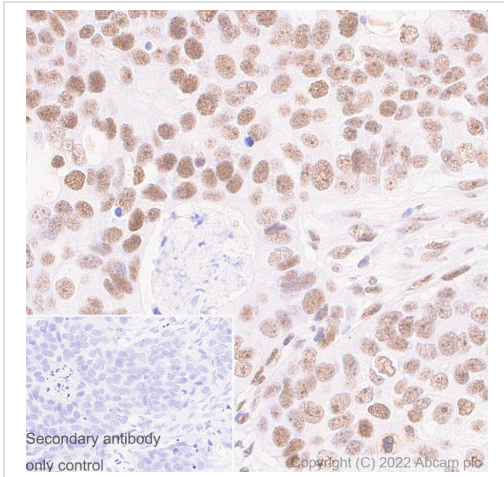
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab183731](#)).

Immunohistochemical analysis of paraffin-embedded Mouse breast carcinoma tissue labeling RNA Helicase A with [ab183731](#) at 1/1000 (0.11 µg/ml) dilution followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). This section was counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.

Nuclear staining on mouse breast carcinoma. The section was incubated with [ab183731](#) for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RNA Helicase A antibody [EPR13521] - BSA and Azide free (ab238985)

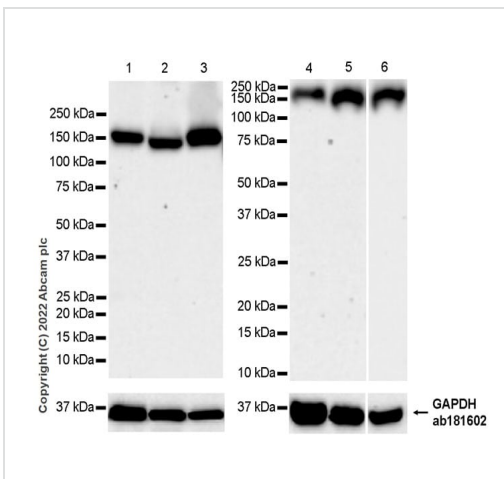
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab183731**).

Immunohistochemical analysis of paraffin-embedded Human breast carcinoma tissue labeling RNA Helicase A with **ab183731** at 1/1000 (0.11 µg/ml) dilution followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). This section was counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.

Nuclear staining on human breast carcinoma. The section was incubated with **ab183731** for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



Western blot - Anti-RNA Helicase A antibody [EPR13521] - BSA and Azide free (ab238985)

All lanes : Anti-RNA Helicase A antibody [EPR13521] (**ab183731**) at 1/1000 dilution

Lane 1 : Rat brain tissue lysate

Lane 2 : Rat liver tissue lysate

Lane 3 : Rat testis tissue lysate

Lane 4 : Mouse brain tissue lysate

Lane 5 : Mouse liver tissue lysate

Lane 6 : Mouse testis tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 141 kDa

Observed band size: 150 kDa

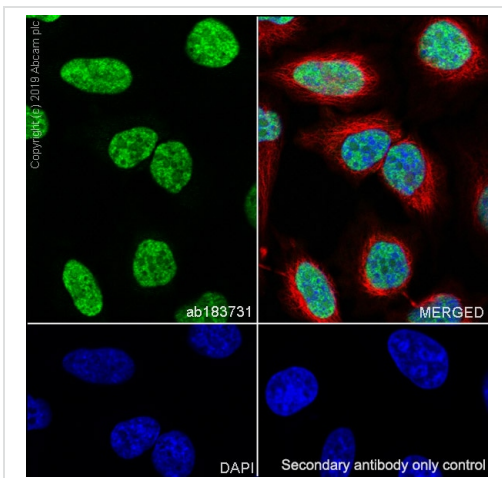
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab183731**).

Blocking and diluting buffer and concentration: 5% NFDN/TBST.

ab181602 was used as a GAPDH loading control.

Exposure time: Lanes 1-5: 103 seconds, Lane 6: 26 seconds.

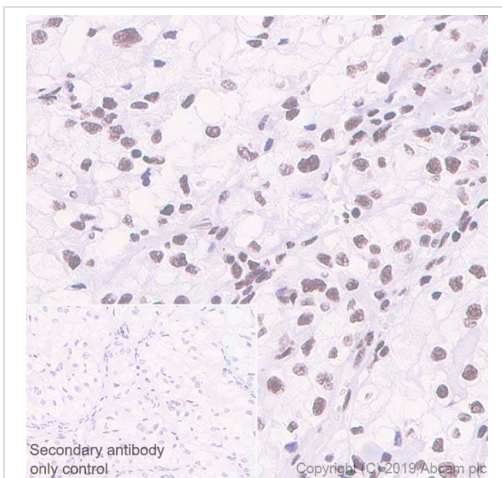
Lysates were freshly made and used immediately to minimize protein degradation.



Immunocytochemistry/ Immunofluorescence - Anti-RNA Helicase A antibody [EPR13521] - BSA and Azide free (ab238985)

Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling RNA Helicase A with purified **ab183731** at 1/50 dilution (2.2 µg/mL). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor[®] 594) 1/200 (2.5 µg/mL). Goat anti rabbit IgG (Alexa Fluor[®] 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/mL) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.

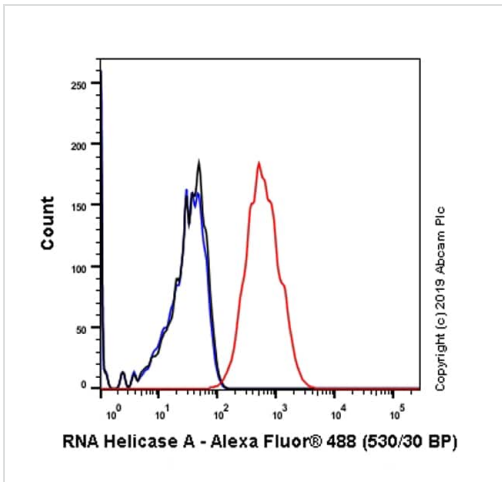
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab183731**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RNA Helicase A antibody [EPR13521] - BSA and Azide free (ab238985)

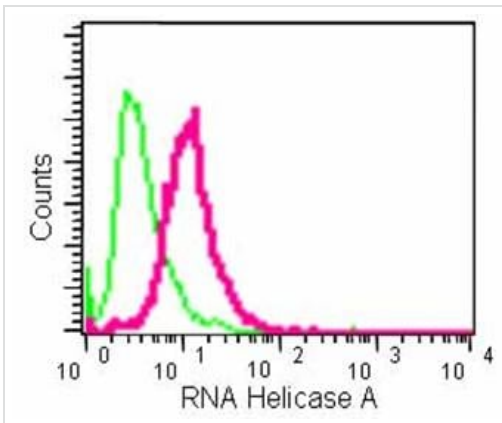
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney carcinoma tissue sections labeling RNA Helicase A with purified **ab183731** at 1/400 dilution (0.28 µg/mL). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab183731**).



Flow Cytometry (Intracellular) - Anti-RNA Helicase A antibody [EPR13521] - BSA and Azide free (ab238985)

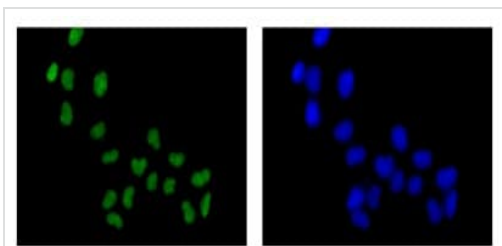
Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling RNA Helicase A with purified **ab183731** at 1/20 dilution (5µg/mL) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue). This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab183731**).



Flow Cytometry (Intracellular) - Anti-RNA Helicase A antibody [EPR13521] - BSA and Azide free (ab238985)

Intracellular Flow Cytometry analysis of HeLa cells using **ab183731** (unpurified) at a 1/10 dilution (red) or a Rabbit monoclonal IgG (negative) (green). Goat anti rabbit IgG (FITC) secondary used at a 1/150 dilution.

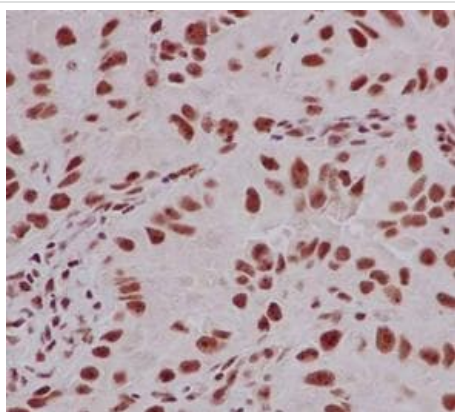
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab183731**).



Immunocytochemistry/ Immunofluorescence - Anti-RNA Helicase A antibody [EPR13521] - BSA and Azide free (ab238985)

Immunocytochemistry analysis of HeLa cells (fixative -20? Acetone) labeling RNA Helicase A with **ab183731** (unpurified) at a 1/250 dilution. Goat anti rabbit IgG (Alexa Fluor® 488) secondary used at a 1/200 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab183731**).



Immunohistochemical analysis of paraffin embedded Human lung adenocarcinoma tissue labeling RNA Helicase A with **ab183731** (unpurified) at a 1/100 dilution. Prediluted HRP conjugated Rabbit IgG secondary used. Counterstained with Hematoxylin. Heat mediated antigen retrieval was performed with EDTA buffer pH 9 before commencing with IHC staining protocol.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab183731**).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RNA Helicase A antibody [EPR13521] - BSA and Azide free (ab238985)

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-RNA Helicase A antibody [EPR13521] - BSA and Azide free (ab238985)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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