# abcam

## Product datasheet

## Anti-RNA Helicase A antibody [EPR13521] ab183731



重组 RabMAb

14 图像 6 References

概述

产品名称 Anti-RNA Helicase A抗体[EPR13521]

描述 兔单克隆抗体[EPR13521] to RNA Helicase A

宿主 Rabbit

经测试应用 适用于: Flow Cyt (Intra), IHC-P, WB, ICC/IF

种属反应性 与反应: Mouse, Rat, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 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

常规说明 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**.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

存储溶液 pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 0.05% BSA, 40% Glycerol (glycerin, glycerine), PBS

纯度 Protein A purified

克隆 单克隆

克隆编号 EPR13521

**同种型** IgG

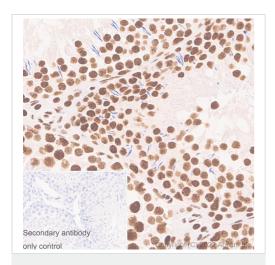
## 应用

## The Abpromise guarantee Abpromise™承诺保证使用ab183731于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		1/10 - 1/20. <b>ab172730</b> - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
IHC-P		1/400. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See IHC antigen retrieval protocols.  For unpurified use at 1/50 - 1/100.
WB		1/10000 - 1/50000. Detects a band of approximately 141 kDa (predicted molecular weight: 141 kDa).
ICC/IF		1/50. For unpurified use at 1/250.

靶标	
功能	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.
序列相似性	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.
结 <b>构域</b>	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.
翻译后修饰	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.
细胞定位	Nucleus > nucleolus. Cytoplasm. Localized in cytoplasmic mRNP granules containing untranslated mRNAs. Can shuttle between nucleus and cytoplasm.



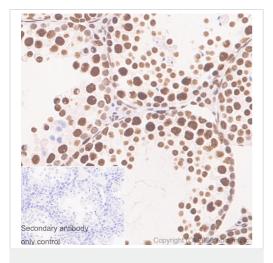
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-RNA Helicase A antibody [EPR13521] (ab183731)

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.



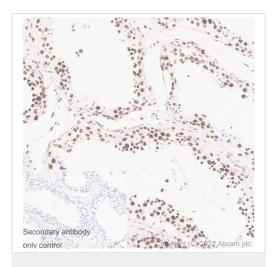
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-RNA Helicase A antibody [EPR13521] (ab183731)

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.



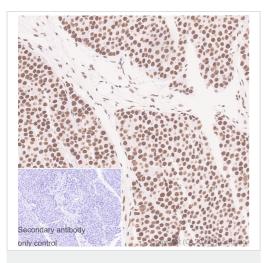
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-RNA Helicase A antibody [EPR13521] (ab183731)

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.

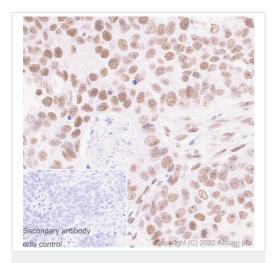


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-RNA Helicase A antibody [EPR13521] (ab183731)

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 paraffinembedded sections) - Anti-RNA Helicase A antibody [EPR13521] (ab183731)

1 2 3 4 5 6

250 kDa 150 kDa 100 kDa 1

Western blot - Anti-RNA Helicase A antibody [EPR13521] (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.

**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 lgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 141 kDa

Observed band size: 150 kDa

Blocking and diluting buffer and concentration: 5% NFDM/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.



Western blot - Anti-RNA Helicase A antibody [EPR13521] (ab183731)

**All lanes :** Anti-RNA Helicase A antibody [EPR13521] (ab183731) at 1/10000 dilution (Purified)

**Lane 1 :** HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

**Lane 2 :** MCF7 (Human breast adenocarcinoma epithelial cell) whole cell lysates

Lane 3 : THP-1 (Human monocytic leukemia monocyte) whole cell lysates

Lysates/proteins at 20 µg per lane.

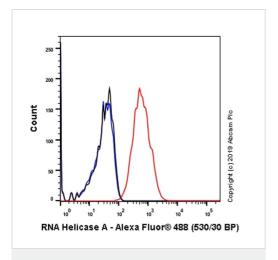
#### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

**Predicted band size:** 141 kDa **Observed band size:** 128,141 kDa

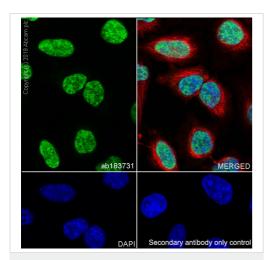
Blocking/Diluting Buffer and concentration: 5% NFDM/TBST

The observed bands are consistent with what are described in PMID: 28337295



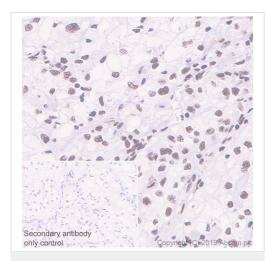
Flow Cytometry (Intracellular) - Anti-RNA Helicase A antibody [EPR13521] (ab183731)

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<sup>®</sup> 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).



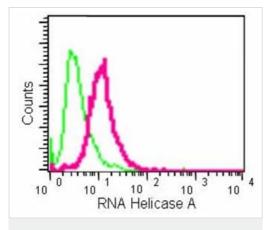
Immunocytochemistry/ Immunofluorescence - Anti-RNA Helicase A antibody [EPR13521] (ab183731)

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



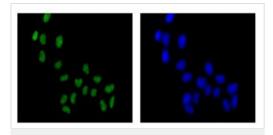
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-RNA Helicase A antibody [EPR13521] (ab183731)

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.



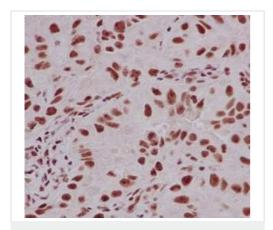
Flow Cytometry (Intracellular) - Anti-RNA Helicase A antibody [EPR13521] (ab183731)

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.



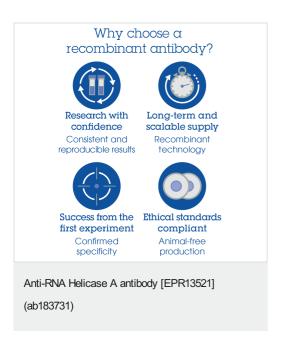
Immunocytochemistry/ Immunofluorescence - Anti-RNA Helicase A antibody [EPR13521] (ab183731)

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



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-RNA Helicase A antibody [EPR13521] (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.



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