

### Anti-eIF4A3 antibody [EPR14301(B)] ab180573

**重组 RabMAb**

★★★★★ **5 Abreviews** **9 References** **7 图像**

#### 概述

<b>产品名称</b>	Anti-eIF4A3抗体[EPR14301(B)]
<b>描述</b>	兔单克隆抗体[EPR14301(B)] to eIF4A3
<b>宿主</b>	Rabbit
<b>经测试应用</b>	<b>适用于:</b> Flow Cyt (Intra), WB, IHC-P, ICC/IF, IP
<b>种属反应性</b>	<b>与反应:</b> Human <b>预测可用于:</b> Mouse, Rat, Chicken, Cow, Pig, Xenopus laevis, Zebrafish, Cynomolgus monkey, Xenopus tropicalis 
<b>免疫原</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>阳性对照</b>	MCF7, HeLa, Raji and HepG2 whole cell lysate ( <b>ab7900</b> ); MCF7 and HeLa cells; Human prostate tissue.
<b>常规说明</b>	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> For more information <b><a href="#">see here</a></b> . Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <b><a href="#">RabMAb<sup>®</sup> patents</a></b> .

#### 性能

<b>形式</b>	Liquid
<b>存放说明</b>	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.
<b>存储溶液</b>	Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
<b>纯度</b>	Protein A purified
<b>克隆</b>	单克隆
<b>克隆编号</b>	EPR14301(B)

## 应用

## The Abpromise guarantee

Abpromise™承诺保证使用ab180573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)		1/160. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★★★★★ (2)	1/1000 - 1/2000. Detects a band of approximately 47 kDa (predicted molecular weight: 47 kDa).
IHC-P		1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF	★★★★★ (2)	1/500.
IP	★★★★★ (1)	1/30.

## 靶标

## 功能

ATP-dependent RNA helicase. Component of a splicing-dependent multiprotein exon junction complex (EJC) deposited at splice junction on mRNAs. The EJC is a dynamic structure consisting of a few core proteins and several more peripheral nuclear and cytoplasmic associated factors that join the complex only transiently either during EJC assembly or during subsequent mRNA metabolism. Core components of the EJC, that remains bound to spliced mRNAs throughout all stages of mRNA metabolism, functions to mark the position of the exon-exon junction in the mature mRNA and thereby influences downstream processes of gene expression including mRNA splicing, nuclear mRNA export, subcellular mRNA localization, translation efficiency and nonsense-mediated mRNA decay (NMD). Constitutes at least part of the platform anchoring other EJC proteins to spliced mRNAs. Its RNA-dependent ATPase and RNA-helicase activities are induced by CASC3, but abolished in presence of the MAGOH/RBM8A heterodimer, thereby trapping the ATP-bound EJC core onto spliced mRNA in a stable conformation. The inhibition of ATPase activity by the MAGOH/RBM8A heterodimer increases the RNA-binding affinity of the EJC. Involved in translational enhancement of spliced mRNAs after formation of the 80S ribosome complex. Binds spliced mRNA in sequence-independent manner, 20-24 nucleotides upstream of mRNA exon-exon junctions. Shows higher affinity for single-stranded RNA in an ATP-bound core EJC complex than after the ATP is hydrolyzed.

## 组织特异性

Ubiquitously expressed.

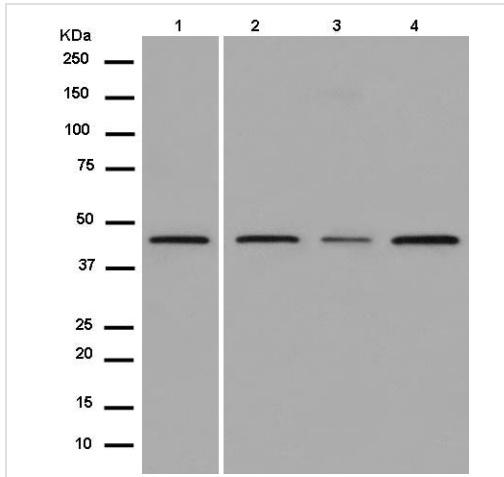
## 序列相似性

Belongs to the DEAD box helicase family. eIF4A subfamily.  
Contains 1 helicase ATP-binding domain.  
Contains 1 helicase C-terminal domain.

## 细胞定位

Nucleus. Nucleus speckle. Cytoplasm. Nucleocytoplasmic shuttling protein. Travels to the cytoplasm as part of the exon junction complex (EJC) bound to mRNA. Detected in dendritic layer as well as the nuclear and cytoplasmic (somatic) compartments of neurons. Colocalizes with

图片



Western blot - Anti-eIF4A3 antibody [EPR14301(B)] (ab180573)

**All lanes :** Anti-eIF4A3 antibody [EPR14301(B)] (ab180573) at 1/1000 dilution

**Lane 1 :** MCF7 cell line with NFDM

**Lane 2 :** HeLa cell line with NFDM

**Lane 3 :** Raji cell line with NFDM

**Lane 4 :** HepG2 cell line with NFDM

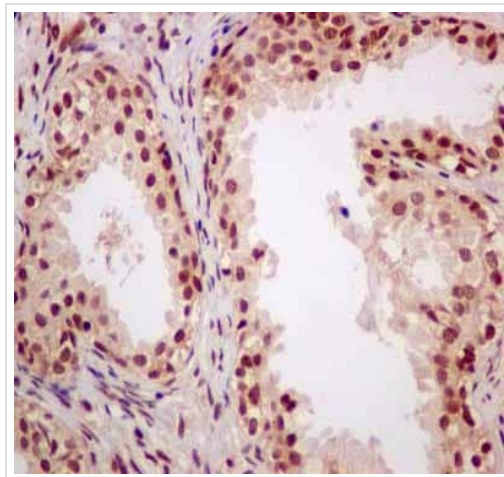
Lysates/proteins at 20 µg per lane.

Blocking peptides at 5 % per lane.

**Secondary**

**All lanes :** Goat Anti-rabbit HRP at 1/1000 dilution

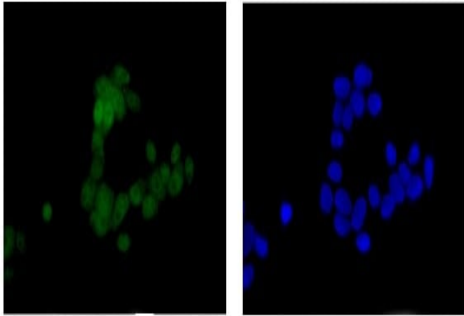
**Predicted band size:** 47 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-eIF4A3 antibody [EPR14301(B)] (ab180573)

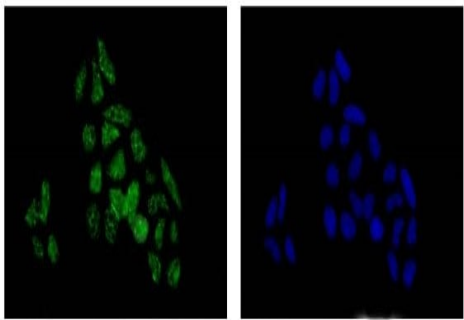
Immunohistochemical analysis of paraffin-embedded Human prostate tissue labeling eIF4A3 with ab180573 at 1/100 dilution. Prediluted (ready to use) HRP Polymer for Rabbit IgG was used as a secondary antibody. Counter stain: Hematoxylin.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



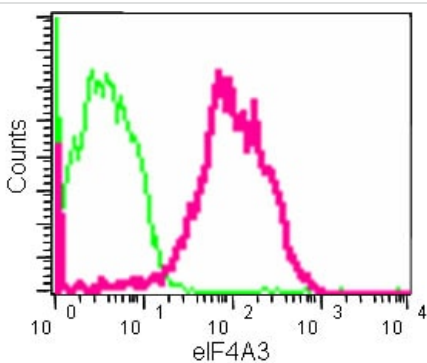
Immunocytochemistry/ Immunofluorescence - Anti-eIF4A3 antibody [EPR14301(B)] (ab180573)

Immunofluorescent analysis of 4% paraformaldehyde MCF7 cells labeling eIF4A3 with ab180573 at 1/500 dilution (green), or with Dapi counter stain (blue). Goat anti rabbit IgG (Dylight 488) was used as a secondary antibody, at a dilution of 1/200.



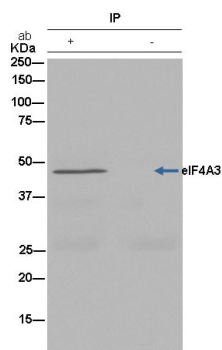
Immunocytochemistry/ Immunofluorescence - Anti-eIF4A3 antibody [EPR14301(B)] (ab180573)

Immunofluorescent analysis of 4% paraformaldehyde HeLa cells labeling eIF4A3 with ab180573 at 1/500 dilution (green), or with Dapi counter stain (blue). Goat anti rabbit IgG (Dylight 488) was used as a secondary antibody at a dilution of 1/200.



Flow Cytometry (Intracellular) - Anti-eIF4A3 antibody [EPR14301(B)] (ab180573)

Intracellular flow cytometric analysis of 2% paraformaldehyde MCF7 cells labeling eIF4A3 with ab180573 at 1/160 dilution, or a rabbit monoclonal IgG isotype control. Secondary antibody used was goat anti rabbit IgG (FITC) at a 1/150 dilution.



Immunoprecipitation - Anti-eIF4A3 antibody  
[EPR14301(B)] (ab180573)

Immunoprecipitation of HeLa labeling eIF4A3 using ab180573 at a 1/30 dilution (lane 1). Lane 2 shows the negative control. Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG was used as a secondary antibody at a dilution of 1/1500. Blocking/dilution buffer and concentration: 5% NFDM/TBST.

**All lanes :** Anti-eIF4A3 antibody [EPR14301(B)] (ab180573) at 1/30 dilution

**Lane 1 :** HeLa cell lysate with NFDM

**Lane 2 :** Negative control with NFDM

Blocking peptides at 5 % per lane.

### 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-eIF4A3 antibody [EPR14301(B)] (ab180573)

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

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