# abcam

# Product datasheet

# Anti-elF4E (phospho S209) antibody [EP2151Y] - BSA and Azide free ab183301



重组 RabMAb

6 References 7 图像

#### 概述

常规说明

产品名称 Anti-eIF4E (phospho S209)抗体[EP2151Y] - BSA and Azide free

描述 兔单克隆抗体[EP2151Y] to eIF4E (phospho S209) - BSA and Azide free

宿主 Rabbit

适用于: WB, IP, IHC-P, Dot blot, ICC/IF 经测试应用

种属反应性 与反应: Mouse, Rat, Human, Pig

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

293 cell lysates, untreated or treated with AP; human breast carcinoma tissue. 阳性对照

ab183301 is the carrier-free version of ab76256.

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 cellbased 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<sup>®</sup> 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.

#### 性能

形式 Liquid

**存放**说明 Shipped at 4°C. Store at +4°C. Do Not Freeze.

**存储溶液** pH: 7.20

Constituent: PBS

**无载体** 是

纯**度** Protein A purified

同种型 lgG

#### 应用

## The Abpromise guarantee Abpromise™承诺保证使用ab183301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
WB		Use at an assay dependent concentration. Predicted molecular weight: 25 kDa.
IP		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols.
Dot blot		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.

## 靶标

功能 Its translation stimulation activity is repressed by binding to the complex CYFIP1-FMR1 (By

similarity). Recognizes and binds the 7-methylguanosine-containing mRNA cap during an early step in the initiation of protein synthesis and facilitates ribosome binding by inducing the

unwinding of the mRNAs secondary structures. Component of the CYFIP1-EIF4E-FMR1 complex which binds to the mRNA cap and mediates translational repression. In the CYFIP1-EIF4E-FMR1

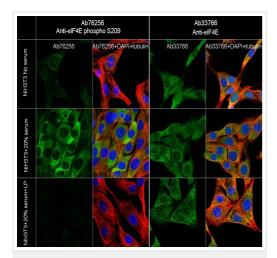
complex this subunit mediates the binding to the mRNA cap.

**序列相似性** Belongs to the eukaryotic initiation factor 4E family.

翻译后修饰 Phosphorylation increases the ability of the protein to bind to mRNA caps and to form the eIF4F

complex.

#### 图片



Immunocytochemistry/ Immunofluorescence - AntielF4E (phospho S209) antibody [EP2151Y] - BSA and Azide free (ab183301)

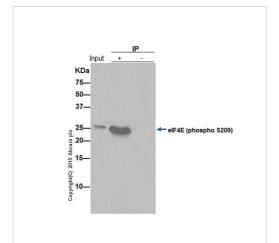
Immunocytochemistry/Immunofluorescence analysis of untreated, 20% serum treated and 20% serum + LP treated NIH/3T3 cells labelling eIF4E (phospho S209) with <u>ab76256</u> (left) and eIF4E with <u>ab33766</u> (right) both at a dilution of 1/500.

Cells were fixed with 100% methanol. <u>ab150077</u>, an Alexa Fluor<sup>®</sup> 488-conjugated goat anti-rabbit lgG (1/1000) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain. <u>ab7291</u>, a mouse anti-tubulin (1/1000) and <u>ab150120</u>, an Alexa Fluor<sup>®</sup> 594-conjugated goat anti-mouse lgG (1/1000) were also used.

The image shows increased cytoplasmic staining after 20% serum treatment on NIH3T3 cells when compared with no serum treated cells. The LP treatment decreased the increased cytoplasmic staining caused by 20% serum.

<u>ab33766</u> was used as a Pan control for <u>ab76256</u>. The results showed cytoplasmic staining on no serum, 20% serum and 20% serum +LP treated NIH3T3 cells.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab76256).



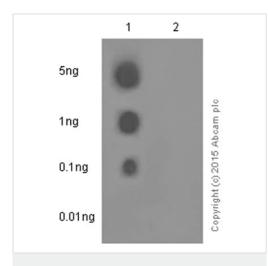
Immunoprecipitation - Anti-elF4E (phospho S209) antibody [EP2151Y] - BSA and Azide free (ab183301)

<u>ab76256</u> (purified) at 1/40 immunoprecipitating eIF4E (phospho S209) in HEK293 whole cell lysate. 10 ug of cell lysate was present in the input. For western blotting, a HRP-conjugated Veriblot for IP Detection Reagent (<u>ab131366</u>) (1/1,500) was used for detection. A rabbit monoclonal IgG (<u>ab172730</u>) was used intead of <u>ab128913</u> as a negative control (Lane 3).

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab76256).



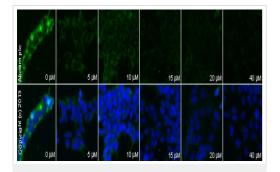
Dot Blot - Anti-elF4E (phospho S209) antibody [EP2151Y] - BSA and Azide free (ab183301)

Dot blot analysis of elF4E (pS209) peptide (Lane 1) and elF4E non-phospho peptide (Lane 2) labelling elF4E (pS209) with purified <u>ab76256</u> at a dilution of 1/1000. <u>ab97051</u> (Peroxidase conjugated goat anti-rabbit lgG (H+L)) was used as the secondary antibody at a dilution of 1/100000.

Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: 3 minutes.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab76256).

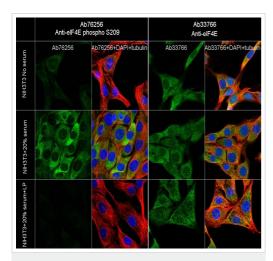


Immunocytochemistry/ Immunofluorescence - AntielF4E (phospho S209) antibody [EP2151Y] - BSA and Azide free (ab183301)

Immunocytochemistry/Immunofluorescence analysis of serum starved HEK293 cells treated with CGP 57380 <a href="mailto:ab120365">ab120365</a>) labelling eIF4E (phospho S209) with unpurified <a href="mailto:ab32124">ab32124</a> at 1/100. Decrease in eIF4E (phospho S209) expression correlates with increased concentration of CGP 57380, as described in literature.

The cells were incubated at 37°C for 1h in media containing different concentrations of <a href="mailto:ab120365">ab120365</a> (CGP 57380) in DMSO, fixed with 100% methanol for 5 minutes at -20°C and blocked with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 2h at room temperature. Staining of the treated cells with unpurified <a href="mailto:ab76256">ab76256</a> was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 goat anti-rabbit polyclonal antibody (<a href="mailto:ab96899">ab96899</a>) at 1/250 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI and are shown in blue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab76256).



Immunocytochemistry/ Immunofluorescence - AntielF4E (phospho S209) antibody [EP2151Y] - BSA and Azide free (ab183301)

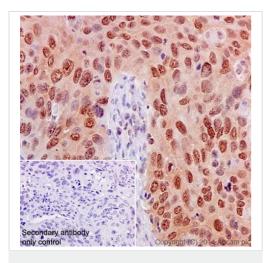
This ICC/IF data was generated using the same anti-eIF4E (phospho S209) antibody clone, EP2151Y, in a different buffer formulation (cat# <u>ab76256</u>).

Immunocytochemistry/Immunofluorescence analysis of untreated, 20% serum treated and 20% serum + LP treated NIH/3T3 cells labelling eIF4E (phospho S209) with <u>ab76256</u> (left) and eIF4E with <u>ab33766</u> (right) both at a dilution of 1/500.

Cells were fixed with 100% methanol. <u>ab150077</u>, an Alexa Fluor<sup>®</sup> 488-conjugated goat anti-rabbit lgG (1/1000) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain. <u>ab7291</u>, a mouse anti-tubulin (1/1000) and <u>ab150120</u>, an Alexa Fluor<sup>®</sup> 594-conjugated goat anti-mouse lgG (1/1000) were also used.

The image shows increased cytoplasmic staining after 20% serum treatment on NIH3T3 cells when compared with no serum treated cells. The LP treatment decreased the increased cytoplasmic staining caused by 20% serum.

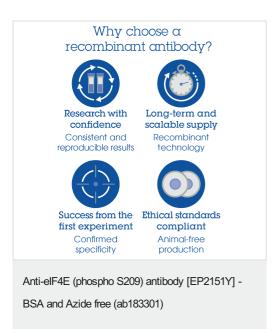
<u>ab33766</u> was used as a Pan control for <u>ab76256</u>. The results showed cytoplasmic staining on no serum, 20% serum and 20% serum +LP treated NIH3T3 cells.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-elF4E (phospho S209) antibody [EP2151Y] - BSA and Azide free (ab183301)

This IHC data was generated using the same anti-eIF4E (phospho S209) antibody clone, EP2151Y, in a different buffer formulation (cat# <u>ab76256</u>).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human cervix carcinoma tissue labelling elF4E with purified <a href="mailto:ab76256">ab76256</a> at 1/50. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. <a href="mailto:ab97051">ab97051</a>, a goat antirabbit lgG H&L (HRP) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



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

## Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.cn/abpromise">https://www.abcam.cn/abpromise</a> or contact our technical team.

## Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors