


## Product datasheet

# Anti-eIF4EBP1 + eIF4EBP2 + eIF4EBP3 (phospho T45) antibody [EPR2169Y] ab68187

Recombinant RabMAb

[6 References](#) [3 Images](#)

### Overview

<b>Product name</b>	Anti-eIF4EBP1 + eIF4EBP2 + eIF4EBP3 (phospho T45) antibody [EPR2169Y]
<b>Description</b>	Rabbit monoclonal [EPR2169Y] to eIF4EBP1 + eIF4EBP2 + eIF4EBP3 (phospho T45)
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P <b>Unsuitable for:</b> Flow Cyt
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse 
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: 293T cell lysate IHC-P: Human breast carcinoma tissue
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <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> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p> <p>Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant

<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR2169Y
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab68187 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

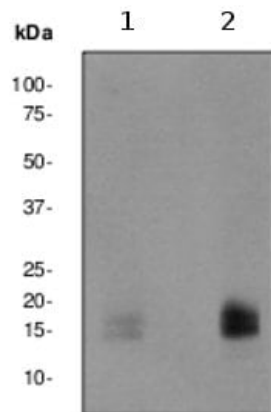
Application	Abreviews	Notes
<b>WB</b>		1/5000 - 1/10000. Detects a band of approximately 14-19 kDa (predicted molecular weight: 13 kDa).
<b>IHC-P</b>		1/50 - 1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

**Application notes** Is unsuitable for Flow Cyt.

## Target

**Relevance** eIF4EBP1 is a member of a family of translation repressor proteins. The protein directly interacts with eukaryotic translation initiation factor 4E (eIF4E), which is a limiting component of the multisubunit complex that recruits 40S ribosomal subunits to the 5' end of mRNAs. Interaction of this protein with eIF4E inhibits complex assembly and represses translation. This protein is phosphorylated in response to various signals including UV irradiation and insulin signaling, resulting in its dissociation from eIF4E and activation of mRNA translation. eIF4EBP2 regulates eIF4E activity by preventing its assembly into the EIF4F complex. It mediates the regulation of protein translation by hormones, growth factors and other stimuli that signal through the MAP kinase pathway. Nonphosphorylated EIF4EBP2 interacts with EIF4E. eIF4EBP2 is phosphorylated on serine and threonine residues in response to insulin, EGF and PDGF, and belongs to the eIF4E binding protein family. eIF4EBP3 is a member of the EIF4EBP family which derives its name from proteins that bind to eukaryotic initiation factor 4E and that prevent its assembly into EIF4F. Cotranscription of this gene and the neighboring upstream gene (MASK) generates a transcript (MASK-BP3) which encodes a fusion protein comprised of the MASK protein sequence for the majority of the protein and a different C terminus due to an alternate reading frame for the EIF4EBP3 segments.

## Images



Western blot - Anti-eIF4EBP1 + eIF4EBP2 + eIF4EBP3 (phospho T45) antibody [EPR2169Y] (ab68187)

**All lanes :** Anti-eIF4EBP1 + eIF4EBP2 + eIF4EBP3 (phospho T45) antibody [EPR2169Y] (ab68187)

**Lane 1 :** 293T cell lysate, untreated

**Lane 2 :** 293T cell lysate, treated with FBS

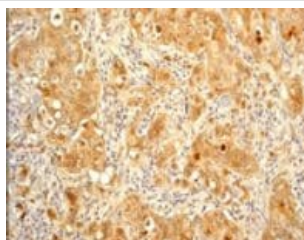
Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes :** HRP conjugated Goat anti-rabbit at 1/2000 dilution

**Predicted band size:** 13 kDa

**Observed band size:** 14-19 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-eIF4EBP1 + eIF4EBP2 + eIF4EBP3 (phospho T45) antibody [EPR2169Y] (ab68187)

Human breast carcinoma tissue stained with ab68187 at 1/50 dilution.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

### 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-eIF4EBP1 + eIF4EBP2 + eIF4EBP3 (phospho T45) antibody [EPR2169Y] (ab68187)

**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 <https://www.abcam.com/abpromise> or contact our technical team.

### Terms and conditions

---

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