

## Product datasheet

# Anti-PRAS40 (phospho T246) antibody [EPR6262-107] ab134084

Recombinant RabMAb

[2 References](#) [2 Images](#)

### Overview

<b>Product name</b>	Anti-PRAS40 (phospho T246) antibody [EPR6262-107]
<b>Description</b>	Rabbit monoclonal [EPR6262-107] to PRAS40 (phospho T246)
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB <b>Unsuitable for:</b> ICC/IF or IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human
<b>Immunogen</b>	Synthetic phosphopeptide corresponding to residues surrounding Threonine 246 of Human PRAS40.
<b>Positive control</b>	HeLa cell lysates.
<b>General notes</b>	Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.

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

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise<sup>™</sup> guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

## Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
<b>Purity</b>	Tissue culture supernatant
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR6262-107
<b>Isotype</b>	IgG

## Applications

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Our [Abpromise guarantee](#) covers the use of **ab134084** 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
WB		1/1000 - 1/10000. Detects a band of approximately 40 kDa (predicted molecular weight: 27 kDa).

**Application notes** Is unsuitable for ICC/IF or IHC-P.

## Target

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**Function** Subunit of mTORC1, which regulates cell growth and survival in response to nutrient and hormonal signals. mTORC1 is activated in response to growth factors or amino-acids. Growth factor-stimulated mTORC1 activation involves a AKT1-mediated phosphorylation of TSC1-TSC2, which leads to the activation of the RHEB GTPase that potently activates the protein kinase activity of mTORC1. Amino-acid-signaling to mTORC1 requires its relocalization to the lysosomes mediated by the Regulator complex and the Rag GTPases. Activated mTORC1 up-regulates protein synthesis by phosphorylating key regulators of mRNA translation and ribosome synthesis. mTORC1 phosphorylates EIF4EBP1 and releases it from inhibiting the elongation initiation factor

4E (eIF4E). mTORC1 phosphorylates and activates S6K1 at 'Thr-389', which then promotes protein synthesis by phosphorylating PDCD4 and targeting it for degradation. Within mTORC1, AKT1S1 negatively regulates mTOR activity in a manner that is dependent on its phosphorylation state and binding to 14-3-3 proteins. Inhibits RHEB-GTP-dependent mTORC1 activation. Substrate for AKT1 phosphorylation, but can also be activated by AKT1-independent mechanisms. May also play a role in nerve growth factor-mediated neuroprotection.

**Tissue specificity**

Widely expressed with highest levels of expression in liver and heart. Expressed at higher levels in cancer cell lines (e.g. A549 and HeLa) than in normal cell lines (e.g. HEK293).

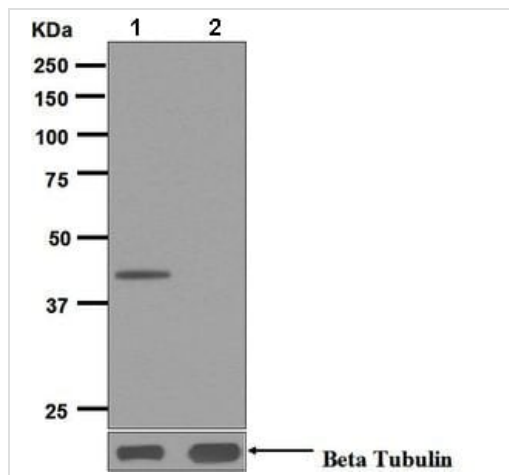
**Post-translational modifications**

Phosphorylated by AKT1. Phosphorylation relieves inhibitory function on mTORC1.

**Cellular localization**

Cytoplasm > cytosol. Found in the cytosolic fraction of the brain.

**Images**



Western blot - Anti-PRAS40 (phospho T246) antibody [EPR6262-107] (ab134084)

**All lanes :** Anti-PRAS40 (phospho T246) antibody [EPR6262-107] (ab134084) at 1/1000 dilution

**Lane 1 :** HeLa cell lysate, untreated

**Lane 2 :** HeLa cell lysate, treated with Lambda Phosphatase

Lysates/proteins at 10 µg per lane.

**Secondary**

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

**Predicted band size:** 27 kDa

Why choose a recombinant antibody?

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

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**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**

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- 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**

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