

## Product datasheet

### Anti-PRKAR2B antibody [EP2649Y] ab75993

Recombinant RabMAb

[20 References](#) [7 Images](#)

#### Overview

<b>Product name</b>	Anti-PRKAR2B antibody [EP2649Y]
<b>Description</b>	Rabbit monoclonal [EP2649Y] to PRKAR2B
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P, IP, ICC/IF <b>Unsuitable for:</b> Flow Cyt
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide within Human PRKAR2B (C terminal). The exact sequence is proprietary.
<b>Positive control</b>	IHC-P: Rat, Mouse, and Human fat tissue sections. IP: Human brain lysate. ICC/IF: Neuro-2a cells. WB: Human, mouse and rat brain lysate
<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>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</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>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 0.05% BSA, 40% Glycerol (glycerin, glycerine), 59% PBS
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EP2649Y

Isotype

IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab75993 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. Predicted molecular weight: 46 kDa. <b>For unpurified use at 1/25000 - 1/50000.</b>
IHC-P		1/1500. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See <b>IHC antigen retrieval protocols</b> . <b>For unpurified use at 1/100 - 1/250.</b> Use of HRP conjugated or polymerized HRP secondary antibodies recommended. Stronger signals have been found
IP		1/30.
ICC/IF		1/50.

### Application notes

Is unsuitable for Flow Cyt.

## Target

### Function

Regulatory subunit of the cAMP-dependent protein kinases involved in cAMP signaling in cells. Type II regulatory chains mediate membrane association by binding to anchoring proteins, including the MAP2 kinase.

### Tissue specificity

Four types of regulatory chains are found: I-alpha, I-beta, II-alpha, and II-beta. Their expression varies among tissues and is in some cases constitutive and in others inducible.

### Sequence similarities

Belongs to the cAMP-dependent kinase regulatory chain family.  
Contains 2 cyclic nucleotide-binding domains.

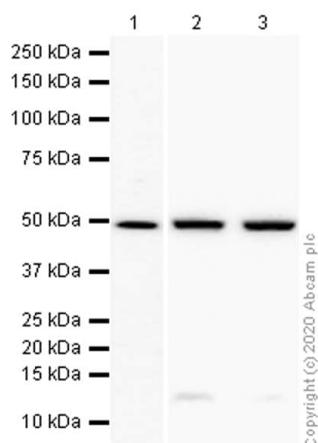
### Post-translational modifications

Phosphorylated by the activated catalytic chain.

### Cellular localization

Cytoplasm. Cell membrane. Co-localizes with PJA2 in the cytoplasm and at the cell membrane.

## Images



Western blot - Anti-PRKAR2B antibody [EP2649Y] (ab75993)

**Lanes 1-2 :** Anti-PRKAR2B antibody [EP2649Y] (ab75993) at 1/1000 dilution (Purified)

**Lane 3 :** Anti-PRKAR2B antibody [EP2649Y] (ab75993) at 1/1000 dilution

**Lane 1 :** Human brain lysate at 15 µg

**Lane 2 :** Mouse brain lysate at 20 µg

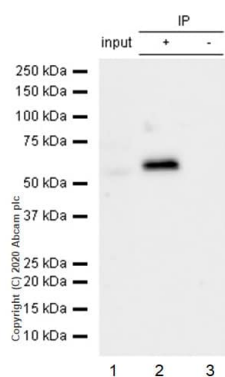
**Lane 3 :** Rat brain lysate at 20 µg

### Secondary

**All lanes :** Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

**Predicted band size:** 46 kDa

**Observed band size:** 52 kDa



Immunoprecipitation - Anti-PRKAR2B antibody [EP2649Y] (ab75993)

Purified ab75993 at 1/30 dilution (2µg) immunoprecipitating PRKAR2B in Human brain lysate.

Lane 1 (input): Human brain lysate 10µg

Lane 2 (+): ab75993 + Human brain lysate.

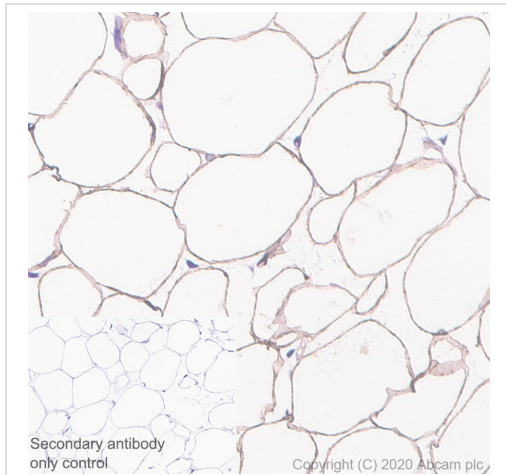
Lane 3 (-): Rabbit monoclonal IgG ([ab172730](#)) instead of ab75993 in Human brain lysate.

VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) (1/1000 dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDm/TBST.

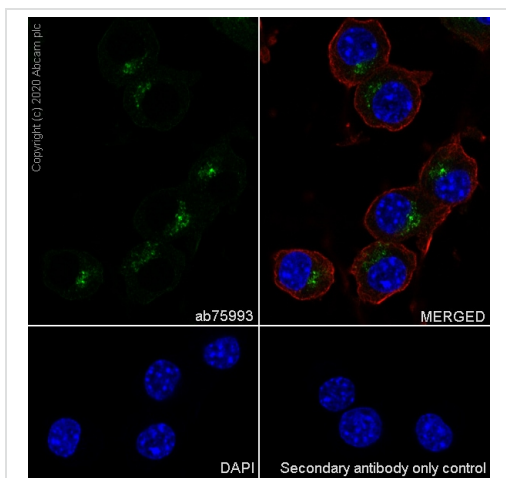
Diluting buffer and concentration: 5% NFDm/TBST.

Observed band size: 52 kDa



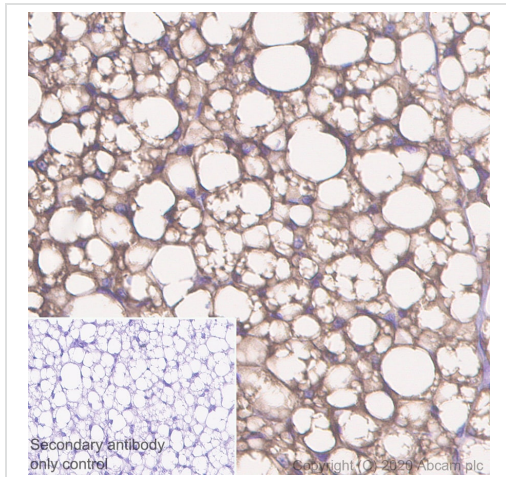
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PRKAR2B antibody [EP2649Y] (ab75993)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human fat tissue sections labeling PRKAR2B with purified ab75993 at 1/1500 dilution (0.27 µg/mL). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



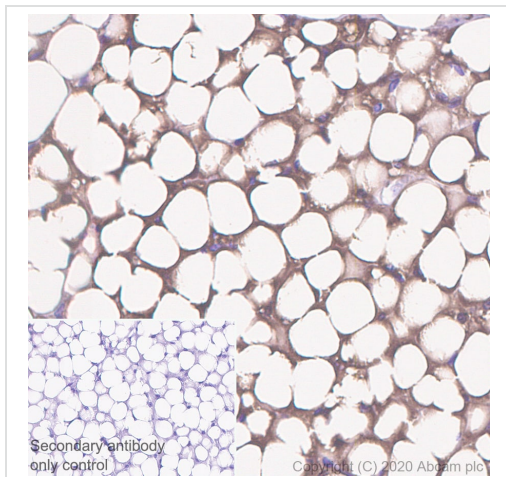
Immunocytochemistry/ Immunofluorescence - Anti-PRKAR2B antibody [EP2649Y] (ab75993)

Immunocytochemistry analysis of Neuro-2a (Mouse neuroblastoma neuroblast) cells labeling PRKAR2B with purified ab75993 at 1/50 dilution (8.14 µg/mL). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/mL). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/mL) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PRKAR2B antibody [EP2649Y] (ab75993)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat fat tissue sections labeling PRKAR2B with purified ab75993 at 1/1500 dilution (0.27 µg/mL). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PRKAR2B antibody [EP2649Y] (ab75993)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse fat tissue sections labeling PRKAR2B with purified ab75993 at 1/1500 dilution (0.27 µg/mL). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

### 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-PRKAR2B antibody [EP2649Y] (ab75993)

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

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