


# Anti-PP2A alpha + beta antibody [EPR11787(B)] - BSA and Azide free ab249449

Recombinant RabMAb

5 Images

### Overview

<b>Product name</b>	Anti-PP2A alpha + beta antibody [EPR11787(B)] - BSA and Azide free
<b>Description</b>	Rabbit monoclonal [EPR11787(B)] to PP2A alpha + beta - BSA and Azide free
<b>Host species</b>	Rabbit
<b>Specificity</b>	The immunogen used for this product shares 100% homology with PP2A beta.
<b>Tested applications</b>	<p><b>Suitable for:</b> WB, ICC/IF</p> <p><b>Unsuitable for:</b> Flow Cyt or IHC-P</p>
<b>Species reactivity</b>	<p><b>Reacts with:</b> Mouse, Human</p> <p><b>Predicted to work with:</b> Rat </p>
<b>Immunogen</b>	Synthetic peptide within Human PP2A alpha + beta. The exact sequence is proprietary.
<b>General notes</b>	<p>ab249449 is the carrier-free version of <a href="#">ab168350</a>.</p> <p>Our <b>carrier-free</b> 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.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.</p> <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</p>

monoclonal antibodies. For details on our patents, please refer to [RabMAb® patents](#).

## Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	pH: 7.2 Constituent: PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Affinity purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR11787(B)
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab249449 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>		Use at an assay dependent concentration. Predicted molecular weight: 36 kDa.
<b>ICC/IF</b>		Use at an assay dependent concentration.

**Application notes** Is unsuitable for Flow Cyt or IHC-P.

## Target

**Function** PP2A can modulate the activity of phosphorylase B kinase casein kinase 2, mitogen-stimulated S6 kinase, and MAP-2 kinase. Cooperates with SGOL2 to protect centromeric cohesin from separase-mediated cleavage in oocytes specifically during meiosis I (By similarity). Can dephosphorylate SV40 large T antigen and p53/TP53. Dephosphorylates SV40 large T antigen, preferentially on serine residues 120, 123, 677, and perhaps 679. The C subunit was most active, followed by the AC form, which was more active than the ABC form, and activity of all three forms was strongly stimulated by manganese, and to a lesser extent by magnesium. Dephosphorylation by the AC form, but not C or ABC form is inhibited by small T antigen. Activates RAF1 by dephosphorylating it at 'Ser-259'.

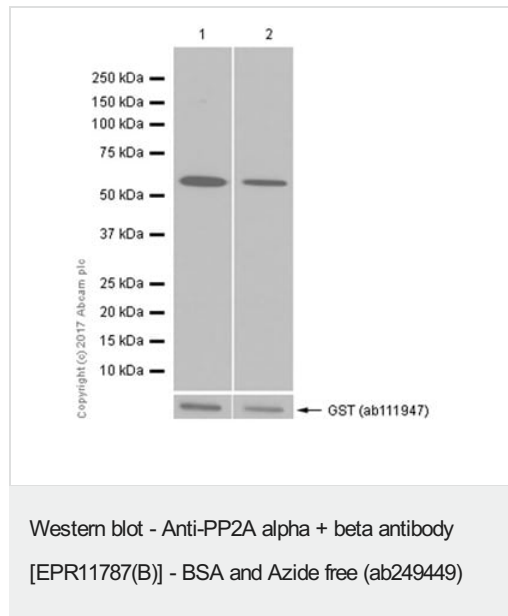
**Sequence similarities** Belongs to the PPP phosphatase family. PP-1 subfamily.

**Post-translational modifications** Reversibly methyl esterified on Leu-309. Carboxyl methylation may play a role in holoenzyme assembly, enhancing the affinity of the PP2A core enzyme for some, but not all, regulatory subunits. It varies during the cell cycle. Phosphorylation of either threonine (by autophosphorylation-activated protein kinase) or tyrosine results in inactivation of the phosphatase. Auto-dephosphorylation has been suggested as a mechanism for reactivation.

## Cellular localization

Cytoplasm. Nucleus. Chromosome > centromere. Cytoplasm > cytoskeleton > spindle pole. In prometaphase cells, but not in anaphase cells, localizes at centromeres. During mitosis, also found at spindle poles. Centromeric localization requires the presence of SGOL2.

## Images



**All lanes :** Anti-PP2A alpha + beta antibody [EPR11787(B)] ([ab168350](#)) at 1/20000 dilution

**Lane 1 :** Human PP2A beta full length recombinant protein

**Lane 2 :** Human PP2A alpha full length recombinant protein

Lysates/proteins at 0.015 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

**Predicted band size:** 36 kDa

**Observed band size:** 59 kDa

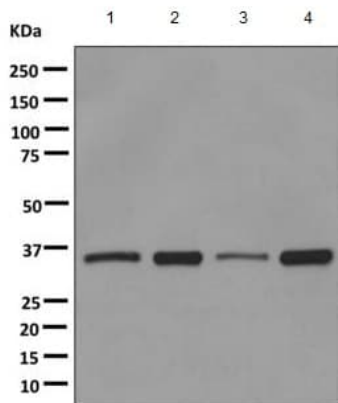
**Exposure time:** 15 seconds

This data was developed using [ab168350](#), the same antibody clone in a different buffer formulation.

**Blocking and dilution buffer:** 5% NFDM/TBST.

Human PP2A beta full length recombinant protein contains aa1-309 with a GST-Tag ([ab128562](#)).

Human PP2A alpha full length recombinant protein contains aa1-309 with a GST-Tag ([ab128557](#)).



Western blot - Anti-PP2A alpha + beta antibody [EPR11787(B)] - BSA and Azide free (ab249449)

**All lanes :** Anti-PP2A alpha + beta antibody [EPR11787(B)] ([ab168350](#)) at 1/10000 dilution

**Lane 1 :** HeLa cell lysate

**Lane 2 :** 293T (Human embryonic kidney epithelial cell) cell lysate

**Lane 3 :** A431 cell lysate

**Lane 4 :** NIH/3T3 cell lysate

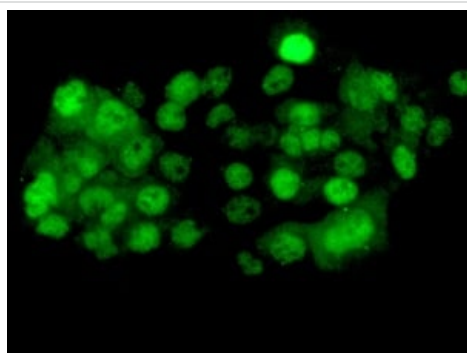
Lysates/proteins at 10 µg per lane.

#### Secondary

**All lanes :** HRP labeled goat anti-rabbit at 1/2000 dilution

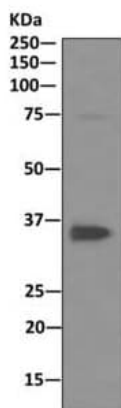
**Predicted band size:** 36 kDa

This data was developed using [ab168350](#), the same antibody clone in a different buffer formulation.



Immunocytochemistry/ Immunofluorescence - Anti-PP2A alpha + beta antibody [EPR11787(B)] - BSA and Azide free (ab249449)

This data was developed using [ab168350](#), the same antibody clone in a different buffer formulation. Immunofluorescent analysis of A431 cells labeling PP2A alpha + beta with [ab168350](#) at 1/50 dilution.



Western blot - Anti-PP2A alpha + beta antibody [EPR11787(B)] - BSA and Azide free (ab249449)

Anti-PP2A alpha + beta antibody [EPR11787(B)] ([ab168350](#)) at 1/10000 dilution + immunoprecipitation pellet from HeLa cell lysate

### Secondary

HRP-conjugated anti-rabbit IgG preferentially detecting the non-reduced form of rabbit IgG

**Predicted band size:** 36 kDa

This data was developed using [ab168350](#), the same antibody clone in a different buffer formulation.

### 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-PP2A alpha + beta antibody [EPR11787(B)] - BSA and Azide free (ab249449)

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

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