


Product datasheet

Anti-PP2A alpha + beta antibody [YE351] ab32065

Recombinant RabMAb

★★★★★ [1 Abreviews](#) [5 References](#) [13 Images](#)

Overview

Product name	Anti-PP2A alpha + beta antibody [YE351]
Description	Rabbit monoclonal [YE351] to PP2A alpha + beta
Host species	Rabbit
Specificity	This antibody can bind both alpha and beta form of PP2A. Mouse samples have been successfully tested in WB, but IHC-P sections from various mouse tissues showed negative results.
Tested applications	Suitable for: IP, WB, IHC-P, Dot blot Unsuitable for: Flow Cyt or ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human Predicted to work with: Cow, Pig 
Immunogen	Synthetic peptide within Human PP2A alpha + beta (N terminal). The exact sequence is proprietary.
Epitope	ab32065 reacts with an epitope located in the N terminal region of PP2A alpha.
Positive control	WB: A431 cell lysate and NIH 3T3 cell lysate. Dot Blot: PP2A-alpha peptide and PP2A-beta peptide.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide

	Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	YE351
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab32065 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
IP		1/80.
WB	★★★★★ (1)	1/500. Predicted molecular weight: 36 kDa.
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Dot blot		Use at an assay dependent concentration.

Application notes Is unsuitable for Flow Cyt or ICC/IF.

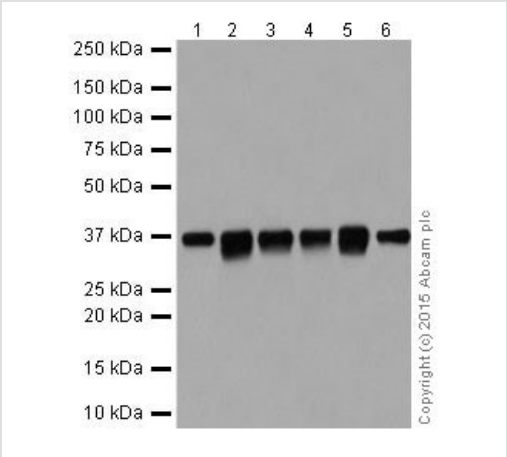
Target

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.



Western blot - Anti-PP2A alpha + beta antibody [YE351] (ab32065)

All lanes : Anti-PP2A alpha + beta antibody [YE351] (ab32065) at 1/50000 dilution

- Lane 1 :** A431 whole cell lysate
- Lane 2 :** A549 whole cell lysate
- Lane 3 :** Caco-2 whole cell lysate
- Lane 4 :** T47D whole cell lysate
- Lane 5 :** C2C12 whole cell lysate
- Lane 6 :** HeLa whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 36 kDa
Observed band size: 36 kDa

Exposure time: 15 seconds

Blocking and dilution buffer: 5% NFDM/TBST.



Western blot - Anti-PP2A alpha + beta antibody [YE351] (ab32065)

All lanes : Anti-PP2A alpha + beta antibody [YE351] (ab32065) at 1/50000 dilution

- Lane 1 :** Jurkat whole cell lysate
- Lane 2 :** U-937 whole cell lysate

Lysates/proteins at 10 µg per lane.

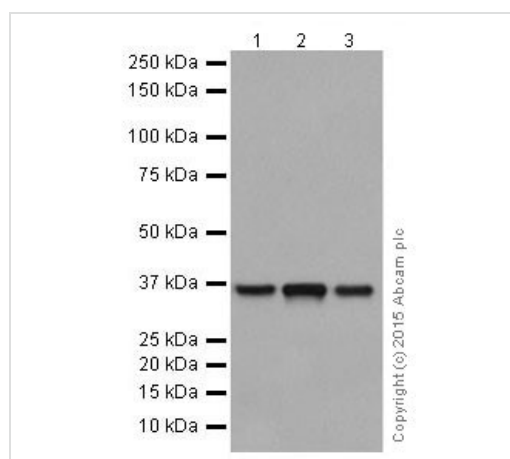
Secondary

All lanes : Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 36 kDa
Observed band size: 36 kDa

Exposure time: 5 seconds

Blocking and dilution buffer: 5% NFDM/TBST.



Western blot - Anti-PP2A alpha + beta antibody [YE351] (ab32065)

All lanes : Anti-PP2A alpha + beta antibody [YE351] (ab32065) at 1/100000 dilution

Lane 1 : Human fetal heart tissue lysate

Lane 2 : Human fetal kidney tissue lysate

Lane 3 : Human fetal spleen tissue lysate

Lysates/proteins at 10 µg per lane.

Secondary

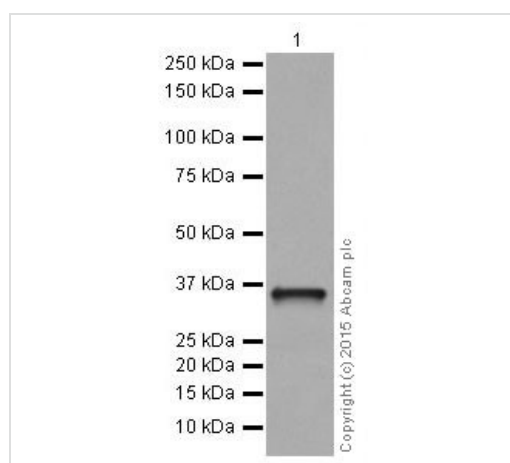
All lanes : HRP-conjugated anti-rabbit IgG, specific to the non-reduced form of IgG at 1/1000 dilution

Predicted band size: 36 kDa

Observed band size: 36 kDa

Exposure time: 30 seconds

Blocking and dilution buffer: 5% NFDM/TBST.



Western blot - Anti-PP2A alpha + beta antibody [YE351] (ab32065)

Anti-PP2A alpha + beta antibody [YE351] (ab32065) at 1/100000 dilution + Human fetal brain tissue lysate at 10 µg

Secondary

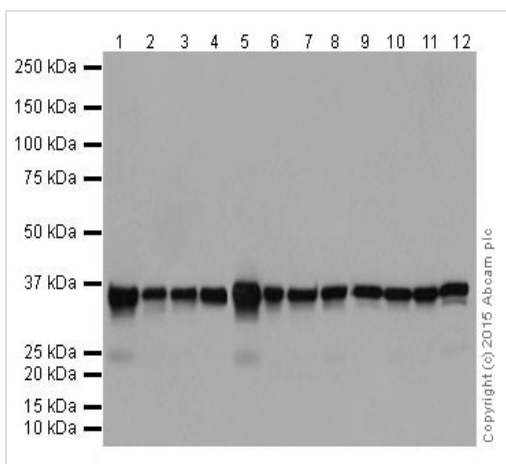
HRP-conjugate anti-rabbit IgG, specific to the non-reduced form of IgG at 1/1000 dilution

Predicted band size: 36 kDa

Observed band size: 36 kDa

Exposure time: 15 seconds

Blocking and dilution buffer: 5% NFDM /TBST.



Western blot - Anti-PP2A alpha + beta antibody
[YE351] (ab32065)

All lanes : Anti-PP2A alpha + beta antibody [YE351] (ab32065) at 1/100000 dilution

Lane 1 : Mouse brain tissue lysate

Lane 2 : Mouse heart tissue lysate

Lane 3 : Mouse kidney tissue lysate

Lane 4 : Mouse spleen tissue lysate

Lane 5 : Rat brain tissue lysate

Lane 6 : Rat heart tissue lysate

Lane 7 : Rat kidney tissue lysate

Lane 8 : Rat spleen tissue lysate

Lane 9 : C6 whole cell lysate

Lane 10 : Raw264.7 whole cell lysate

Lane 11 : PC-12 whole cell lysate

Lane 12 : NIH/3T3 whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

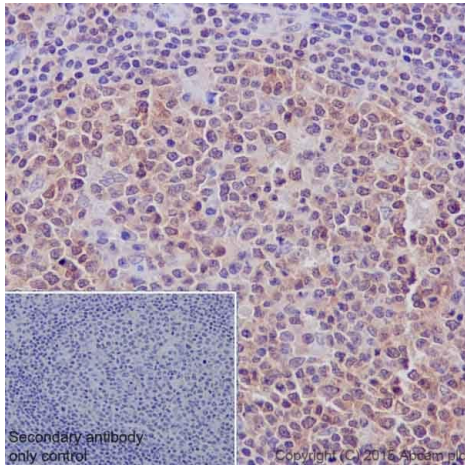
All lanes : Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 36 kDa

Observed band size: 36 kDa

Exposure time: 1 second

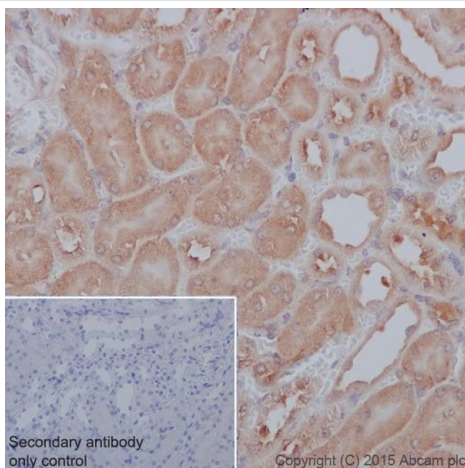
Blocking and dilution buffer: 5% NFDM /TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PP2A alpha + beta antibody [YE351] (ab32065)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil tissue labeling PP2A alpha + beta with ab32065 at a dilution of 1/100. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. [ab97051](#), a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

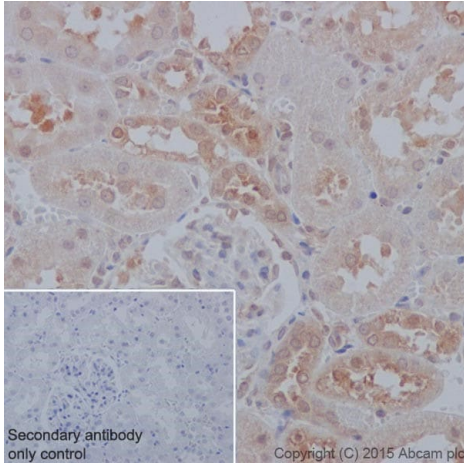
Cytoplasm and weak nucleus staining is visible in lymphocytes of human tonsil.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PP2A alpha + beta antibody [YE351] (ab32065)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse kidney tissue labelling PP2A alpha + beta with ab32065 at a dilution of 1/100. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. [ab97051](#), a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

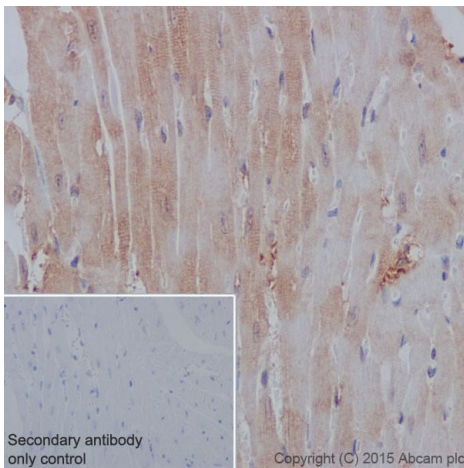
Cytoplasm staining is visible in epithelial cells of mouse kidney



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PP2A alpha + beta antibody [YE351] (ab32065)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat kidney tissue labelling PP2A alpha + beta with ab32065 at a dilution of 1/100. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. [ab97051](#), a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

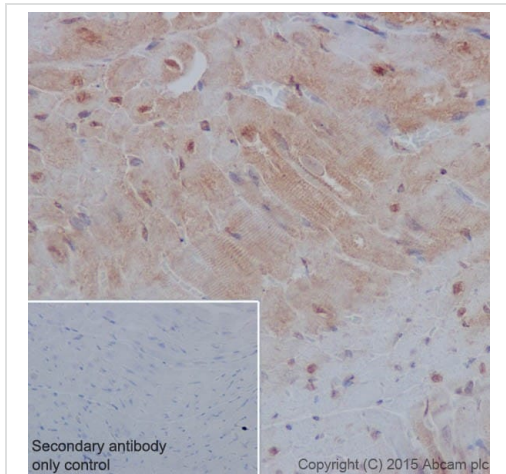
Cytoplasm and weak nucleus staining is visible in epithelial cells of rat kidney.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PP2A alpha + beta antibody [YE351] (ab32065)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse heart tissue labelling PP2A alpha + beta with ab32065 at a dilution of 1/100. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. [ab97051](#), a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

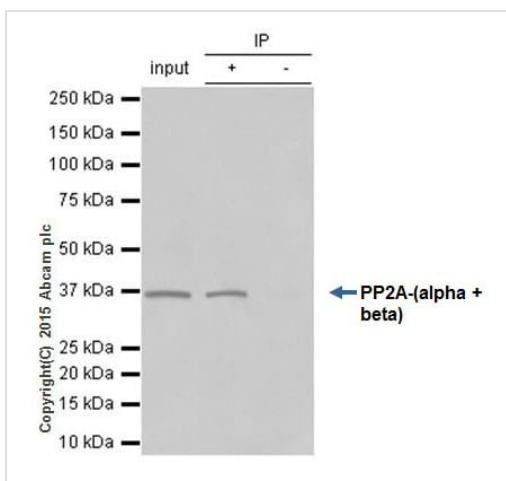
Cytoplasm staining is visible in mouse heart.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PP2A alpha + beta antibody [YE351] (ab32065)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat heart tissue labelling PP2A alpha + beta with ab32065 at a dilution of 1/100. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. [ab97051](#), a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

Cytoplasm and nucleus staining is visible on rat heart.



Immunoprecipitation - Anti-PP2A alpha + beta antibody [YE351] (ab32065)

ab32065 at 1/80 immunoprecipitating PP2A alpha + beta in HeLa whole cell lysate.

Lane 1 (input): HeLa whole cell lysate (10µg)

Lane 2 (+): ab32065 + HeLa whole cell lysate.

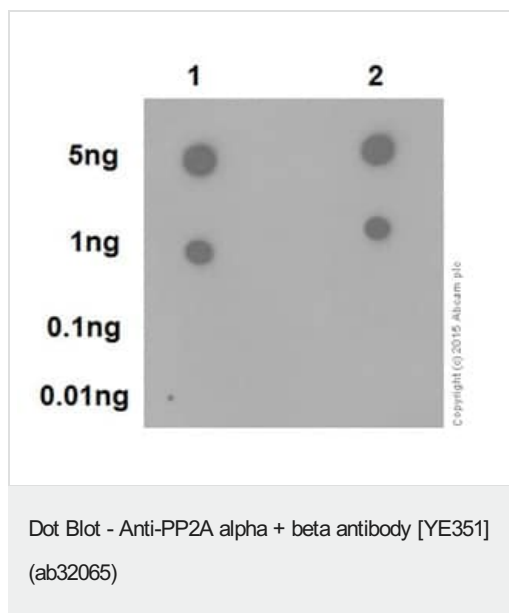
Lane 3 (-): Rabbit monoclonal IgG ([ab172730](#)) instead of ab32065 in HeLa (human cervix adenocarcinoma) whole cell lysate.

For western blotting, ab32065 (1/500) [ab131366](#) VeriBlot for IP Detection Reagent (HRP) was used for detection (1/10000).

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.

Observed band: 37kDa.







Dot blot analysis of PP2A-alpha peptide (Lane 1) and PP2A-beta peptide (Lane 2) labelling PP2A alpha+beta with ab32065 at a dilution of 1/1000. A HRP-conjugated anti-rabbit IgG, specific to the non-reduced form of IgG was used as the secondary antibody at a dilution of 1/1000.

Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: 3 minutes.

Why choose a recombinant antibody?

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

Anti-PP2A alpha + beta antibody [YE351] (ab32065)

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