


Product datasheet

Anti-PP2A alpha + beta (methyl L309) antibody [2A10] ab66597

★★★★★ [5 Abreviews](#) [13 References](#) [2 Images](#)

Overview

Product name	Anti-PP2A alpha + beta (methyl L309) antibody [2A10]
Description	Mouse monoclonal [2A10] to PP2A alpha + beta (methyl L309)
Host species	Mouse
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Rat, Human Predicted to work with: Mouse, <i>Saccharomyces cerevisiae</i> 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	This antibody gave a positive signal in Hek293 and PC12 whole cell lysates
General notes	<p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>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, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 6.97% L-Arginine
Purity	Protein G purified
Clonality	Monoclonal

Clone number	2A10
Myeloma	NS1
Isotype	IgG1
Light chain type	kappa

Applications

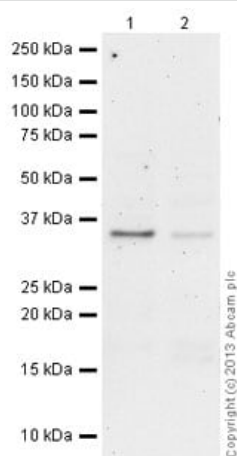
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab66597 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (5)	Use a concentration of 5 - 10 µg/ml. Detects a band of approximately 36 kDa (predicted molecular weight: 36 kDa).

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



Western blot - Anti-PP2A alpha + beta (methylation L309) antibody [2A10] (ab66597)

All lanes : Anti-PP2A alpha + beta (methyl L309) antibody [2A10] (ab66597) at 10 µg/ml

Lane 1 : HEK293 (Human embryonic kidney cell line) Whole Cell Lysate

Lane 2 : PC12 (Rat adrenal pheochromocytoma cell line) Whole Cell Lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Mouse IgG H&L (HRP) preadsorbed ([ab97040](#)) at 1/10000 dilution

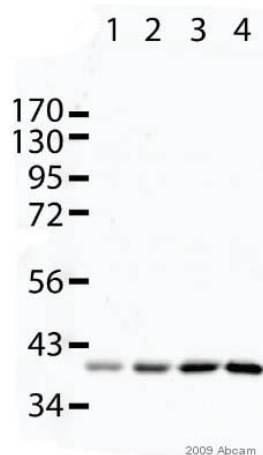
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 36 kDa

Observed band size: 36 kDa

Exposure time: 20 minutes



Western blot - Anti-PP2A alpha + beta (methylation L309) antibody [2A10] (ab66597)

This image is courtesy of an anonymous Abreview

All lanes : Anti-PP2A alpha + beta (methyl L309) antibody [2A10] (ab66597) at 1/1000 dilution

Lane 1 : No LCMT1 with 100% Licor Blocking Buffer for 30 minutes at 25°C.

Lane 2 : LCMT1 at 0.02 µg/ml with 100% Licor Blocking Buffer for 30 minutes at 25°C.

Lane 3 : LCMT1 at 0.1 µg/ml with 100% Licor Blocking Buffer for 30 minutes at 25°C.

Lane 4 : LCMT1 at 0.5 µg/ml with 100% Licor Blocking Buffer for 30 minutes at 25°C.

Secondary

All lanes : IRDye 800CW conjugated goat anti-mouse polyclonal at

1/5000 dilution

Performed under reducing conditions.

Predicted band size: 36 kDa

Detection method: Licor 10 minute exposure.

Specific observed bands at 40kDa

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