


Product datasheet

Anti-PP2A-alpha antibody - C-terminal ab226790

2 Images

Overview

Product name	Anti-PP2A-alpha antibody - C-terminal
Description	Rabbit polyclonal to PP2A-alpha - C-terminal
Host species	Rabbit
Tested applications	Suitable for: WB, IP
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat, Rabbit, Chicken, Cow, Dog, Pig, Xenopus laevis, Zebrafish 
Immunogen	Synthetic peptide within Human PP2A-alpha (C terminal). The exact sequence is proprietary. (Carrier-protein conjugated). Database link: P67775
Positive control	WB: HEK-293T, A431, HeLa and HepG2 whole cell extracts. IP: HEK-293T whole cell extract.
General notes	<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. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.00 Preservative: 0.025% Proclin 300 Constituents: 78% PBS, 1% BSA, 20% Glycerol (glycerin, glycerine)
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab226790 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		1/500 - 1/3000. Predicted molecular weight: 35 kDa.
IP		1/100 - 1/500.

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.

Sequence similarities

Belongs to the PPP phosphatase family. PP-1 subfamily.

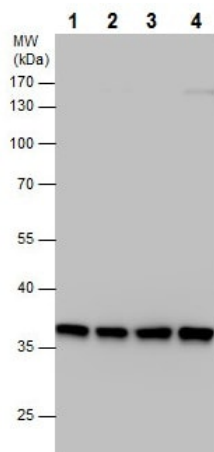
Post-translational modifications

Reversibly methyl esterified on Leu-309. Carboxyl methylation may play a role in holoenzyme assembly. 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 antibody - C-terminal (ab226790)

All lanes : Anti-PP2A-alpha antibody - C-terminal (ab226790) at 1/1000 dilution

Lane 1 : HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell extract

Lane 2 : A431 (human epidermoid carcinoma cell line) whole cell extract

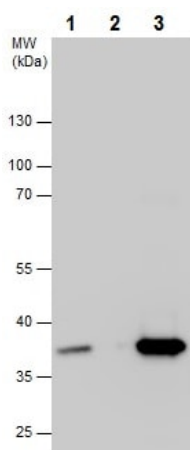
Lane 3 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell extract

Lane 4 : HepG2 (human liver hepatocellular carcinoma cell line) whole cell extract

Lysates/proteins at 30 µg per lane.

Predicted band size: 35 kDa

10% SDS-PAGE gel.



Immunoprecipitation - Anti-PP2A-alpha antibody - C-terminal (ab226790)

PP2A-alpha was immunoprecipitated from HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell extract with 5 µg ab226790. Western blot was performed from the immunoprecipitate using ab226790.

Lane 1: HEK-293T whole cell extract (Input).

Lane 2: Control IgG IP in HEK-293T whole cell extract.

Lane 3: ab226790 IP in HEK-293T whole cell extract.

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

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