abcam

Product datasheet

Recombinant Human PP2A-alpha protein (Tagged) abl 14424

1 Image

Description

Product name Recombinant Human PP2A-alpha protein (Tagged)

Expression system Wheat germ
Accession P67775

Protein length Full length protein

Animal free No

Nature Recombinant

Species Human

Sequence MDEKVFTKELDQWIEQLNECKQLSESQVKSLCEKAKEILT

KESNVQEVRC

 ${\tt PVTVCGDVHGQFHDLMELFRIGGKSPDTNYLFMGDYVDR}$

GYYSVETVTLL

VALKVRYRERITILRGNHESRQITQVYGFYDECLRKYGNAN

VWKYFTDLF

DYLPLTALVDGQIFCLHGGLSPSIDTLDHIRALDRLQEVPH

EGPMCDLLW

SDPDDRGGWGISPRGAGYTFGQDISETFNHANGLTLVSR

AHQLVMEGYNW

CHDRNVVTIFSAPNYCYRCGNQAAIMELDDTLKYSFLQFD

PAPRRGEPHV TRRTPDYFL

Predicted molecular weight 60 kDa including tags

Amino acids 1 to 309

Tags GST tag N-Terminus

Specifications

Our Abpromise guarantee covers the use of ab114424 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications ELISA

Western blot SDS-PAGE

Preparation and Storage

Stability and Storage

Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

00.8 :Ha

Constituents: 0.3% Glutathione, 0.79% Tris HCI

General Info

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

Post-translational

modifications

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

Reversibly methyl esterified on Leu-309. Carboxyl methylation may play a role in holoenzyme assembly. It varies during the cell cycle.

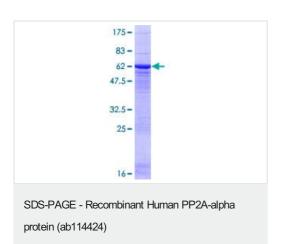
Phosphorylation of either threonine (by autophosphorylation-activated protein kinase) or tyrosine results in inactivation of the phosphatase. Auto-dephosphorylation has been suggested as a

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



ab114424 analysed on a 12.5% SDS-PAGE gel stained with Coomassie Blue.

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