abcam

Product datasheet

Anti-PP2A alpha + beta antibody [YE351] - BSA and Azide free ab232450



3 Images

Overview

Product name Anti-PP2A alpha + beta antibody [YE351] - BSA and Azide free

Description Rabbit monoclonal [YE351] to PP2A alpha + beta - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: Dot blot, WB, IP, IHC-P

Unsuitable for: Flow Cyt or ICC/IF

Species reactivity Reacts with: Mouse, Rat, Human

Predicted to work with: Cow, Pig

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Epitope ab232450 reacts with an epitope located in the N terminal region of PP2A alpha.

Positive control IHC-P: Human tonsil tissue. Dot Blot: PP2A-alpha peptide and PP2A-beta peptide.

General notes ab232450 is the carrier-free version of ab32065.

> Our carrier-free 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.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal

Clone number YE351

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab232450 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
Dot blot		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 36 kDa.
IP		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

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

Post-translational modifications

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

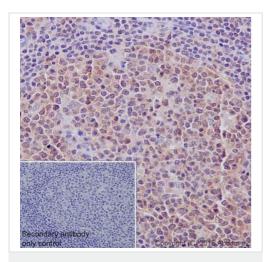
Reversibly methyl esterified on Leu-309. Carboxyl methylation may play a role in holoenzyme assembly, enhancing the affinity of the PP2A core enzyme for some, but not all, regulatory subunits. It varies during the cell cycle.

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

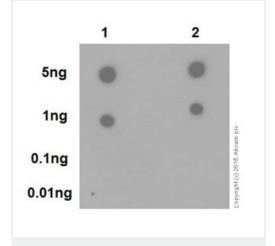


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PP2A alpha + beta antibody [YE351] - BSA and Azide free (ab232450)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil tissue labeling PP2A alpha + beta with <u>ab32065</u> at a dilution of 1/100. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. <u>ab97051</u>, a HRP-conjugated goat anti-rabbit lgG (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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32065).



Dot Blot - Anti-PP2A alpha + beta antibody [YE351]
- BSA and Azide free (ab232450)

This data was developed using the same antibody clone in a different buffer formulation (<u>ab32065</u>).

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

Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: 3 minutes.



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