# **PRODUCT INFORMATION**

Catalog number APP0401

**Clone No.** p6c7

**Product type** Monoclonal Antibody

**UnitProt No.** P35813

NCBI Accession No. NP\_066283

# **Alternative Names**

Pyruvate dehydrogenase phosphatase catalytic subunit 1, Pyruvate dehydrogenase acetyl-transferringphosphatase 1, Protein phosphatase Mg2+/Mn2+dependent 1A, Protein phosphatase 2C, Protein phosphatase 1A (formerly 2C) magnesium-dependent alpha isoform, Protein phosphatase 1A (formerly 2C), PPM2C, PPM1A, PP2CA, PP2C alpha, PDPC 1, PDP 1, PDP, MGC9201, FLJ42306, EC 3.1.3.43

# **PRODUCT SPECIFICATION**

Antibody Host Mouse

Reacts With Human

**Concentration** 1mg/ml (determined by BCA assay)

## Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

## Immunogen

Recombinant human PP2Calpha (1-382aa) purified from E. coli

# lsotype

lgG2b kappa

**Purification Note** By protein-G affinity chromatography

## Application

ELISA, WB, ICC/IF

## Usage

The antibody has been tested by ELISA, Western blot and ICC/IF analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtainoptimal results.



#### Storage

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

# BACKGROUND

#### Description

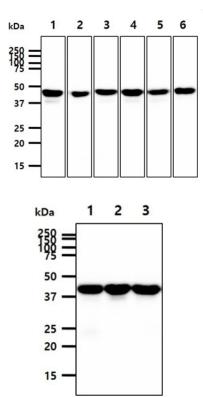
Protein phosphatase 2C (PP2Calpha) is a Mn2+ - or Mg 2+ -dependent protein serine/threonine phosphatase that inhibits the human stress-responsive p38 and JNk MAPk pathways and regulates cellular stress response in eukaryotes. The PPM (metal-dependent protein phosphatase) family of Ser/Thr protein phosphatases have recently been shown to down-regulate the stress response pathways in eukaryotes. Within the stress pathway, key signaling kinases, which are activated by protein phosphorylation, have been proposed as the in vivo substrates of PP2Calpha, the prototypical member of the PPM family.

## **General References**

Lin X, et al., (2006) Cell. 125(5): 915-928 Duan X, et al., (2006) J Biol Chem. 281(48):36526-32

# DATA

#### Western blot analysis (WB)



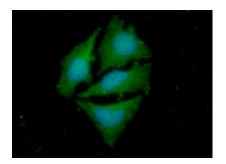
The cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human PP2C alpha antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system. Lane 1.: Jurkat cell lysate Lane 2.: HeLa cell lysate Lane 3.: K562 cell lysate Lane 4.: MCF7 cell lysate Lane 5.: A549 cell lysate Lane 6.: Raji cell lysate

The tissue lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human PP2C alpha antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system. Lane 1.: Mouse kidney tissue lysate Lane 2.: Mouse brain tissue lysate Lane 3.: Mouse liver tissue lysate

#### Immunocytochemistry/Immunofluorescence (ICC/IF)



NKMAXBiO We support you, we believe in your research Human PP2C alpha/PPM1A antibody Catalog Number: APP0401



ICC/IF analysis of PP2C alpha in HeLa cells. The cell was stained with APP0401 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

