For Research Use Only

Phospho-PPP1CA (Thr320) Polyclonal antibody

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Catalog Number:29874-1-AP

Basic Information

Catalog Number:
29874-1-AP

Size:
250 μg/ml

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
BC001888

GeneID (NCBI):
5499

UNIPROT ID:
P62136

Full Name:
protein phosphatase 1, catalytic subunit, alpha isoform

Calculated MW:
330 aa, 38 kDa

Observed MW:
37 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:1000-1:6000

Applications

Tested Applications:
WB, ELISA

Species Specificity:
Human

Positive Controls:

WB : Calyculin A treated HeLa cells, Calyculin A treated Jurkat cells

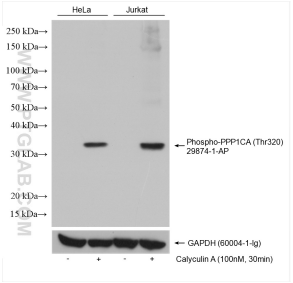
Background Information

Protein phosphatase associates with over 200 regulatory proteins to form highly specific holoenzymes which dephosphorylate hundreds of biological targets. Type 1 protein phosphatase (PP1), a serine/threonine phosphatase, is essential for cell division and participates in the regulation of glycogen metabolism, muscle contractility, and protein synthesis. Four isoforms of PP1 have been characterized: PP1α, PP1δ, PP1γ1 and PP1γ2 (PMID: 9835651). It has been illustrated that PP1 dephosphorylates Rb and cdc25 during mitosis (PMID: 8384581, PMID: 1392080). A cell cycle-dependent phosphorylation at Thr320 of PP1α by cdc2 kinase inhibits PP1α activity (PMID: 9122166).

Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Non-treated and Calyculin A treated various cells were subjected to SDS PAGE followed by western blot with 29874-1-AP (Phospho-PPP1CA (Thr320) antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH antibody as the loading control.