For Research Use Only

PPP1CA Monoclonal antibody

Catalog Number:67070-1-Ig Featured Product 8 Publications

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Basic Information

Catalog Number:
67070-1-Ig

Size:
150ul , Concentration: 1000 ug/ml by Bradford method using BSA as the standard;

Source:
Mouse

Isotype:
IgG1

Immunogen Catalog Number:
AG28451

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:
Protein A purification

CloneNo.:
1C10A2

Recommended Dilutions:
WB 1:5000-1:50000

Applications

Tested Applications:
WB, ELISA

Cited Applications:
WB, IP

Species Specificity:
Human, mouse, rat, pig, zebrafish, rabbit

Cited Species:
human, mouse, rat

Positive Controls:

WB : HeLa cells, fetal human brain tissue, pig brain tissue, zebrafish tissue, T-47D cells, Jurkat cells, HEK-293 cells, rabbit brain tissue, rat brain tissue, mouse brain tissue

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, PP1γ 1 and PP1γ 2 (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).

Notable Publications

Author	Pubmed ID	Journal	Application
Xiaozhen Gu	33080273	Neurotoxicology	WB
Jiatian Lin	33101466	Exp Ther Med	WB
Xiaoyi Xu	35501151	J Neurosci	WB

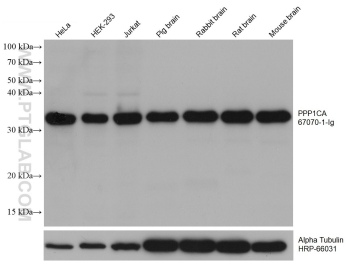
Storage

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

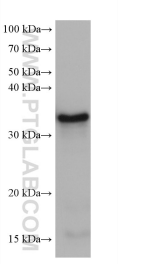
*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 67070-1-Ig (PPP1CA antibody) at dilution of 1:2600 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Alpha Tubulin Monoclonal antibody (HRP-66031) as loading control.



zebrafish tissue were subjected to SDS PAGE followed by western blot with 67070-1-Ig (PPP1CA antibody) at dilution of 1:2600 incubated at room temperature for 1.5 hours.