



Datasheet for ABIN6264364
anti-PPP1CA antibody (C-Term)



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1 Image

Overview

Quantity:	100 µL
Target:	PPP1CA
Binding Specificity:	C-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PPP1CA antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Immunogen:	A synthesized peptide derived from human PPP1CA, corresponding to a region within C-terminal amino acids.
Isotype:	IgG
Specificity:	PPP1CA Antibody detects endogenous levels of total PPP1CA.
Predicted Reactivity:	Bovine,Horse,Sheep,Rabbit,Dog
Purification:	The antiserum was purified by peptide affinity chromatography using SulfoLink™ Coupling Resin (Thermo Fisher Scientific).

Target Details

Target:	PPP1CA
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Target Details

Alternative Name: [PPP1CA \(PPP1CA Products\)](#)

Background: Description: Protein phosphatase that associates with over 200 regulatory proteins to form highly specific holoenzymes which dephosphorylate hundreds of biological targets. Protein phosphatase 1 (PP1) is essential for cell division, and participates in the regulation of glycogen metabolism, muscle contractility and protein synthesis. Involved in regulation of ionic conductances and long-term synaptic plasticity. May play an important role in dephosphorylating substrates such as the postsynaptic density-associated Ca²⁺/calmodulin dependent protein kinase II. Component of the PTW/PP1 phosphatase complex, which plays a role in the control of chromatin structure and cell cycle progression during the transition from mitosis into interphase. Regulates NEK2 function in terms of kinase activity and centrosome number and splitting, both in the presence and absence of radiation-induced DNA damage. Regulator of neural tube and optic fissure closure, and enteric neural crest cell (ENCCs) migration during development. In balance with CSNK1D and CSNK1E, determines the circadian period length, through the regulation of the speed and rhythmicity of PER1 and PER2 phosphorylation. May dephosphorylate CSNK1D and CSNK1E. Dephosphorylates the 'Ser-418' residue of FOXP3 in regulatory T-cells (Treg) from patients with rheumatoid arthritis, thereby inactivating FOXP3 and rendering Treg cells functionally defective (PubMed:23396208). Dephosphorylates CENPA (PubMed:25556658). Dephosphorylates the 'Ser-139' residue of ATG16L1 causing dissociation of ATG12-ATG5-ATG16L1 complex, thereby inhibiting autophagy (PubMed:26083323).

Gene: PPP1CA

Molecular Weight: 38kDa

Gene ID: 5499

UniProt: [P62136](#)

Pathways: [M Phase](#), [Cellular Glucan Metabolic Process](#), [Regulation of Carbohydrate Metabolic Process](#), [Lipid Metabolism](#)

Application Details

Application Notes: WB 1:1000-3000, ELISA(peptide) 1:20000-1:40000

Restrictions: For Research Use only

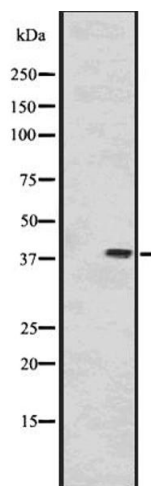
Handling

Format: Liquid

Handling

Concentration:	1 mg/mL
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20 °C. Stable for 12 months from date of receipt.
Expiry Date:	12 months

Images



Western Blotting

Image 1. Western blot analysis of PP1 α using HeLa whole cell lysates