Datasheet for ABIN7169304

anti-PPP1CA antibody (Catalytic Subunit)

3 Images

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Overview

Quantity:	100 µg
Target:	PPP1CA
Binding Specificity:	AA 192-330, Catalytic Subunit
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PPP1CA antibody is un-conjugated
Application:	ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF)

Product Details

Immunogen:	Recombinant Human Serine/threonine-protein phosphatase PP1-alpha catalytic subunit protein (192-330AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

Target Details

Target:	PPP1CA
Alternative Name:	PPP1CA (PPP1CA Products)
Background:	Background: Protein phosphatase that associates with over 200 regulatory proteins to form

Target Details

	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 Ca(2+)/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). Aliases: Alpha isoform serine threonine protein phosphatase PP1alpha 1 catalytic subunit antibody, Catalytic subunit antibody, EC 3.1.3.16 antibody, MGC15877 antibody, MGC1674 antibody, PP 1A antibody, PP-1A antibody, PP1A antibody, PP1A_HUMAN antibody, PP1alpha antibody, PP2C ALPHA antibody, PP2CA antibody, Ppp1ca antibody, Protein Phosphatase 2C Alpha Isoform antibody, Serine threonine protein phosphatase PP1 alpha catalytic subunit antibody, Serine threonine protein phosphatase PP1 alpha catalytic subunit protein phosphatase 1 antibody, Serine/threonine-protein phosphatase PP1-alpha catalytic subunit antibody
UniProt:	P62136
Pathways:	M Phase, Cellular Glucan Metabolic Process, Regulation of Carbohydrate Metabolic Process, Lipid Metabolism

Application Details

Application Notes:	Recommended dilution: IHC:1:20-1:200, IF:1:50-1:200,
Restrictions:	For Research Use only

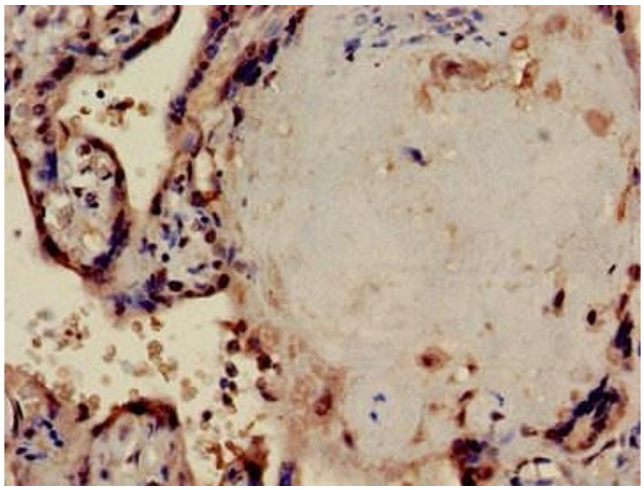
Handling

Format:	Liquid

Handling

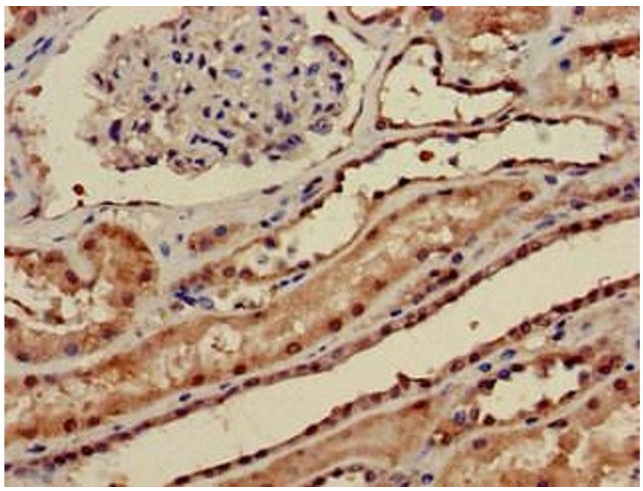
Buffer:	Preservative: 0.03 % Proclin 300 Constituents: 50 % Glycerol, 0.01M PBS, pH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



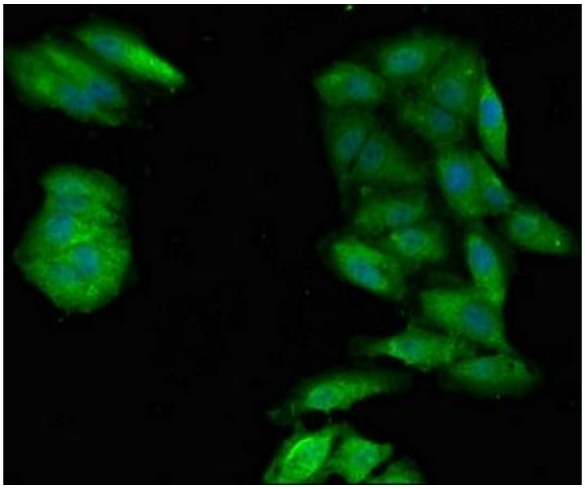
Immunohistochemistry

Image 1. Immunohistochemistry of paraffin-embedded human placenta tissue using ABIN7169304 at dilution of 1:100



Immunohistochemistry

Image 2. Immunohistochemistry of paraffin-embedded human kidney tissue using ABIN7169304 at dilution of 1:100



Immunofluorescence

Image 3. Immunofluorescent analysis of Hela cells using ABIN7169304 at dilution of 1:100 and Alexa Fluor 488-congugated AffiniPure Goat Anti-Rabbit IgG(H+L)

