ARG59511
anti-PPP1CC antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PPP1CC
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, WB
Specificity	This antibody might react to PPP1CA and PPP1CB.
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PPP1CC
Species	Human
Immunogen	Recombinant fusion protein corresponding to aa. 1-323 of Human PPP1CC (NP_002701.1).
Conjugation	Un-conjugated
Alternate Names	PP-1G; PPP1G; Protein phosphatase 1C catalytic subunit; EC 3.1.3.16; PP1C; Serine/threonine-protein phosphatase PP1-gamma catalytic subunit

Application Instructions

Application table

Application	Dilution
ICC/IF	1:50 - 1:200
WB	1:200 - 1:2000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	Rat brain, Mouse thymus and HL-60
Observed Size	38 kDa

Properties

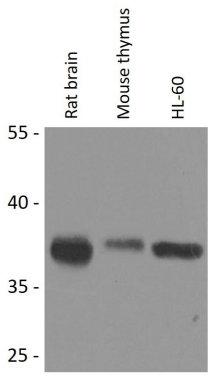
Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

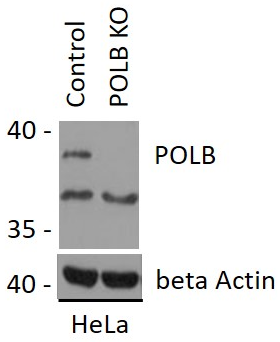
Gene Symbol	PPP1CC
Gene Full Name	protein phosphatase 1, catalytic subunit, gamma isozyme
Background	The protein encoded by this gene belongs to the protein phosphatase family, PP1 subfamily. PP1 is an ubiquitous serine/threonine phosphatase that regulates many cellular processes, including cell division. It is expressed in mammalian cells as three closely related isoforms, alpha, beta/delta and gamma, which have distinct localization patterns. This gene encodes the gamma isozyme. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2011]
Function	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. Dephosphorylates RPS6KB1. 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. 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. [UniProt]
Calculated Mw	37 kDa
PTM	Phosphorylated by NEK2. [UniProt]
Cellular Localization	Cytoplasm. Nucleus. Nucleus, nucleolus. Nucleus, nucleoplasm. Nucleus speckle. Chromosome, centromere, kinetochore. Cleavage furrow. Midbody. Mitochondrion. Note=Colocalizes with SPZ1 in the nucleus (By similarity). [UniProt]

Images



ARG59511 anti-PPP1CC antibody WB image

Western blot: 25 µg of Rat brain, Mouse thymus and HL-60 cell lysates stained with ARG59511 anti-PPP1CC antibody at 1:1000 dilution.



ARG59511 anti-PPP1CC antibody WB image

Western blot: 25 µg of extracts from normal (control) and PPP1CC knockout (KO) HeLa cells, using ARG59511 anti-PPP1CC antibody at 1:1000 dilution.