

DATASHEET

PPP3CA Rabbit Polyclonal Antibody

CAT. NO. APA13639

KEY FEATURES

Target	PPP3CA	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Polyclonal
Applications	WB, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at -20°C

BACKGROUND

Calcium-dependent, calmodulin-stimulated protein phosphatase which plays an essential role in the transduction of intracellular Ca(2+)-mediated signals. Many of the substrates contain a PxIxIT motif and/or a LxVP motif. In response to increased Ca(2+) levels, dephosphorylates and activates phosphatase SSH1 which results in cofilin dephosphorylation. In response to increased Ca(2+) levels following mitochondrial depolarization, dephosphorylates DNM1L inducing DNM1L translocation to the mitochondrion. Positively regulates the CACNA1B/CAV2.2-mediated Ca(2+) release probability at hippocampal neuronal soma and synaptic terminals. Dephosphorylates heat shock protein HSPB1. Dephosphorylates and activates transcription factor NFATC1.

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:2000
IF/ICC	1:50 - 1:200

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to PPP3CA
Specificity	Recognizes endogenous levels of PPP3CA protein.
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human PPP3CA
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 58 kD; Observed: 62 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	CALNA; CNA; Serine/threonine-protein phosphatase 2B catalytic subunit alpha isoform; CAM-PRP catalytic subunit; Calmodulin-dependent calcineurin A subunit alpha isoform
Gene Symbol	PPP3CA
Entrez Gene	5530(Human); 19055(Mouse); 24674(Rat)
SwissProt	Q08209(Human); P63328(Mouse); P63329(Rat)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

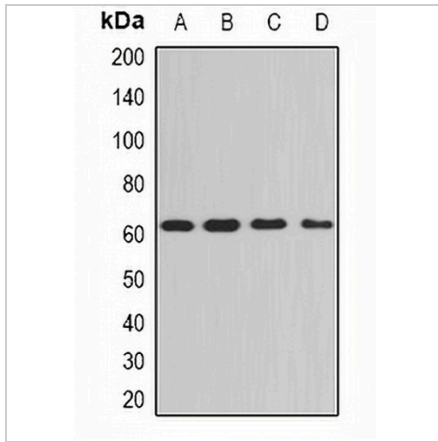
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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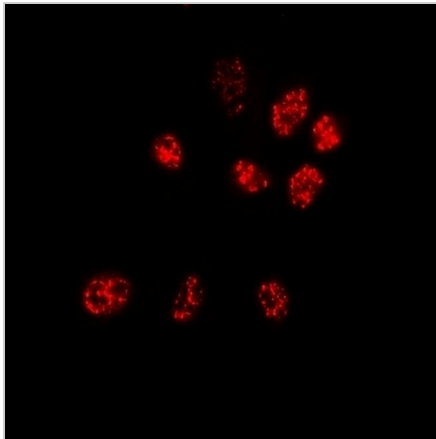
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DATA



Western blot analysis of PPP3CA expression in HeLa (A), A549 (B), mouse brain (C), mouse lung (D) whole cell lysates. (Predicted band size: 58 kD; Observed band size: 62 kD)



Immunofluorescent analysis of PPP3CA staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.