

**DATASHEET**

**PPP3CA Rabbit Monoclonal Antibody(C1175)**

CAT. NO. AMA00787

**KEY FEATURES**

Target	PPP3CA	Source / Host	Rabbit
Reactivity	Human, Mouse	Clonality	Monoclonal
Applications	WB, IHC	Conjugation	Unconjugated
Form / Buffer	Liquid in PBS, pH 7.4, containing 50% glycerol, 0.2% BSA 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 - 1:1000
IHC	1:50 - 1:200

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

**PRODUCT OVERVIEW**

Description	Recombinant rabbit monoclonal antibody to PPP3CA
Specificity	Recognizes endogenous levels of PPP3CA protein
Antibody Type	Primary antibody, Recombinant
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within human PPP3CA. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 58 kD; Observed: 59 kD
Form/Buffer	Liquid in PBS, pH 7.4, containing 50% glycerol, 0.2% BSA 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)
SwissProt	Q08209(Human); P63328(Mouse)

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

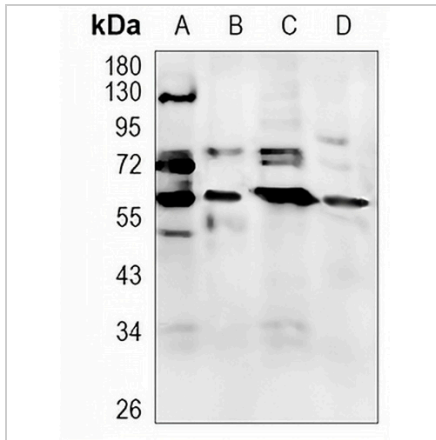
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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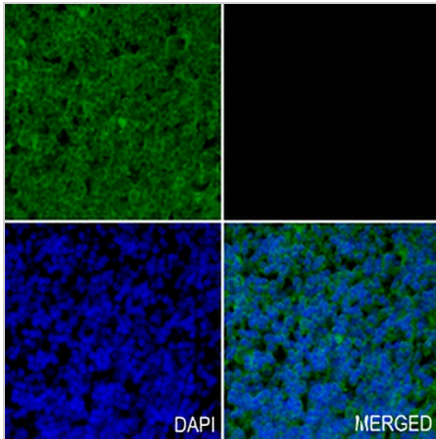
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**DATA**



Western blot analysis of PPP3CA expression in MCF7 (A), HeLa (B), THP1 (C), mouse liver (D) whole cell lysates. (Predicted band size: 58 kD; Observed band size: 59 kD)



Immunohistochemical analysis of PPP3CA staining in human tonsil formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. Tyramide-AREX® Fluor 488 (green) was used as the chromogen. The section was then counterstained with DAPI (blue).

**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.