

**PPP3CC Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP12168a**

**Specification**

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**PPP3CC Antibody (N-term) - Product Information**

Application	IHC-P, WB,E
Primary Accession	<a href="#">P48454</a>
Other Accession	<a href="#">NP_005596.2</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	58129
Antigen Region	10-37

**PPP3CC Antibody (N-term) - Additional Information**

**Gene ID** 5533

**Other Names**

Serine/threonine-protein phosphatase 2B catalytic subunit gamma isoform, CAM-PRP catalytic subunit, Calcineurin, testis-specific catalytic subunit, Calmodulin-dependent calcineurin A subunit gamma isoform, PPP3CC, CALNA3, CNA3

**Target/Specificity**

This PPP3CC antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 10-37 amino acids from the N-terminal region of human PPP3CC.

**Dilution**

IHC-P~~1:10~50

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

PPP3CC Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**PPP3CC Antibody (N-term) - Protein Information**

**Name** PPP3CC

**Synonyms** CALNA3, CNA3

**Function** Calcium-dependent, calmodulin-stimulated protein phosphatase which plays an essential role in the transduction of intracellular  $\text{Ca}^{2+}$ -mediated signals. Dephosphorylates and activates transcription factor NFATC1. Dephosphorylates and inactivates transcription factor ELK1. Dephosphorylates DARPP32.

**Cellular Location**

Mitochondrion {ECO:0000250|UniProtKB:P48455}. Note=Localizes in the mitochondria in a SPATA33-dependent manner {ECO:0000250|UniProtKB:P48455}

**Tissue Location**

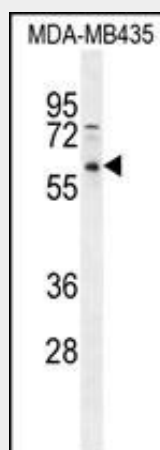
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**PPP3CC Antibody (N-term) - Protocols**

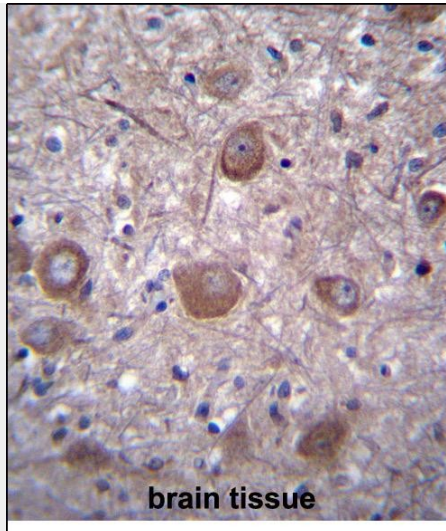
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**PPP3CC Antibody (N-term) - Images**



PPP3CC Antibody (N-term) (Cat. #AP12168a) western blot analysis in MDA-MB435 cell line lysates (35ug/lane). This demonstrates the PPP3CC antibody detected the PPP3CC protein (arrow).



PPP3CC Antibody (N-term) (Cat. #AP12168a) immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of PPP3CC Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

#### **PPP3CC Antibody (N-term) - Background**

Calmodulin-dependent protein phosphatase, calcineurin, is involved in a wide range of biologic activities, acting as a  $\text{Ca}(2+)$ -dependent modifier of phosphorylation status. In testis, the motility of the sperm is thought to be controlled by cAMP-dependent phosphorylation and a unique form of calcineurin appears to be associated with the flagellum. The calcineurin holoenzyme is composed of catalytic and regulatory subunits of 60 and 18 kD, respectively. At least 3 genes, calcineurin A-alpha (CALNA1; MIM 114105), calcineurin A-beta (CALNA2; MIM 114106), and calcineurin A-gamma (CALNA3), have been cloned for the catalytic subunit. These genes have been identified in humans, mice, and rats, and are highly conserved between species (90 to 95% amino acid identity).

#### **PPP3CC Antibody (N-term) - References**

Liu, Y.J., et al. Obesity (Silver Spring) 18(12):2339-2346(2010)  
He, Z.H., et al. Eur. J. Appl. Physiol. 110(4):761-767(2010)  
Saus, E., et al. J Psychiatr Res 44(14):971-978(2010)  
Kyogoku, C., et al. Psychiatry Res (2010) In press :  
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