

Rabbit Calcineurin (PPP3CA) Polyclonal Antibody | anti-PPP3CA antibody

Calcineurin (PPP3CA) Antibody (N-term)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA288841	Rabbit	Human, Mouse Predicted Reactivity: Bovine, Rat	Immunohistochemistry, ELISA, Western Blot

PRODUCT SYNONYMS

Calcineurin (PPP3CA); Polyclonal Antibody; Calcineurin (PPP3CA) Antibody (N-term); Serine/threonine-protein phosphatase 2B catalytic subunit alpha isoform; CAM-PRP catalytic subunit; Calmodulin-dependent calcineurin A subunit alpha isoform; PPP3CA; CALNA; CNA; anti-PPP3CA antibody

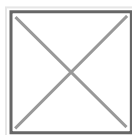
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse Predicted Reactivity: Bovine, Rat
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This Calcineurin (PPP3CA) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 21-51 amino acids from the N-terminal region of human Calcineurin (PPP3CA).
Purity/Purification	Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Sequence Positions	21-51
Sequence Length	521
Applicable Applications for anti-PPP3CA antibody	IHC (Immunohistochemistry), ELISA, WB (Western Blot)
Antigen Type	Synthetic Peptide
Antigen Source	HUMAN
Function	Calcium-dependent, calmodulin-stimulated protein phosphatase which plays an essential role in the transduction of intracellular Ca(2+)-mediated signals (PubMed: ,PubMed: ,PubMed: ,PubMed:). Many of the substrates contain a PxIxIT motif and/or a LxVP motif (PubMed: ,PubMed: ,PubMed: ,PubMed: ,PubMed:). In response to increased Ca(2+) levels, dephosphorylates and activates phosphatase SSH1 which results in cofilin dephosphorylation (PubMed:). In response to increased Ca(2+) levels following mitochondrial depolarization, dephosphorylates DNM1L inducing DNM1L translocation to the mitochondrion (PubMed:). Dephosphorylates heat shock protein HSPB1 (By similarity). Dephosphorylates and activates transcription factor NFATC1 (PubMed:). In response to increased Ca(2+) levels, regulates NFAT-mediated transcription probably by dephosphorylating NFAT and promoting its nuclear translocation (PubMed:). Dephosphorylates and inactivates transcription factor ELK1 (PubMed:). Dephosphorylates DARPP32 (PubMed:). May dephosphorylate CRTC2 at 'Ser-171' resulting in CRTC2 dissociation from 14-3-3 proteins (PubMed:).
Cellular Location	Cytoplasm. Cell membrane; Peripheral membrane protein. Cell membrane, sarcolemma {ECO:0000250 UniProtKB:P63329}. Cytoplasm, myofibril, sarcomere, Z line {ECO:0000250 UniProtKB:P63329}. Cell projection, dendritic spine. Note=Colocalizes with ACTN1 and MYOZ2 at the Z line in heart and skeletal muscle (By similarity). Recruited to the cell membrane by scaffold protein AKAP5 following L-type Ca(2+)- channel activation (PubMed:22343722). {ECO:0000250 UniProtKB:P63329, ECO:0000269 PubMed:22343722}
Tissue Location	Expressed in keratinocytes (at protein level).

Preparation and Storage

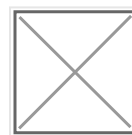
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

IMAGES



IHC (Immunohistochemistry)

Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



WB (Western Blot)

Western blot analysis of anti-PPP3CA Pab in mouse kidney tissue lysate. PPP3CA (arrow) was detected using the purified Pab.

ADDITIONAL INFORMATION

Related Product Information for anti-PPP3CA antibody	PPP3CA is a calcium-dependent, calmodulin-stimulated protein phosphatase. This subunit may have a role in the calmodulin activation of calcineurin. PPP3CA dephosphorylates HSPB1 and SSH1.
Product Categories/Family for anti-PPP3CA antibody	Immunology ; Signal Transduction ; GPCR Antibodies
References	Rodriguez, A., et al., J. Biol. Chem. 280(11):9980-9984 (2005). Shirane, M., et al., Nat. Cell Biol. 5(1):28-37 (2003). Bengoechea-Alonso, M.T., et al., Nitric Oxide 8(1):65-74 (2003). Huai, Q., et al., Proc. Natl. Acad. Sci. U.S.A. 99(19):12037-12042 (2002). Bennasser, Y., et al., Virology 303(1):174-180 (2002).

NCBI AND UNIPROT INFORMATION

NCBI GI #	6715568
NCBI GeneID	5530
NCBI Accession #	NP_000935.1; NP_001124163.1; NP_001124164.1
NCBI GenBank Nucleotide #	NM_000944.4
UniProt Accession #	Q08209; Q8TAW9; A1A441; A8K3B7; A8W6Z7; A8W6Z8; B5BUA2
Molecular Weight	Calculated MW: 58688
NCBI Official Full Name	serine/threonine-protein phosphatase 2B catalytic subunit alpha isoform isoform 1
NCBI Official Synonym Full Names	protein phosphatase 3, catalytic subunit, alpha isozyme
NCBI Official Symbol	PPP3CA
NCBI Official Synonym Symbols	CALN; CCN1; CNA1; CALNA; PPP2B; CALNA1
NCBI Protein Information	serine/threonine-protein phosphatase 2B catalytic subunit alpha isoform
UniProt Protein Name	Serine/threonine-protein phosphatase 2B catalytic subunit alpha isoform
UniProt Gene Name	PPP3CA
UniProt Synonym Gene Names	CALNA; CNA
UniProt Entry Name	PP2BA_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/calcineurin-ppp3ca-antibody-immunohistochemistry-western-blot-elisa/288841>