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PPP3CB Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8464a

Product Information

Application	WB, IHC-P, E
Primary Accession	P16298
Other Accession	P20651, P48453
Reactivity	Human, Rat, Mouse
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB6004
Calculated MW	59024
Antigen Region	1-30

Additional Information

Gene ID	5532
Other Names	Serine/threonine-protein phosphatase 2B catalytic subunit beta isoform, CAM-PRP catalytic subunit, Calmodulin-dependent calcineurin A subunit beta isoform, PPP3CB, CALNA2, CALNB, CNA2
Target/Specificity	This PPP3CB antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human PPP3CB.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
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.
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	PPP3CB Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PPP3CB
Synonyms	CALNA2, CALNB, CNA2

Function	Calcium-dependent, calmodulin-stimulated protein phosphatase which plays an essential role in the transduction of intracellular Ca(2+)-mediated signals (PubMed:19154138, PubMed:25720963, PubMed:26794871, PubMed:32753672). Dephosphorylates TFEB in response to lysosomal Ca(2+) release, resulting in TFEB nuclear translocation and stimulation of lysosomal biogenesis (PubMed:25720963, PubMed:32753672). Dephosphorylates and activates transcription factor NFATC1 (PubMed:19154138). Dephosphorylates and inactivates transcription factor ELK1 (PubMed:19154138). Dephosphorylates DARPP32 (PubMed:19154138). Negatively regulates MAP3K14/NIK signaling via inhibition of nuclear translocation of the transcription factors RELA and RELB (By similarity). May play a role in skeletal muscle fiber type specification (By similarity).
Cellular Location	Cytoplasm.

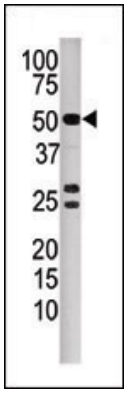
Background

PPP3CB is a calcium-dependent, calmodulin-stimulated protein phosphatase. This subunit may have a role in the calmodulin activation of calcineurin.

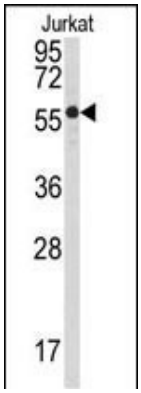
References

Katanosaka, Y., et al., J. Biol. Chem. 280(7):5764-5772 (2005).
Bell, O., et al., Mol. Endocrinol. 19(2):516-526 (2005).
Bennasser, Y., et al., Virology 303(1):174-180 (2002).
Kissinger, C.R., et al., Nature 378(6557):641-644 (1995).
Muramatsu, T., et al., Biochim. Biophys. Acta 1178(1):117-120 (1993).

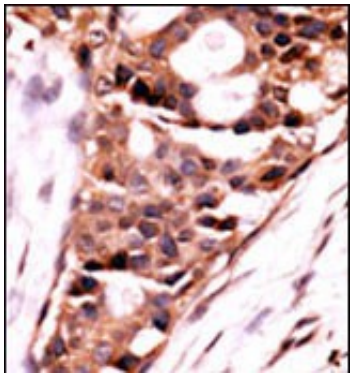
Images



Western blot analysis of anti-PPP3CB Pab (Cat. #AP8464a) in mouse kidney tissue lysate. PPP3CB(arrow) was detected using the purified Pab.



Western blot analysis of anti-PPP3CB Antibody (N-term) (Cat.#AP8464a) in Jurkat cell line lysates (35ug/lane). PPP3CB(arrow) was detected using the purified Pab.



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.