

Calcineurin A Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10056**Specification**

Calcineurin A Antibody - Product Information

Application	WB
Primary Accession	P16298
Reactivity	Human, Mouse, Rat, Rabbit, Hamster, Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	59024

Calcineurin A Antibody - Additional Information**Gene ID 5532**

Application & Usage	Western Blotting (1-4 µg/ml) and for immunoprecipitation (10-20 µg/ml). However, the optimal conditions should be determined individually. The immunoaffinity purified antibody detects a 61 kDa band, corresponding to the expected molecular weight of Calcineurin A on immunoblots. A 32 kDa band can also be detected in human samples, presumably to be the cleavage product of Calcineurin A..
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Other Names

PPP3CA, CCN1, CNA1, CALN, CALNA, CALNA1, PPP2B

Target/Specificity

Calcineurin A

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

100 µg (0.2 mg/ml) affinity purified, rabbit anti-Calcineurin A polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 0.01% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

Calcineurin A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Calcineurin A Antibody - 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:32753672, PubMed:26794871). 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

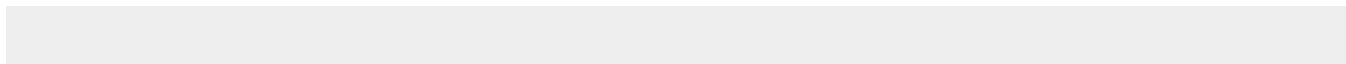
Cytoplasm.

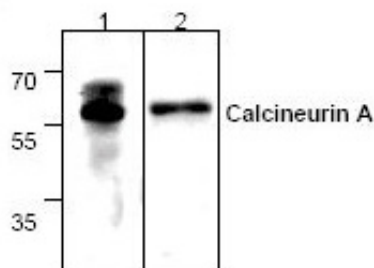
Calcineurin A Antibody - Protocols

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](#)

Calcineurin A Antibody - Images





Western blot analysis of Calcineurin A in lysate from Jurkat cells (Lane 1) and rat kidney (Lane 2).

Calcineurin A Antibody - Background

Calcineurin is a calcium/calmodulin-dependent serine/threonine protein phosphatase. The active enzyme is a heterodimer consisting of a catalytic A subunit of 61 kDa and a myristylated regulatory B subunit of 19 kDa that binds calcium. The catalytic A subunit consists of an amino terminal catalytic domain, followed by calmodulin and B subunit binding sites, and a carboxyl-terminal autoinhibitory domain. Calcineurin is the target of immunosuppressant drugs such as cyclosporin A and FK506. Calcineurin controls the translocation of nuclear factors of activated T cells (NFAT), a family of transcriptional activators that control the expression of cytokine genes essential to immune response, from the cytosol into the nucleus of activated T cells. Calcineurin has been proposed to play an important role in mediating calcium-activated cell death.