

Calcineurin A Antibody
Catalog # ASM10431**Specification****Calcineurin A Antibody - Product Information**

Application	WB, IHC, IP, ICC
Primary Accession	Q08209
Other Accession	Q08209
Host	Rabbit
Reactivity	Human, Mouse, Rat, Rabbit, Dog
Clonality	Polyclonal

Description

Rabbit Anti-Human Calcineurin A Polyclonal

Target/Specificity

Detects ~61kDa.

Other Names

Alpha isoform formerly PPP2B Antibody, Calcineurin A alpha Antibody, Calcineurin A1 Antibody, CalcineurinA Antibody, Calmodulin dependent calcineurin A subunit alpha isoform Antibody, Calmodulin-dependent calcineurin A subunit alpha isoform Antibody, CALN Antibody, CALNA Antibody, CALNA 1 Antibody, CAM PRP catalytic subunit Antibody, CCN 1 Antibody, Protein phosphatase 2B catalytic subunitProtein phosphatase 3 (formerly 2B) catalytic subunit alpha isoform Antibody, Protein phosphatase 3 catalytic subunit alpha isoform PPP3CA Antibody, Protein phosphatase 3 catalytic subunit alpha isozyme Antibody, Serine/threonine protein phosphatase 2B catalytic subunit alpha isoform Antibody

Immunogen

Human Calcineurin A peptide (AA 264-283)

Purification

Peptide Affinity Purified

Storage -20°C

Storage Buffer

PBS pH7.4, 50% glycerol, 0.09% sodium azide

Shipping Temperature

Blue Ice or 4°C

Certificate of Analysis

1 µg/ml of SPC-175 was sufficient for detection of Calcineurin A in 20 µg of Heat shock Hela lysate by colorimetric immunoblot analysis using Goat anti-rabbit IgG:HRP as the secondary antibody.

Cellular Localization

Nucleus

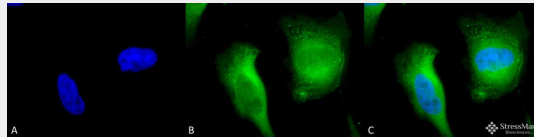
Calcineurin A Antibody - Protocols

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

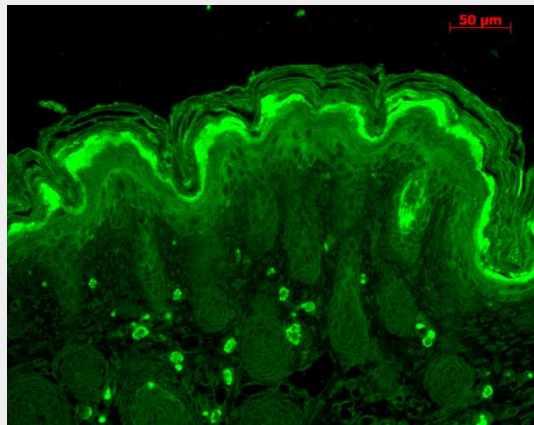
- [Western Blot](#)

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

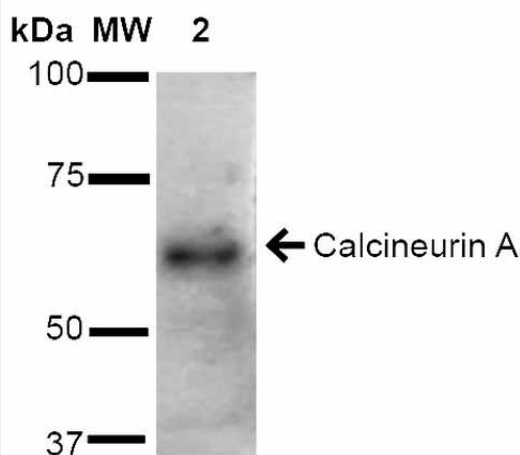
Calcineurin A Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-Calcineurin A Polyclonal Antibody (ASM10431). Tissue: HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rabbit Anti-Calcineurin A Polyclonal Antibody (ASM10431) at 1:120 for 12 hours at 4°C. Secondary Antibody: FITC Goat Anti-Rabbit (green) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Cell membrane. Cytoplasm. Magnification: 100x. (A) DAPI (blue) nuclear stain. (B) Anti-Calcineurin A Antibody. (C) Composite.



Immunohistochemistry analysis using Rabbit Anti-Calcineurin A Polyclonal Antibody (ASM10431). Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative Solution. Primary Antibody: Rabbit Anti-Calcineurin A Polyclonal Antibody (ASM10431) at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Rabbit (green) at 1:50 for 1 hour at RT. Localization: General epidermis.



Western blot analysis of Rat Brain cell lysates showing detection of ~61 kDa Calcineurin A protein using Rabbit Anti-Calcineurin A Polyclonal Antibody (ASM10431). Lane 1: Molecular Weight Ladder (MW). Lane 2: Rat Brain cell lysates. Load: 15 μ g. Block: 5% Skim Milk in 1X TBST. Primary Antibody: Rabbit Anti-Calcineurin A Polyclonal Antibody (ASM10431) at 1:1000 for 2 hours at RT. Secondary Antibody: Goat Anti-Rabbit IgG: HRP at 1:2000 for 60 min at RT. Color Development: ECL solution for 5 min at RT. Predicted/Observed Size: ~61 kDa.



Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-Calcineurin A Polyclonal Antibody (ASM10431). Tissue: HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rabbit Anti-Calcineurin A Polyclonal Antibody (ASM10431) at 1:120 for 12 hours at 4°C. Secondary Antibody: APC Goat Anti-Rabbit (red) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Cell membrane. Cytoplasm. Magnification: 20x. (A) DAPI (blue) nuclear stain. (B) Anti-Calcineurin A Antibody. (C) Composite.

Calcineurin A Antibody - Background

Calcineurin is a heterodimeric phosphatase protein, also known as calcium-dependent serine-threonine phosphatase. The structure consists of a catalytic subunit alpha, Calcineurin A (57-59KDa) the active site and a Ca^{2+} binding unit, Calcineurin B (19-20KDa) the regulatory subunit(1). Calcineurin plays a key role in the T-cell response growth and differentiation mechanism, regulating the activation of the Nuclear factor of activated T-cells (NFATc) which are important in the expression of IL-2 genes. Calcineurin has been the target of inhibitors, the novel and structural immune-suppressants antifungal drugs(2). Genetic studies in yeast and fungi established the molecular basis of the inhibition mechanism by cyclosporine A and FK506 (3).

Calcineurin A Antibody - References

1. Rusnak F. and Mertz P. (2000) *Physiol Rev.* 80(4):1483-521.
2. Hemenway C.S. And Heitman J. (1999)*Cell Biochem Biophys.* 30(1):115-51.
3. Fox D.S. and Heitman J. (2002) *Bioessays.* 24(10):894-903.