

Datasheet for 200-301-P23

Calcineurin alpha Antibody

Overview

Description:	Anti-Calcineurin alpha (MOUSE) Antibody - 200-301-P23
Item No.:	200-301-P23
Size:	100 µg
Applications:	IHC, WB
Reactivity:	Human, Rat, Bovine
Host Species:	Mouse

Product Details

Background:	Calcineurin, the Ca(2+)/calmodulin-regulated protein phosphatase, first detected in skeletal muscle and brain, has been found in all cells from yeast to mammals. Calcineurin A alpha (PPP3CA), is located on human chromosomes 4, Chromosomal mapping of the human genes for the calmodulin-dependent protein phosphatase (calcineurin) catalytic subunit. Calcineurin regulates bone formation by the osteoblast. This antibody is suitable for researchers interested in apoptosis, transcription factors, nuclear receptors, cancer research, Immune Response, cardiovascular disease, MAK Kinase Signaling, and AKT Signaling.
Synonyms:	CNA2, CNB, CNB1, CALNB1, Protein phosphatase 2B regulatory subunit 1, Protein phosphatase 3 regulatory subunit B alpha isoform 1
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	CN-A1
Format:	IgG1

Target Details

Gene Name:	PPP3R1
Reactivity:	Human, Rat, Bovine
Immunogen Type:	Other

Immunogen:	Calcineurin alpha antibody was produced in mice by repeated immunizations with bovine brain calcineurin.
Purity/Specificity:	Anti-Calcineurin alpha antibody was purified from mouse ascites by protein A chromatography. This product reacts with human, rat, and bovine. Cross reactivity with Calcineurin alpha from other sources has not been determined.
Relevant Links:	<ul style="list-style-type: none">• UniProtKB - P63098• GeneID - 5534• NCBI - NP_000936.1

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-Calcineurin alpha is tested for Immunohistochemistry-P and Western Blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~19.3 kDa corresponding to the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5000
IHC:	1:100-1:500
WB:	0.25-0.5ug/ml

Formulation

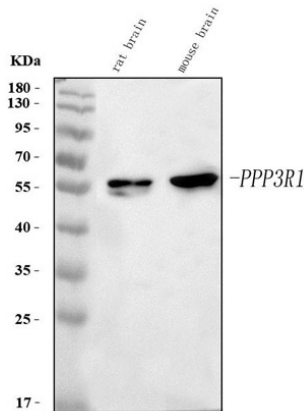
Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	1.2% sodium acetate
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	2mg BSA
Reconstitution Volume:	1.0 mL
Reconstitution Buffer:	Neutral PBS

Shipping & Handling

Shipping Condition:	Dry Ice
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Storage Condition:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. Aliquot and stored frozen at -20°C for six months. Avoid repeated freeze and thaw cycles.
Expiration:	Expiration date is one (1) year from date of receipt.

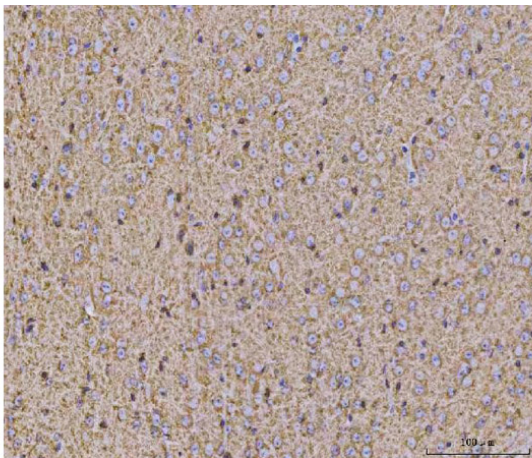
Images



Western Blot

Western Blot analysis of Calcineurin alpha using mouse anti-Calcineurin Alpha.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with affinity purified mouse anti-Calcineurin Alpha/PPP3R1 antigen monoclonal antibody at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at 1:10,000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Calcineurin Alpha/PPP3R1 at approximately 61 kDa. The expected band size for Calcineurin Alpha/PPP3R1 is at 19 kDa.

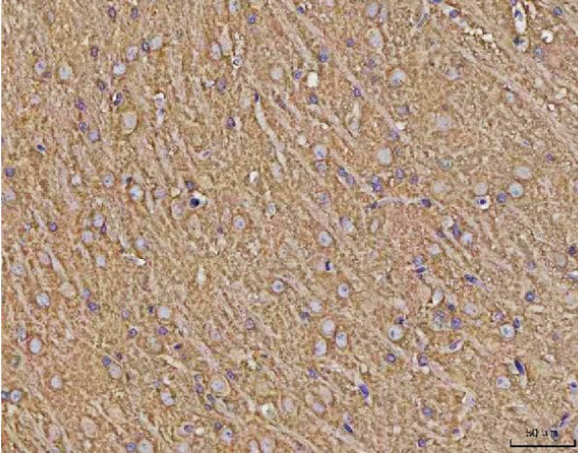


Immunohistochemistry

Immunohistochemistry analysis of Calcineurin Alpha/PPP3R1 using anti-Calcineurin Alpha/PPP3R1 antibody.

Calcineurin Alpha/PPP3R1 was detected in a paraffin-embedded section of mouse brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum.

The tissue section was then incubated with 1 µg/ml mouse anti-Calcineurin Alpha/PPP3R1 Antibody overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB as the chromogen.



Immunohistochemistry

Immunohistochemistry analysis of Calcineurin Alpha/PPP3R1 using anti-Calcineurin Alpha/PPP3R1 antibody.

Calcineurin Alpha/PPP3R1 was detected in a paraffin-embedded section of rat brain tissue.

Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum.

The tissue section was then incubated with 1 $\mu\text{g/ml}$ mouse anti-Calcineurin Alpha/PPP3R1 Antibody overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit with DAB as the chromogen.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.