Datasheet for 600-401-DX3

RCAN2 Antibody

Overview

Description:	Anti-RCAN2 (RABBIT) Antibody - 600-401-DX3
Item No.:	600-401-DX3
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	Regulator of calcineurin 2 (RCAN2), also known as ZAKI4 and DSCR1L1, is expressed as two isoforms differing at their N-terminus. The longer of the two (isoform 1) is expressed exclusively in the brain, while isoform 2 is ubiquitously expressed, with highest expression in brain, heart, and muscle. Both isoforms bind to the catalytic subunit of calcineurin, a Ca++-dependent protein phosphatase involved in several neuronal functions, though their C-terminal region and inhibit calcineurin's activity. Unlike isoform 1 of RCAN2, the expression of the second isoform is not induced by the thyroid hormone T3. RCAN2 is a member of a family of three endogenous calcineurin regulators that are located near the minimal supernumerary fragment of chromosome 21 in individuals with Down syndrome, suggesting that they play a role in this syndrome. Multiple isoforms of RCAN2 are known to exist.
Synonyms:	Calcipressin-2, Down syndrome candidate region 1-like 1, Myocyte-enriched calcineurin-interacting protein 2, MCIP2, Regulator of calcineurin 2, Thyroid hormone-responsive protein ZAKI-4, RCAN2, DSCR1L1, ZAKI4
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	RCAN2
Reactivity:	Human, Mouse, Rat

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-RCAN2 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 14 amino acid synthetic peptide near the internal region of human RCAN2.
Purity/Specificity:	Anti-RCAN2 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with RCAN2 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q14206 • GeneID - 10231 • NCBI - NP_001238902.1

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-RCAN2 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 22 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:20,000
IF:	20 µg/mL
IHC:	2.5 µg/mL
WB:	1-2 µg/mL

Formulation

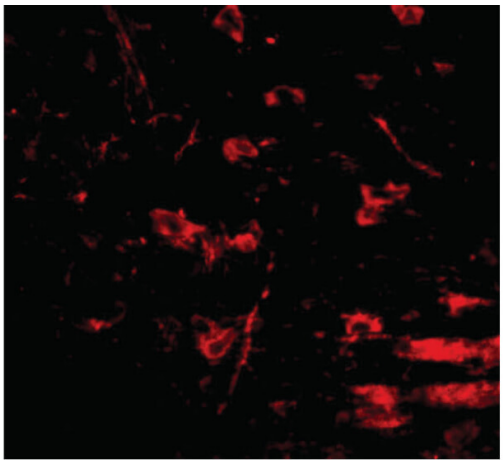
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

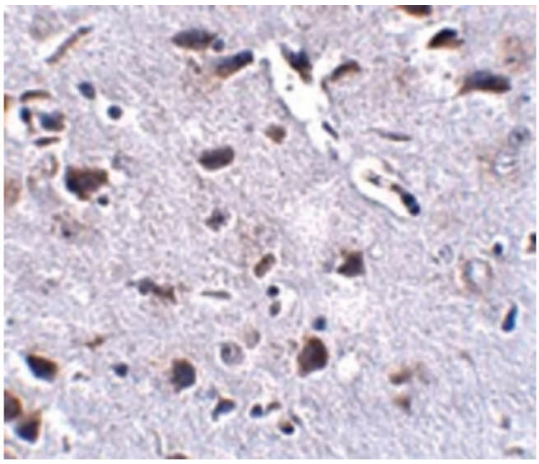
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

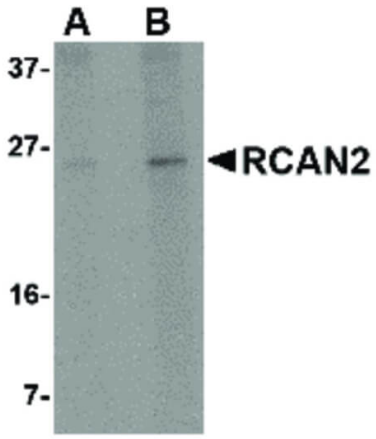
Images



Immunofluorescence Microscopy
Immunofluorescence Microscopy of RCAN2 antibody. Tissue: Mouse brain tissue. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: RCAN2 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: RCAN2 is cytoplasmic. Staining: RCAN2 as red fluorescent signal.



Immunohistochemistry
Immunohistochemistry of RCAN2 antibody. Tissue: Mouse brain tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: RCAN2 antibody at 2.5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: RCAN2 is cytoplasmic. Staining: RCAN2 as precipitated purple signal with brown counterstain.



Western Blot

Western Blot of RCAN2 antibody. Lane 1: 3T3 cell lysate with RCAN2 antibody at 1 µg/mL. Lane 2: 3T3 cell lysate with RCAN2 antibody at 2 µg/mL. Load: 35 µg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 22 kDa, 26 kDa for RCAN2. Other band(s): RCAN2 splice variants and isoforms.

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.