

### RCAN1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16791A

### Specification

# **RCAN1 Antibody (N-term) - Product Information**

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Antigen Region WB, IF,E <u>P53805</u> <u>O9JHG6</u>, <u>NP\_004405.3</u>, <u>NP\_981963.1</u> Human Mouse Rabbit Polyclonal Rabbit IgG 41-68

# **RCAN1** Antibody (N-term) - Additional Information

Gene ID 1827

**Other Names** Calcipressin-1, Adapt78, Down syndrome critical region protein 1, Myocyte-enriched calcineurin-interacting protein 1, MCIP1, Regulator of calcineurin 1, RCAN1, ADAPT78, CSP1, DSC1, DSCR1

#### Target/Specificity

This RCAN1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 41-68 amino acids from the N-terminal region of human RCAN1.

**Dilution** WB~~1:1000 IF~~1:10~50 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### 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**

RCAN1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# **RCAN1 Antibody (N-term) - Protein Information**



# Name RCAN1

Synonyms ADAPT78, CSP1, DSC1, DSCR1

**Function** Inhibits calcineurin-dependent transcriptional responses by binding to the catalytic domain of calcineurin A (PubMed:<u>12809556</u>). Could play a role during central nervous system development (By similarity).

**Tissue Location** 

Highly expressed heart, brain and skeletal muscle. Also expressed in all other tissues

# **RCAN1 Antibody (N-term) - Protocols**

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- RCAN1 Antibody (N-term) Images



Fluorescent confocal of A431 cell stained with RCAN1 Antibody image (N-term)(Cat#AP16791a).A431 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with RCAN1 primary antibody (1:25, 1 h at 37°C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37°C).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37°C). Nuclei were counterstained with DAPI (blue) (10  $\mu$ g/ml, 10 min). RCAN1 immunoreactivity is localized to Cytoplasm significantly.





RCAN1 Antibody (N-term) (Cat. #AP16791a) western blot analysis in 293 cell line lysates (35ug/lane).This demonstrates the RCAN1 antibody detected the RCAN1 protein (arrow).



Western blot analysis of RCAN1 (arrow) using rabbit polyclonal RCAN1 Antibody (N-term) (Cat. #AP16791a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the RCAN1 gene.

# RCAN1 Antibody (N-term) - Background

The protein encoded by this gene interacts with calcineurin A and inhibits calcineurin-dependent signaling pathways, possibly affecting central nervous system development. This gene is located in the minimal candidate region for the Down syndrome phenotype, and is overexpressed in the brain of Down syndrome fetuses. Chronic overexpression of this gene may lead to neurofibrillary tangles such as those associated with Alzheimer disease. Three transcript variants encoding three different isoforms have been found for this gene.

# **RCAN1 Antibody (N-term) - References**

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :



Tam, G.W., et al. Biochem. Soc. Trans. 38(2):445-451(2010) Lee, M.Y., et al. Hum. Mol. Genet. 19(3):468-479(2010) Sales, K.J., et al. Am. J. Pathol. 176(1):435-445(2010) Sales, K.J., et al. Biochim. Biophys. Acta 1793(12):1917-1928(2009)