SANTA CRUZ BIOTECHNOLOGY, INC.

# reticulocalbin-1 (P-12): sc-109423

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

RCN proteins are highly conserved and, depending on their phosphorylation status, either stimulate or inhibit calcineurin, a $Ca^{2+}$-dependent protein phosphatase that couples $Ca^{2+}$ signals to cellular responses. Reticulocalbin-1, also known as RCN1 or proliferation-inducing gene 20, is a 331 amino acid ubiquitously expressed protein that belongs to the CREC family. RCN1 contains a leader peptide, six EF-hand calcium-binding motifs, and a C-terminal HDEL sequence, which serves as an endoplasmic reticulum retention signal. RCN1 may regulate calcium-dependent activities in the endoplasmic reticulum lumen or post-ER compartment. The human RCN1 protein is 95% identical to the mouse Rcn protein. The RCN1 gene is conserved in chimpanzee, mouse, rat, chicken and zebrafish, and maps to human chromosome 11p13.

## REFERENCES


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## CHROMOSOMAL LOCATION

Genetic locus: RCN1 (human) mapping to 11p13; Rcn1 (mouse) mapping to 2 E3.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## SOURCE

reticulocalbin-1 (P-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of reticulocalbin-1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-109423 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

reticulocalbin-1 (P-12) is recommended for detection of reticulocalbin-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with family member reticulocalbin-3.

reticulocalbin-1 (P-12) is also recommended for detection of reticulocalbin-1 in additional species, including equine.

Suitable for use as control antibody for reticulocalbin-1 siRNA (h): sc-96490, reticulocalbin-1 siRNA (m): sc-152814, reticulocalbin-1 shRNA Plasmid (h): sc-96490-SH, reticulocalbin-1 shRNA Plasmid (m): sc-152814-SH, reticulocalbin-1 shRNA (h) Lentiviral Particles: sc-96490-V and reticulocalbin-1 shRNA (m) Lentiviral Particles: sc-152814-V.

Molecular Weight of reticulocalbin-1: 39 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.