

RCL1 (C-21): sc-130251

BACKGROUND

RCL1 (RNA terminal phosphate cyclase-like 1), also known as RNAC, RPC2, RPCL1 or RTC2, is a 373 amino acid protein that localizes to the nucleolus and belongs to the type 2 subfamily of RNA 3'-terminal cyclases. Involved in the proper maturation of the small 18S ribosomal subunit, RCL1 plays a role in the biogenesis of the 40S ribosomal subunit, specifically in early pre-rRNA processing steps at the A0, A1 and A2 40S cleavage sites. Processing at the 40S cleavage sites is crucial for correct 18S RNA formation. Human RCL1 shares 97% sequence identity with its mouse counterpart, suggesting a conserved role between species.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: RCL1 (human) mapping to 9p24.1; Rcl1 (mouse) mapping to 19 C1.

SOURCE

RCL1 (C-21) is a purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of RCL1 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

RESEARCH USE

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

APPLICATIONS

RCL1 (C-21) is recommended for detection of RCL1 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for RCL1 siRNA (h): sc-92488, RCL1 siRNA (m): sc-152774, RCL1 shRNA Plasmid (h): sc-92488-SH, RCL1 shRNA Plasmid (m): sc-152774-SH, RCL1 shRNA (h) Lentiviral Particles: sc-92488-V and RCL1 shRNA (m) Lentiviral Particles: sc-152774-V.

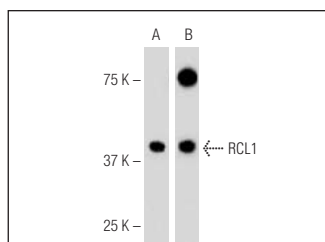
Molecular Weight of RCL1: 41 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or mouse brain extract: sc-2253.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



RCL1 (C-21): sc-130151. Western blot analysis of RCL1 expression in mouse brain tissue extract (A) and Hep G2 cell lysate (B).

PROTOCOLS

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