SANTA CRUZ BIOTECHNOLOGY, INC.

# rabphilin-3AL (N-17): sc-165334

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*The Power to Question*

## BACKGROUND

Rabphilin-3AL (rabphilin-3A-like), also known as RPH3AL or NOC2, is a cytoplasmic Rab GTPase effector. It contains one FYVE-type zinc finger and one Rab-binding (RBD) domain, but unlike its related protein, rabphilin-3A, rabphilin-3AL does not contain any C2 domains. Rabphilin-3AL is expressed in a variety of tissues, with highest levels found in kidney, skeletal muscle, pancreas, liver, ovary, stomach, heart and thyroid. It is believed to play a role regulating calcium-dependent secretory vesicle exocytosis in endocrine and exocrine cells. Via its RBD domain, rabphilin-3AL is capable of binding Rab 27a and, through this interaction, rabphilin-3AL is recruited to dense-core vesicles. With lower affinity, rabphilin-3AL can also bind Rab 3 and Rab 8 with its RBD domain. Through an interaction with Rab 3, rabphilin-3AL can inhibit G-protein signaling in endocrine pancreas and positively regulate insulin secretion. Rabphilin-3AL knockout mice display accumulation of secretory granules and irregular shape in exocrine cells.

## REFERENCES


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8. Teramae, H., et al. 2007. Cellular expression of Noc2, a Rab effector protein, in endocrine and exocrine tissues in the mouse. Histochem. Cell Biol. 127: 1-11.
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## CHROMOSOMAL LOCATION

Genetic locus: RPH3AL (human) mapping to 17p13.3; Rph3al (mouse) mapping to 11 B5.

## SOURCE

rabphilin-3AL (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of rabphilin-3AL 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-165334 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

rabphilin-3AL (N-17) is recommended for detection of rabphilin-3AL 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 rabphilin-3A.

rabphilin-3AL (N-17) is also recommended for detection of rabphilin-3AL in additional species, including canine and bovine.

Suitable for use as control antibody for rabphilin-3AL siRNA (h): sc-94036, rabphilin-3AL siRNA (m): sc-152672, rabphilin-3AL shRNA Plasmid (h): sc-94036-SH, rabphilin-3AL shRNA Plasmid (m): sc-152672-SH, rabphilin-3AL shRNA (h) Lentiviral Particles: sc-94036-V and rabphilin-3AL shRNA (m) Lentiviral Particles: sc-152672-V.

Molecular Weight of rabphilin-3AL: 37 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.

## RESEARCH USE

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

## PROTOCOLS

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