SANTA CRUZ BIOTECHNOLOGY, INC.

Rab 11A (7C10): sc-58465

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The Ras-related superfamily of guanine nucleotide binding proteins, which includes the Ral/Rec, Rap, R-Ras and Rho/Rab subfamilies, exhibit 30-60% homology with Ras p21. Accumulating data suggests an important role for Rab proteins, either in endocytosis or in biosynthetic protein transport. The transport of newly synthesized proteins from the endoplasmic reticulum to various stacks of the Golgi complex and to secretory vesicles involves at each stage the movement of carrier vesicles, a process that appears to involve Rab protein function. The possibility that Rab proteins might also direct the exocytosis from secretory vesicles to the plasma membrane is supported by the observation that in yeast, the Sec4 protein, which is 40% homologous to Rab proteins, is associated with secretory vesicles. Several members of the Rab subfamily have been identified, each of which is found at a particular stage of a membrane transport pathway.

REFERENCES

1. Zahraoui, A., et al. 1989. The human Rab genes encode a family of GTP-binding proteins related to yeast Ypt1 and Sec4 products involved in secretion. J. Biol. Chem. 264: 12394-12401.
2. Baldini, G., et al. 1992. Cloning of a Rab 3 isotype predominately expressed in adipocytes. Proc. Natl. Acad. Sci. USA 89: 5049-5052.
3. Chavrier, P., et al. 1992. The complexity of the Rab and Rho GTP-binding protein subfamilies revealed by a PCR cloning approach. Gene 112: 261-264.
4. Chen, Y., et al. 1993. Expression and localization of two low molecular weight GTP-binding proteins, Rab 8 and Rab 10, by epitope tag. Proc. Natl. Acad. Sci. USA 90: 6508-6512.
5. Karniguian, A., et al. 1993. Identification of small GTP-binding Rab proteins in human platelets: thrombin-induced phosphorylation of Rab 3B, Rab 6 and Rab 8 proteins. Proc. Natl. Acad. Sci. USA 90: 7647-7651.

CHROMOSOMAL LOCATION

Genetic locus: RAB11A (human) mapping to 15q22.31; Rab11a (mouse) mapping to 9 C.

SOURCE

Rab 11A (7C10) is a mouse monoclonal antibody raised against synthetic Rab 11A peptide of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of 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

Rab 11A (7C10) is recommended for detection of Rab 11A of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for Rab 11A siRNA (h): sc-36340, Rab 11A siRNA (m): sc-36341, Rab 11A shRNA Plasmid (h): sc-36340-SH, Rab 11A shRNA Plasmid (m): sc-36341-SH, Rab 11A shRNA (h) Lentiviral Particles: sc-36340-V and Rab 11A shRNA (m) Lentiviral Particles: sc-36341-V.

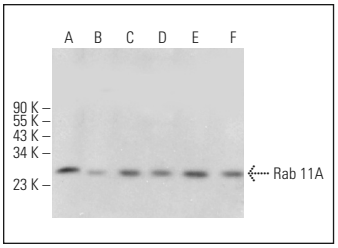
Molecular Weight of Rab 11A: 25 kDa.

Positive Controls: Rab 11A (m): 293T Lysate: sc-122877, Jurkat whole cell lysate: sc-2204 or Neuro-2A whole cell lysate: sc-364185.

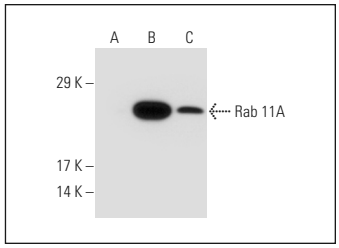
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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



Rab 11A (7C10): sc-58465. Western blot analysis of Rab 11A expression in Jurkat (**A**), K-562 (**B**), BYDP (**C**), NIH/3T3 (**D**), Neuro-2A (**E**) and C6 (**F**) whole cell lysates.



Rab 11A (7C10): sc-58465. Western blot analysis of Rab 11A expression in non-transfected 293T: sc-117752 (**A**), mouse Rab 11A transfected 293T: sc-122877 (**B**) and Jurkat (**C**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Zhou, L., et al. 2014. Up-regulation of cholesterol absorption is a mechanism for cholecystokinin-induced hypercholesterolemia. J. Biol. Chem. 289: 12989-12999.
2. Riffle, B.W., et al. 2014. Novel molecular events associated with altered steroidogenesis induced by exposure to atrazine in the intact and castrate male rat. Reprod. Toxicol. 47: 59-69.

CONJUGATES

See **Rab 11A (D-3): sc-166523** for Rab 11A antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.