SANTA CRUZ BIOTECHNOLOGY, INC.

Rab 20 (S-15): sc-69005

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BIOTECHNOLOGY

The Power to Question

BACKGROUND

The Ras-related superfamily of guanine nucleotide binding proteins includes the R-Ras, Rap, Ral/Rec and Rho/Rab subfamilies all of which are thought to play an important role in either endocytosis or in biosynthetic protein transport. The process of transporting newly synthesized proteins from the endoplasmic reticulum (ER) to various stacks of the Golgi complex and to secretory vesicles involves the movement of carrier vesicles and requires Rab protein function. Rab proteins are also an integral part of endocytic pathways. Rab 20 (Ras-related protein Rab 20) is a 234 amino acid protein that localizes to the Golgi apparatus and belongs to the Rab subfamily of small GTPases. Expressed in normal and cancerous pancreatic tissue, Rab 20 plays an important role in apical endocytosis and recycling and may be involved in the development of exocrine pancreatic adenocarcinomas.

REFERENCES

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2. McMurtrie, E.B., Barbosa MDFS, M. and Kingsmore, S.F. 1997. Genetic mapping of Rab 20 on mouse chromosome 8. Mamm. Genome. 8: 291-292.

3. Pereira-Leal, J.B. and Seabra, M.C. 2000. The mammalian Rab family of small GTPases: definition of family and subfamily sequence motifs suggests a mechanism for functional specificity in the Ras superfamily. J. Mol. Biol. 301: 1077-1087.

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7. Amillet, J.M., Ferbus, D., Real, F.X., Antony, C., Muleris, M., Gress, T.M. and Goubin, G. 2006. Characterization of human Rab 20 overexpressed in exocrine pancreatic carcinoma. Hum. Pathol. 37: 256-263.

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CHROMOSOMAL LOCATION

Genetic locus: RAB20 (human) mapping to 13q34.

SOURCE

Rab 20 (S-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Rab 20 of human origin.

STORAGE

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

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-69005 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Rab 20 (S-15) is recommended for detection of Rab 20 of 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).

Suitable for use as control antibody for Rab 20 siRNA (h): sc-76320, Rab 20 shRNA Plasmid (h): sc-76320-SH and Rab 20 shRNA (h) Lentiviral Particles: sc-76320-V.

Molecular Weight of Rab 20: 29 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.

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.