SANTA CRUZ BIOTECHNOLOGY, INC.

Rab 42 (MU-9): sc-130482



BACKGROUND

The Ras-related superfamily of guanine nucleotide binding proteins includes the R-Ras, Rap, Ral/Rec and Rho/Rab subfamilies. Increasing data suggests an important role for Rab proteins in either endocytosis or in biosynthetic protein transport. The process of transporting newly synthesized proteins from the endoplasmic reticulum 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 42 (putative Ras-related protein Rab-42) is a 105 amino acid protein that belongs to the small GTPase superfamily. Rab 42 is encoded by a gene on chromosome 1. Chromosome 1 is the largest human chromosome, spanning about 260 million base pairs and making up 8% of the human genome. There are about 3,000 genes on chromosome 1, many of which are associated with genetic diseases, including Hutchinson-Gilford progeria, familial adenomatous polyposis, Stickler syndrome, Gaucher disease and Usher syndrome.

REFERENCES

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STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

CHROMOSOMAL LOCATION

Genetic locus: RAB42 (human) mapping to 1p35.3.

SOURCE

Rab 42 (MU-9) is a mouse monoclonal antibody raised against recombinant Rab 42 of human origin.

PRODUCT

Each vial contains 100 μg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Rab 42 (MU-9) is recommended for detection of Rab 42 of human origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

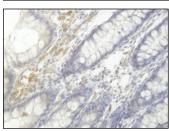
Suitable for use as control antibody for Rab 42 siRNA (h): sc-78688, Rab 42 shRNA Plasmid (h): sc-78688-SH and Rab 42 shRNA (h) Lentiviral Particles: sc-78688-V.

Molecular Weight of Rab 42: 11 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



Rab 42 (MU-9): sc-130482. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human colon tissue showing membrane localization.

RESEARCH USE

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

PROTOCOLS

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