

Rab 38 (h): 293T Lysate: sc-174920

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 38, also known as rGTPbp and NY-MEL-1, is a melanocyte- and lung-specific member of the Rab family of proteins and localizes to the cell membrane where it is believed to participate in melanosomal transport and docking. Rab 38 may play an important role in melanogenesis and in the targeting of TRP1, a protein involved in the production of melanin. A mutation in the gene encoding Rab 38 may result in oculocutaneous albinism (OCA), a condition in which pigment is absent from eye, skin and hair.

REFERENCES

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3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 606281. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Osanai, K., et al. 2005. Expression and characterization of Rab 38, a new member of the Rab small G protein family. *Biol. Chem.* 386: 143-153.
5. Wasmeier, C., et al. 2006. Rab 38 and Rab 32 control post-Golgi trafficking of melanogenic enzymes. *J. Cell Biol.* 175: 271-281.
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7. Zippelius, A., et al. 2007. Melanocyte differentiation antigen Rab 38/NY-MEL-1 induces frequent antibody responses exclusively in melanoma patients. *Cancer Immunol. Immunother.* 56: 249-258.
8. Brooks, B.P., et al. 2007. Analysis of ocular hypopigmentation in Rab 38^{cht/cht} mice. *Invest. Ophthalmol. Vis. Sci.* 48: 3905-3913.
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STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: RAB38 (human) mapping to 11q14.2.

PRODUCT

Rab 38 (h): 293T Lysate represents a lysate of human Rab 38 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Rab 38 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Rab 38 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

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