

Rab 27b (h): 293T Lysate: sc-114535

BACKGROUND

The Rab family of low molecular weight GTPases are critical regulators of vesicular transport. Rab proteins cycle between an active GTP-bound state, which recruits specific effector proteins, and an inactive GDP-bound state. Two members of this family, Rab 27a and Rab 27b, have overlapping functions, but differ in tissue specificity. Rab 27a is widely expressed with significant expression in pancreatic islets and pituitary tissue, and low expression in brain. Rab 27b is also expressed in pituitary tissue, but is more significantly expressed in brain and spleen. Rab 27a regulates diverse processes involving lysosome-related organelles, including melanosome motility in melanocytes and lytic granule release in cytotoxic T lymphocytes. Mutations in the Rab 27a gene result in Griscelli syndrome (GS) or the corresponding mouse model, ashen, a rare autosomal recessive disorder characterized by hypopigmentation, prolonged bleeding times and platelet storage pool deficiency. In GS, Rab 27a is not available to mediate the recruitment of melanosomes via the Actin motor, Myosin Va. The human Rab 27b gene maps to chromosome 18q21.2 and encodes a protein that is involved in pituitary hormone secretion. Rab 27b may be functionally redundant to Rab 27a, as it can rescue Rab 27a mutants.

REFERENCES

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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.

CHROMOSOMAL LOCATION

Genetic locus: RAB27B (human) mapping to 18q21.2.

PRODUCT

Rab 27b (h): 293T Lysate represents a lysate of human Rab 27b transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Rab 27b (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Rab 27b 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.

PROTOCOLS

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