SANTA CRUZ BIOTECHNOLOGY, INC.

Rho GDIα (h2): 293 Lysate: sc-112194

BACKGROUND

Members of the Ras superfamily of small GTP-binding proteins are critical mediators of diverse cell signaling pathways, including those leading to cell proliferation, cytoskeletal organization and secretion. The counter-conversion of the active GTP-bound form of these proteins to their inactive GDP-bound form is influenced by two types of regulatory proteins: those that alter the intrinsic GTPase activity of the GTP-binding proteins and those that alter the rate of GDP/GTP exchange. Guanine nucleotide-releasing factors (GRFs) increase the GDP dissociation rate, while GDP-dissociation inhibitors (GDIs) decrease the dissociation rate. Rho GDIα, also known as ARHGDIA or GDIA1, is a 204 amino acid member of the Rho GDI family of proteins. Localized to the cytoplasm, Rho GDIα inhibits the dissociation of GDP from Rho proteins, thereby preventing GTP from binding to and subsequently activating Rho proteins. In humans, Rho GDIα can be phosphorylated at Ser101 by p21-activated kinase (αPAK), an event that inhibits Rho GDIα activity and may result in positive feedback regulation of certain Rho GDIα target proteins.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ARHGDIA (human) mapping to 17q25.3.

PRODUCT

Rho GDIα (h2): 293 Lysate represents a lysate of human Rho GDIα transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Rho GDIα (h2): 293 Lysate is suitable as a Western Blotting positive control for human reactive Rho GDIα antibodies. Recommended use: 10-20 µl per lane.

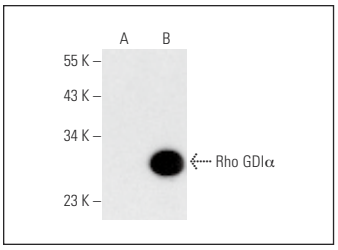
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-tranfected 293 cells.

Rho GDI (G-3): sc-365190 is recommended as a positive control antibody for Western Blot analysis of enhanced human Rho GDIα expression in Rho GDIα transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

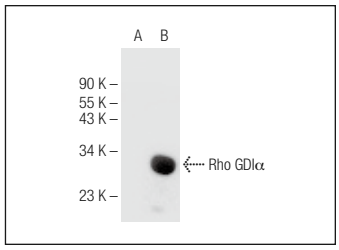
RECOMMENDED SUPPORT REAGENTS

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.

DATA



Rho GDI (G-3): sc-365190. Western blot analysis of Rho GDIα expression in non-transfected: sc-110760 (**A**) and human Rho GDIα transfected: sc-112194 (**B**) 293 whole cell lysates.



Rho GDI (E-1): sc-373883. Western blot analysis of Rho GDIα expression in non-transfected: sc-110760 (**A**) and human Rho GDIα transfected: sc-112194 (**B**) 293 whole cell lysates.

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.

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.