Ral A (h2): 293T Lysate: sc-115540



The Power to Question

BACKGROUND

Ral A and Ral B constitute a distinct subfamily of Ras-related GTPases (i.e., GDP/GTP binding proteins). Ral proteins are activated by a unique nucleotide exchange factor, Ral GDS, and deactivated by a distinct GTPase-activating protein. Unlike Ras proteins, Ral A and Ral B fail to induce transformed foci when activated variants are expressed in various recipient cells. A potential downstream target of Ral, designated Ral BP-1, has been shown to contain a Rho-GTPase-activating domain. This Rho-GTPase-activating domain interacts preferentially with the Rho family member Cdc42. A Ras/Ral signaling pathway has been reported to mediate phospholipase D (PLD) activation by v-Src, thus indicating PLD as another downstream target of Ral A.

REFERENCES

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- Hofer, F., et al. 1994. Activated Ras interacts with the Ral guanine nucleotide dissociation stimulator. Proc. Natl. Acad. Sci. USA 91: 11089-11093.
- Spaargaren, M. and Bischoff, J.R. 1994. Identification of the guanine nucleotide dissociation stimulator for Ral as a putative effector molecule of R-Ras, H-Ras, K-Ras, and Rap. Proc. Natl. Acad. Sci. USA 91: 12609-12613.
- Cantor, S.B., et al. 1995. Identification and characterization of Ral-binding protein 1, a potential downstream target of Ral GTPases. Mol. Cell. Biol. 15: 4578-4584.
- Jullien-Flores, V., et al. 1995. Bridging Ral GTPase to Rho pathways. RLIP76, a Ral effector with CDC42/Rac GTPase-activating protein activity. J. Biol. Chem. 270: 22473-22477.
- Jiang, H., et al. 1995. Involvement of Ral GTPase in v-Src-induced phospholipase D activation. Nature 378: 409-412.

CHROMOSOMAL LOCATION

Genetic locus: RALA (human) mapping to 7p14.1.

PRODUCT

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

APPLICATIONS

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

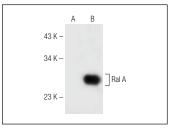
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

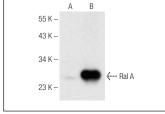
Ral A (F-5): sc-374462 is recommended as a positive control antibody for Western Blot analysis of enhanced human Ral A expression in Ral A transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA





Ral A (F-5): sc-374462. Western blot analysis of Ral A expression in non-transfected: sc-117752 (**A**) and human Ral A transfected: sc-115540 (**B**) 293T whole cell Ivsates

Ral A/B (E-7): sc-374582. Western blot analysis of Ral A expression in non-transfected: sc-117752 (A) and human Ral A transfected: sc-115540 (B) 293T 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.

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