

# Ral A (C-19): sc-1530

## 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

1. Wildey, G.M., Viggleswarapu, M., Rim, S. and Denker, J.K. 1993. Isolation of cDNA clones and tissue expression of rat Ral A and Ral B GTP-binding proteins. *Biochem. Biophys. Res. Commun.* 194: 552-559.
2. Hofer, F., Fields, S., Schneider, C. and Martin, G.S. 1994. Activated Ras interacts with the Ral guanine nucleotide dissociation stimulator. *Proc. Natl. Acad. Sci. USA* 91: 11089-11093.

## CHROMOSOMAL LOCATION

Genetic locus: RALA (human) mapping to 7p14.1; Rala (mouse) mapping to 13 A2.

## SOURCE

Ral A (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Ral A of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-1530 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Ral A (C-19) is recommended for detection of Ral A of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Ral A (C-19) is also recommended for detection of Ral A in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Ral A siRNA (h): sc-41842, Ral A siRNA (m): sc-41843, Ral A shRNA Plasmid (h): sc-41842-SH, Ral A shRNA Plasmid (m): sc-41843-SH, Ral A shRNA (h) Lentiviral Particles: sc-41842-V and Ral A shRNA (m) Lentiviral Particles: sc-41843-V.

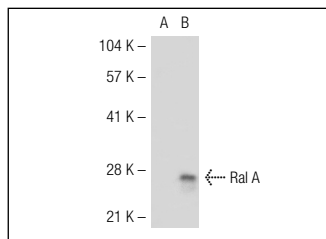
Molecular Weight of Ral A: 28 kDa.

Positive Controls: Ral A (h2): 293T lysate: sc-115540.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



Ral A (C-19): sc-1530. 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 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. 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](http://www.scbt.com) or our catalog for detailed protocols and support products.


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Try **Ral A (F-5): sc-374462** or **Ral A/B (F-2): sc-373998**, our highly recommended monoclonal alternatives to Ral A (C-19).