

# Ral GDS (H-110): sc-25636

## 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., et al. 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., et al. 1994. Activated Ras interacts with the Ral guanine nucleotide dissociation stimulator. *Proc. Natl. Acad. Sci. USA* 91: 11089-11093.

## CHROMOSOMAL LOCATION

Genetic locus: RALGDS (human) mapping to 9q34.2; Ralgs (mouse) mapping to 2 A3.

## SOURCE

Ral GDS (H-110) is a rabbit polyclonal antibody raised against amino acids 42-110 mapping near the N-terminus of Ral GDS 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.

## APPLICATIONS

Ral GDS (H-110) is recommended for detection of Ral GDS 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 GDS (H-110) is also recommended for detection of Ral GDS in additional species, including canine and avian.

Suitable for use as control antibody for Ral GDS siRNA (h): sc-41730, Ral GDS siRNA (m): sc-41731, Ral GDS shRNA Plasmid (h): sc-41730-SH, Ral GDS shRNA Plasmid (m): sc-41731-SH, Ral GDS shRNA (h) Lentiviral Particles: sc-41730-V and Ral GDS shRNA (m) Lentiviral Particles: sc-41731-V.

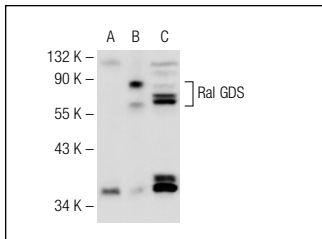
Molecular Weight of Ral GDS: 115 kDa.

Positive Controls: Ral GDS (m): 293T Lysate: sc-127440, HeLa whole cell lysate: sc-2200 or MIA PaCa-2 cell lysate: sc-2285.

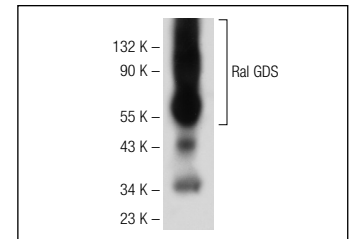
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



Ral GDS (H-110): sc-25636. Western blot analysis of Ral GDS expression in non-transfected 293T: sc-117752 (A), mouse Ral GDS transfected 293T: sc-127440 (B) and HeLa (C) whole cell lysates.



Ral GDS (H-110): sc-25636. Western blot analysis of Ral GDS expression in MIA PaCa-2 whole cell lysate.

## SELECT PRODUCT CITATIONS

1. Rondaij, M.G., et al. 2008. Guanine exchange factor Ral GDS mediates exocytosis of Weibel-Palade bodies from endothelial cells. *Blood* 112: 56-63.

## 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.



Try **Ral GDS (C-11): sc-393809**, our highly recommended monoclonal alternative to Ral GDS (H-110).