

# Ral GDS (C-19): sc-1787

## 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 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Ral GDS of mouse 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-1787 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

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

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.

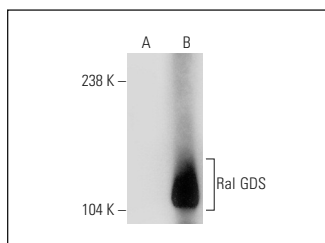
Molecular Weight of Ral GDS: 115 kDa.

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

## 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 GDS (C-19): sc-1787. Western blot analysis of Ral GDS expression in non-transfected: sc-117752 (A) and mouse Ral GDS transfected: sc-127440 (B) 293T whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Ardehali, M.R., et al. 2003. Microsurgical intraluminal middle cerebral artery occlusion model in rodents. *Acta Neurol. Scand.* 107: 267-275.
2. Cheng, L., et al. 2004. Peroxisome proliferator-activated receptor  $\delta$  activates fatty acid oxidation in cultured neonatal and adult cardiomyocytes. *Biochem. Biophys. Res. Commun.* 313: 277-286.
3. Fan, S., et al. 2007. Ras effector pathways modulate scatter factor-stimulated NF $\kappa$ B signaling and protection against DNA damage. *Oncogene* 26: 4774-4796.

## 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.


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Try **Ral GDS (C-11): sc-393809**, our highly recommended monoclonal alternative to Ral GDS (C-19).