## SANTA CRUZ BIOTECHNOLOGY, INC.

# Ral BP-1 (C-19): sc-1527



## 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.

## CHROMOSOMAL LOCATION

Genetic locus: RALBP1 (human) mapping to 18p11.22; Ralbp1 (mouse) mapping to 17 E1.1.

#### SOURCE

Ral BP-1 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Ral BP-1 of rat origin.

#### PRODUCT

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-1527 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## **APPLICATIONS**

Ral BP-1 (C-19) is recommended for detection of Ral BP-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 BP-1 (C-19) is also recommended for detection of Ral BP-1 in additional species, including canine.

Suitable for use as control antibody for Ral BP-1 siRNA (h): sc-36376, Ral BP-1 siRNA (m): sc-36377, Ral BP-1 shRNA Plasmid (h): sc-36376-SH, Ral BP-1 shRNA Plasmid (m): sc-36377-SH, Ral BP-1 shRNA (h) Lentiviral Particles: sc-36376-V and Ral BP-1 shRNA (m) Lentiviral Particles: sc-36377-V.

Molecular Weight of Ral BP-1: 95 kDa.

Positive Controls: Ral BP-1 (h): 293T Lysate: sc-113513 or NIH/3T3 whole cell lysate: sc-2210.

#### **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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941. 4) Immuno-histochemistry: use ImmunoCruz<sup>™</sup>: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA





Ral BP-1 (C-19): sc-1527. Western blot analysis of Ral BP-1 expression in non-transfected 293T: sc-117752 (**A**), human Ral BP-1 transfected 293T: sc-113513 (**B**) and NIH/3T3 (**C**) whole cell lysates Ral BP-1 (C-19): sc-1527. Immunofluorescence staining of methanol-fixed NIH/3T3 cells showing cytoplasmic localization (**A**). Immunoperoxidase staining of formalinfixed, paraffin-embedded human breast carcinoma tissue showing cytoplasmic localization (**B**).

### SELECT PRODUCT CITATIONS

- 1. Kariya, K., et al. 2000. Regulation of complex formation of POB1/epsin/ adaptor protein complex 2 by mitotic phosphorylation. J. Biol. Chem. 275: 18399-18406.
- Soranzo, N., et al. 2007. Lack of support for a role for RLIP76 (RALBP1) in response to treatment or predisposition to epilepsy. Epilepsia 48: 674-683.
- Crespel, A., et al. 2008. Juvenile myoclonic epilepsy in a patient with history of infantile hemiplegia. Rev. Neurol. 165: 189-193.

#### **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

#### PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS Satisfation Guaranteed Try **Ral BP-1 (H-10): sc-48337**, our highly recommended monoclonal alternative to Ral BP-1 (C-19).