SANTA CRUZ BIOTECHNOLOGY, INC.

Rho 8 (C-19): sc-1946



BACKGROUND

The Ras p21 family of guanine nucleotide proteins has been widely studied in view of its apparent role in signal transduction pathways and high frequency of mutations in human malignancies. It is now clear, however, that the Ras proteins (H-, K- and N-Ras p21) are members of a much larger superfamily of related proteins. Six members of this family, Rap 1A, Rap 1B, Rap 2, R-Ras, Ral A and Ral B, exhibit approximately 50% amino acid homology to Ras. The five mammalian Rho proteins (Rho A, B, C, 7 and 8) are approximately 30% homologous to Ras and are expressed in a wide range of cell types. Both Ras p21 and Rho p21, as well as other members of the Ras superfamily, contain a carboxy terminal CAAX sequence (C, cysteine; A, aliphatic amino acid; X, any amino acid) which in the case of Ras has been shown to be essential for correct localization and function.

CHROMOSOMAL LOCATION

Genetic locus: ARHE (human) mapping to 2q23.3; Arhe (mouse) mapping to 2 C1.1.

SOURCE

Rho 8 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Rho 8 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-1946 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Rho 8 (C-19) is recommended for detection of Rho 8 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Rho 8 (C-19) is also recommended for detection of Rho 8 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Rho 8 siRNA (h): sc-41881, Rho 8 siRNA (m): sc-41882, Rho 8 shRNA Plasmid (h): sc-41881-SH, Rho 8 shRNA Plasmid (m): sc-41882-SH, Rho 8 shRNA (h) Lentiviral Particles: sc-41881-V and Rho 8 shRNA (m) Lentiviral Particles: sc-41882-V.

Molecular Weight of Rho 8: 32 kDa.

Positive Controls: Rho 8 (h): 293T Lysate: sc-174030, U-87 MG cell lysate: sc-2411 or mouse placenta extract: sc-364247.

STORAGE

Store at 4° C, **D0 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.

DATA



Rho 8 (C-19): sc-1946. Western blot analysis of Rho 8 expression in non-transfected 293T: sc-117752 (Å), human Rho 8 transfected 293T: sc-174030 (B) and U-87 MG (C) whole cell lysates.

SELECT PRODUCT CITATIONS

- Worrad, D.M., et al. 1994. Reversing effect of sorcin in the drug resistance of human nasopharyngeal carcinoma. Development 120: 2347-2357.
- Jiang, W.G., et al. 2003. Prognostic value of Rho GTPases and Rho guanine nucleotide dissociation inhibiotors in human breast cancers. Clin. Cancer Res. 9: 6432-6440.
- Cario-Toumaniantz, C., et al. 2003. Modulation of Rho A-Rho kinasemediated Ca²⁺ sensitization of rabbit myometrium during pregnancyrole of Rnd3. J. Physiol. 552: 403-413.
- Tanaka, H., et al. 2006. Pragmin, a novel effector of Rnd2 GTPase, stimulates Rho A activity. J. Biol. Chem. 281: 10355-10364.
- 5. Grise, F., et al. 2012. Rnd3/RhoE is down-regulated in hepatocellular carcinoma and controls cellular invasion. Hepatology 55: 1766-1775.

PROTOCOLS

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

