SANTA CRUZ BIOTECHNOLOGY, INC.

REPS2 (C-20): sc-50174



BACKGROUND

REPS2, a cytoplasmic protein, is primarily expressed in cerebellum, lung, testis, cerebrum and kidney. REPS2 forms as complex with DDEF1 and then binds to paxillin. It can also form a complex with activated RAL, which interacts with the Rho subfamily member Cdc42, and with Ral BP-1, which is involved in growth factor signaling via its influence on the Ral signaling pathway. The NFkB subunit p65 interacts with the EH domain of REPS2, and an upregulation of NFkB activity correlates with a downregulation of REPS2 activity. Decreased expression of REPS2 during progression cancer cells may lead to loss of control of growth factor signalling and, thus, loss of control of cell proliferation. REPS2 may also be an important factor in cancer cell resistance to apoptosis.

REFERENCES

- 1. Ikeda, M., et al. 1998. Identification and characterization of a novel protein interacting with Ral-binding protein 1, a putative effector protein of Ral. J. Biol. Chem. 273: 814-821.
- 2. Oshiro, T., et al. 2002. Interaction of POB1, a downstream molecule of small G protein Ral, with PAG2, a paxillin-binding protein, is involved in cell migration. J. Biol. Chem. 277: 38618-38626.
- 3. Oosterhoff, J.K., et al. 2003. REPS2/POB1 is downregulated during human prostate cancer progression and inhibits growth factor signalling in prostate cancer cells. Oncogene 22: 2920-2925.
- 4. Huang, K.M., et al. 2004. Organization and annotation of the Xcat critical region: elimination of seven positional candidate genes. Genomics 83: 893-901.
- 5. Penninkhof, F., et al. 2004. Identification of REPS2 as a putative modulator of NFkB activity in prostate cancer cells. Oncogene 23: 5607-5615.
- 6. Oosterhoff, J.K., et al. 2005. EGF signalling in prostate cancer cell lines is inhibited by a high expression level of the endocytosis protein REPS2. Int. J. Cancer 113: 561-567.

CHROMOSOMAL LOCATION

Genetic locus: REPS2 (human) mapping to Xp22.2; Reps2 (mouse) mapping to X F4.

SOURCE

REPS2 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of REPS2 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-50174 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

REPS2 (C-20) is recommended for detection of REPS2 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).

REPS2 (C-20) is also recommended for detection of REPS2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for REPS2 siRNA (h): sc-61454, REPS2 siRNA (m): sc-61455, REPS2 shRNA Plasmid (h): sc-61454-SH, REPS2 shRNA Plasmid (m): sc-61455-SH, REPS2 shRNA (h) Lentiviral Particles: sc-61454-V and REPS2 shRNA (m) Lentiviral Particles: sc-61455-V.

sc-2405 or F9 cell lysate: sc-2245.

DATA



REPS2 expression in mouse cerebellum (A) and mous

STORAGE

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

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

Molecular Weight of REPS2: 78 kDa.

Positive Controls: mouse cerebellum extract: sc-2403, mouse testis extract:

testis (B) tissue extracts and F9 whole cell lysate (C)

PROTOCOLS

MONOS Satisfation Guaranteed

Try REPS2 (K-18): sc-100825, our highly recommended monoclonal alternative to REPS2 (C-20)