SANTA CRUZ BIOTECHNOLOGY, INC.

Sall1 (N-17): sc-46037

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Sall1 (Sall1, sal-like 1, TBS, HSAL1) and Sall2 (Sall2, sal-like 2, HSAL2, p150 (Sal2)) are mammalian homologs of the *Drosophila* region-specific home-otic gene spalt (sal), which encodes a zinc finger-containing transcription regulator. *Drosophila* spalt (sal) is an essential genetic component required for the speci-fication of posterior head and anterior tail as opposed to trunk. Mammalian Sall1 may mediate higher order chromatin structure, and may be a component of a distinct heterochromatin-dependent silencing process. Sall1 is present in kidney, brain and liver. Sall2 is a p53-independent regulator of p21 and BAX, and can function in some cell types as a regulator of cell growth and survival. Human Sall2 is present in brain, heart, kidney or pancreas. Sall1 and Sall2 are expressed in different areas of the fetal brain that may represent distinct sets of neurons.

REFERENCES

1. Nielsen, T.O., et al. 2003. Tissue microarray validation of epidermal growth factor receptor and Sall2 in synovial sarcoma with comparison to tumors of similar histology. Am. J. Pathol. 163: 1449-1456.
2. Sato, A., et al. 2003. Zinc finger protein Sall2 is not essential for embryonic and kidney development. Mol. Cell. Biol. 23: 62-69.
3. Wabbels, B.K., et al. 2004. No evidence of Sall4-mutations in isolated sporadic duane retraction "syndrome" (DURS). Am. J. Med. Genet. 131: 216-218.
4. Borozdin, W., et al. 2004. Novel mutations in the gene Sall4 provide further evidence for acro-renal-ocular and Okihiro syndromes being allelic entities, and extend the phenotypic spectrum. J. Med. Genet. 41: e102.
5. Borozdin, W., et al. 2004. Sall4 deletions are a common cause of Okihiro and acro-renal-ocular syndromes and confirm haploinsufficiency as the pathogenic mechanism. J. Med. Genet. 41: e113.
6. Kohlhase, J., et al. 2004. Mutations in Sall4 in malformed father and daughter postulated previously due to reflect mutagenesis by thalidomide. Birth Defects Res. A Clin. Mol. Teratol. 70: 550-551.

CHROMOSOMAL LOCATION

Genetic locus: SALL1 (human) mapping to 16q12.1; Sall1 (mouse) mapping to 8 C3.

SOURCE

Sall1 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Sall1 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.

Blocking peptide available for competition studies, sc-46037 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-46037 X, 200 µg/0.1 ml.

APPLICATIONS

Sall1 (N-17) is recommended for detection of Sall1 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).

Suitable for use as control antibody for Sall1 siRNA (h): sc-45620, Sall1 siRNA (m): sc-45621, Sall1 shRNA Plasmid (h): sc-45620-SH, Sall1 shRNA Plasmid (m): sc-45621-SH, Sall1 shRNA (h) Lentiviral Particles: sc-45620-V and Sall1 shRNA (m) Lentiviral Particles: sc-45621-V.

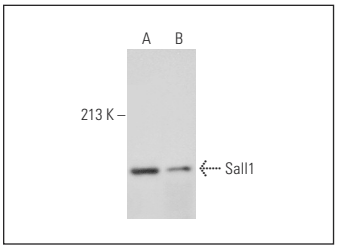
Sall1 (N-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Positive Controls: Sall1 (h): 293T Lysate: sc-369360, ARPE-19 whole cell lysate: sc-364357 or NIH/3T3 nuclear extract: sc-2138.

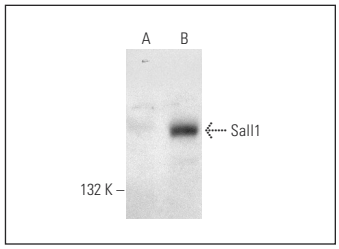
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecip-itation: 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



Sall1 (N-17): sc-46037. Western blot analysis of Sall1 expression in ARPE-19 whole cell lysate (**A**) and NIH/3T3 nuclear extract (**B**).



Sall1 (N-17): sc-46037. Western blot analysis of Sall1 expression in non-transfected: sc-117752 (**A**) and human Sall1 transfected: sc-369360 (**B**) 293T whole cell lysates.

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.