SANTA CRUZ BIOTECHNOLOGY, INC.

Sall3 (N-15): sc-46042



BACKGROUND

Sall3 (Sall3, sal-like 3) and SAll4 (Sall4, sal-like 4) are mammalian homologs of the *Drosophila* region-specific homeotic gene spalt (sal), which encodes a zinc finger-containing transcription regulator. *Drosophila* spalt (sal) is an essential genetic component required for the specification of posterior head and anterior tail as opposed to trunk. Sall3 is expressed at 24 weeks of gestation in several regions of the human fetal brain including neurons of the hippocampus formation and of mediodorsal and ventrolateral thalamic nuclei, Purkinje cells of the cerebellum, and a subset of neurons in the brainstem. Sall4 expression in early mouse embryos is gradually confined to the head region and the primitive streak, followed by prominent expression in the developing midbrain, branchial arches, limbs and genital papilla.

REFERENCES

- 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.
- Sato, A., et al. 2003. Zinc finger protein Sall2 is not essential for embryonic and kidney development. Mol. Cell. Biol. 23: 62-69.
- Wabbels, B.K., et al. 2004. Clinical and molecular genetic findings in isolated sporadic Duane syndrome. Klin. Monatsbl Augenheilkd. 221: 849-853.
- 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.
- 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.
- 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.
- 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.
- Parrish, M., et al. 2004. Loss of the Sall3 gene leads to palate deficiency, abnormalities in cranial nerves, and perinatal lethality. Mol. Cell. Biol. 24: 7102-7112.
- Sato, A., et al. 2004. Sall1, a causative gene for Townes-Brocks syndrome, enhances the canonical Wnt signaling by localizing to heterochromatin. Biochem. Biophys. Res. Commun. 319: 103-113.

CHROMOSOMAL LOCATION

Genetic locus: SALL3 (human) mapping to 18q23; Sall3 (mouse) mapping to 18 E3.

SOURCE

Sall3 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Sall3 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-46042 P, (100 μ g 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-46042 X, 200 $\mu g/0.1$ ml.

APPLICATIONS

Sall3 (N-15) is recommended for detection of Sall3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 Sall3 siRNA (h): sc-45624, Sall3 siRNA (m): sc-45625, Sall3 shRNA Plasmid (h): sc-45624-SH, Sall3 shRNA Plasmid (m): sc-45625-SH, Sall3 shRNA (h) Lentiviral Particles: sc-45624-V and Sall3 shRNA (m) Lentiviral Particles: sc-45625-V.

Sall3 (N-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

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) Immunofluo-rescence: 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.

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.

PROTOCOLS

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

MONOS Tr Satisfation m Guaranteed

Try **Sall3 (A-9): sc-271818**, our highly recommended monoclonal alternative to Sall3 (N-15).