

Sall3 (H-16): sc-46041

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.

CHROMOSOMAL LOCATION

Genetic locus: SALL3 (human) mapping to 18q23, SALL1 (human) mapping to 16q12.1; Sall3 (mouse) mapping to 18 E3, Sall1 (mouse) mapping to 8 D.

SOURCE

Sall3 (H-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Sall3 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-46041 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-46041 X, 200 µg/0.1 ml.

STORAGE

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

APPLICATIONS

Sall3 (H-16) is recommended for detection of Sall3 and, to a lesser extent, 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).

Sall3 (H-16) is also recommended for detection of Sall3 and, to a lesser extent, Sall1 in additional species, including equine, canine, porcine and avian.

Sall3 (H-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

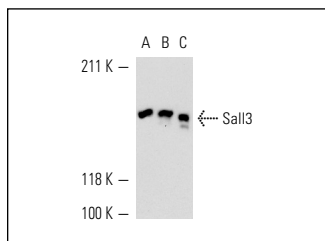
Molecular Weight of Sall3: 163 kDa.

Positive Controls: KNRK nuclear extract: sc-2141, A10 nuclear extract 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) 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™ Mounting Medium: sc-24941.

DATA



Sall3 (H-16): sc-46041. Western blot analysis of Sall3 expression in KNRK (A), A10 (B) and NIH/3T3 (C) nuclear extracts.

RESEARCH USE

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

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Try **Sall3 (A-9): sc-271818**, our highly recommended monoclonal alternative to Sall3 (H-16).