

Sall3 (M-140): sc-67066

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

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- 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. Part A Clin. Mol. Teratol.* 70: 550-551.

CHROMOSOMAL LOCATION

Genetic locus: Sall3 (mouse) mapping to 18 E3.

SOURCE

Sall3 (M-140) is a rabbit polyclonal antibody raised against amino acids 231-370 mapping near the N-terminus of Sall3 of mouse origin.

PRODUCT

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

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-67066 X, 200 µg/0.1 ml.

APPLICATIONS

Sall3 (M-140) is recommended for detection of Sall3 of mouse and rat 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 Sall3 siRNA (m): sc-45625, Sall3 shRNA Plasmid (m): sc-45625-SH and Sall3 shRNA (m) Lentiviral Particles: sc-45625-V.

Sall3 (M-140) 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 goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

- Chen, X., et al. 2011. Two functional variations in 5'-UTR of hoGG1 gene associated with the risk of breast cancer in Chinese. *Breast Cancer Res. Treat.* 127: 795-803.

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.



Try **Sall3 (A-9): sc-271818**, our highly recommended monoclonal alternative to Sall3 (M-140).