SANTA CRUZ BIOTECHNOLOGY, INC.

Sall3 (H-110): sc-67065



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

- 1. 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.
- 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.
- Takasato, M., et al. 2004. Identification of kidney mesenchymal genes by a combination of microarray analysis and Sall1-GFP knockin mice. Mech. Dev. 121: 547-557.
- Hoei-Hansen, C.E., et al. 2004. Identification of genes differentially expressed in testes containing Carcinoma *in situ*. Mol. Hum. Reprod. 10: 423-431.
- Ohgane, J., et al. 2004. The Sall3 locus is an epigenetic hotspot of aberrant DNA methylation associated with placentomegaly of cloned mice. Genes Cells 9: 253-260.
- 7. Brodbeck, S., et al. 2004. Genetic determination of nephrogenesis: the Pax/Eya/Six gene network. Pediatr. Nephrol. 19: 249-255.
- 8. Li, D., et al. 2004. p150 (Sal2) is a p53-independent regulator of p21 (WAF1/CIP). Mol. Cell. Biol. 24: 3885-3893.
- Hanisch, F., et al. 2005. Congenital fibrosis of extraocular muscles (CFEOM) and other phenotypes of congenital cranial dysinnervation syndromes (CCDD). Nervenarzt 76: 395-402.

CHROMOSOMAL LOCATION

Genetic locus: SALL3 (human) mapping to 18q23.

SOURCE

Sall3 (H-110) is a rabbit polyclonal antibody raised against amino acids 531-640 mapping within an internal region 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.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-67065 X, 200 $\mu\text{g}/0.1$ ml.

APPLICATIONS

Sall3 (H-110) is recommended for detection of Sall3 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 (h): sc-45624, Sall3 shRNA Plasmid (h): sc-45624-SH and Sall3 shRNA (h) Lentiviral Particles: sc-45624-V.

Sall3 (H-110) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Sall3: 163 kDa.

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.

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 (H-110).