

# Sall4 (M-220): sc-67068

## 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.
2. Li, D., et al. 2004. p150(Sal2) is a p53-independent regulator of p21(WAF1/CIP). *Mol. Cell. Biol.* 24: 3885-3893.
3. 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.
4. 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.
5. 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.
6. Hoei-Hansen, C.E., et al. 2004. Identification of genes differentially expressed in testes containing carcinoma *in situ*. *Mol. Hum. Reprod.* 10: 423-431.

## CHROMOSOMAL LOCATION

Genetic locus: Sall4 (mouse) mapping to 2 H3.

## SOURCE

Sall4 (M-220) is a rabbit polyclonal antibody raised against amino acids 671-890 mapping within an internal region of Sall4 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-67068 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

Sall4 (M-220) is recommended for detection of Sall4 of mouse and, to a lesser extent, 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 Sall4 siRNA (m): sc-45809, Sall4 shRNA Plasmid (m): sc-45809-SH and Sall4 shRNA (m) Lentiviral Particles: sc-45809-V.

Sall4 (M-220) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Sall4 isoform A: 165 kDa.

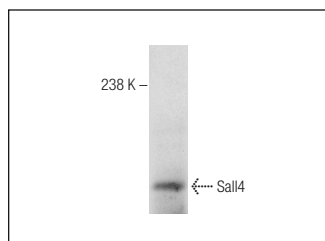
Molecular Weight of Sall4 isoform B: 95 kDa.

Positive Controls: mouse testis extract: sc-2405 or P19 cell lysate: sc-24760.

## 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.

## DATA



Sall4 (M-220): sc-67068. Western blot analysis of Sall4 expression in mouse testis tissue extract.

## RESEARCH USE

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

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Try **Sall4 (G-3): sc-166033** or **Sall4 (F-2): sc-377432**, our highly recommended monoclonal alternatives to Sall4 (M-220).