

SNAI 1 (T-18): sc-10433

BACKGROUND

The SNAIL family of developmental regulatory proteins is a group of widely conserved zinc-finger proteins that regulate transcription and include the mammalian proteins SLUG, SNAI 1, the human homolog of *Drosophila* SNAIL, and Smuc. SNAI 1 and SLUG are expressed in placenta and adult heart, liver and skeletal muscle. SNAI 1, and the corresponding mouse homolog Sna, each contain three classic zinc fingers and one atypical zinc finger, while SLUG contains five zinc finger regions and a transcriptional repression domain at the amino terminus, which enables SLUG to act as a negative regulator of gene expression. SLUG is implicated in the generation and migration of neural crest cells in human embryos and also contributes to limb bud development. In addition, SLUG also constitutes a cellular anti-apoptotic transcription factor that effectively prevents apoptosis in murine pro-B cells deprived of IL-3. The SNAIL-related gene from murine skeletal muscle cells, Smuc, is highly expressed in skeletal muscle and thymus and can, likewise, repress gene transcription. Smuc preferentially associates with CAGGTG and CACCTG E-box motifs (CANNTG) on DNA and involves the five putative DNA-binding zinc finger domains at the C-terminal region of Smuc.

CHROMOSOMAL LOCATION

Genetic locus: SNAI1 (human) mapping to 20q13.13; Snai1 (mouse) mapping to 2 H3.

SOURCE

SNAI 1 (T-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SNAI 1 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-10433 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-10433 X, 200 µg/0.1 ml.

APPLICATIONS

SNAI 1 (T-18) is recommended for detection of SNAI 1 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).

Suitable for use as control antibody for SNAI 1 siRNA (h): sc-38398, SNAI 1 siRNA (m): sc-38399, SNAI 1 shRNA Plasmid (h): sc-38398-SH, SNAI 1 shRNA Plasmid (m): sc-38399-SH, SNAI 1 shRNA (h) Lentiviral Particles: sc-38398-V and SNAI 1 shRNA (m) Lentiviral Particles: sc-38399-V.

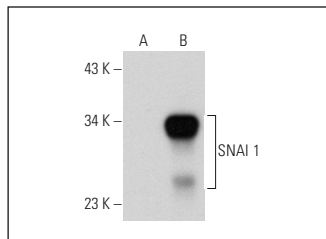
SNAI 1 (T-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of SNAI 1: 29 kDa.

STORAGE

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

DATA



SNAI 1 (T-18): sc-10433. Western blot analysis of SNAI 1 expression in non-transfected: sc-117752 (A) and human SNAI 1 transfected: sc-113766 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Li, Y., et al. 2003. Role for integrin-linked kinase in mediating tubular epithelial to mesenchymal transition and renal interstitial fibrogenesis. *J. Clin. Invest.* 112: 503-516.
- Medici, D., et al. 2010. Conversion of vascular endothelial cells into multipotent stem-like cells. *Nat. Med.* 16: 1400-1406.
- Kotb, A.M., et al. 2011. Replacement of E-cadherin by N-cadherin in the mammary gland leads to fibrocystic changes and tumor formation. *Breast Cancer Res.* 13: R104.
- Tuncay Cagatay, S., et al. 2013. MTA-1 expression is associated with metastasis and epithelial to mesenchymal transition in colorectal cancer cells. *Tumour Biol.* 34: 1189-1204.
- Ghiggeri, G.M., et al. 2013. Constitutional nephrin deficiency in conditionally immortalized human podocytes induced epithelial-mesenchymal transition, supported by β -catenin/NF κ B activation: a consequence of cell junction impairment? *Int. J. Nephrol.* 2013: 457490.
- Wang, Q., et al. 2013. The role of uPAR in epithelial-mesenchymal transition in small airway epithelium of patients with chronic obstructive pulmonary disease. *Respir. Res.* 14: 67.
- Joseph, J.V., et al. 2014. TGF- β is an inducer of ZEB1-dependent mesenchymal transdifferentiation in glioblastoma that is associated with tumor invasion. *Cell Death Dis.* 5: e1443.

RESEARCH USE

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



Try **SNAI 1 (G-7): sc-271977** or **SNAI 1 (E-10): sc-393172**, our highly recommended monoclonal alternatives to SNAI 1 (T-18). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **SNAI 1 (G-7): sc-271977**.