**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, Snail, the human homolog of Drosophila Snail; and Smuc. Snail 1 and Slug are expressed in placenta and adult heart, liver and skeletal muscle. Snail 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 (CANTGT) 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; Sna1 (mouse) mapping to 2 H3.

**SOURCE**

Snail 1 (G-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 113-139 within an internal region of Snail 1 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-271977 X, 200 µg/0.1 ml.

Snail 1 (G-7) is available conjugated to agarose (sc-271977 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-271977 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-271977 PE), fluorescein (sc-271977 FITC), Alexa Fluor® 488 (sc-271977 AF488), Alexa Fluor® 546 (sc-271977 AF546), Alexa Fluor® 594 (sc-271977 AF594) or Alexa Fluor® 647 (sc-271977 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-271977 AF680) or Alexa Fluor® 790 (sc-271977 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM. Blocking peptide available for competition studies, sc-271977 P (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

**STORAGE**

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

**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

**APPLICATIONS**

Snail 1 (G-7) is recommended for detection of Snail 1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (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 Snail 1 siRNA (h): sc-38398, Snail 1 siRNA (m): sc-38399, SNAI1 shRNA Plasmid (h): sc-38398-SH, SNAI1 shRNA Plasmid (m): sc-38399-SH, SNAI1 shRNA (h) Lentiviral Particles: sc-38398-V and SNAI1 shRNA (m) Lentiviral Particles: sc-38399-V.

Snail 1 (G-7) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Snail 1: 20 kDa.

Positive Controls: Snail 1 (h): 293T Lysate: sc-113766 or Caki-1 cell lysate: sc-2224.

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

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