SANTA CRUZ BIOTECHNOLOGY, INC.

SLUG (H-140): sc-15391

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 in 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: SNAI2 (human) mapping to 8q11.21; Snai2 (mouse) mapping to 16 A1.

SOURCE

SLUG (H-140) is a rabbit polyclonal antibody raised against amino acids 21-160 of SLUG 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.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-15391 X, 200 µg/0.1 ml.

APPLICATIONS

SLUG (H-140) is recommended for detection of SLUG 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), 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).

SLUG (H-140) is also recommended for detection of SLUG in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for SLUG siRNA (h): sc-38393, SLUG siRNA (m): sc-38394, SLUG shRNA Plasmid (h): sc-38393-SH, SLUG shRNA Plasmid (m): sc-38394-SH, SLUG shRNA (h) Lentiviral Particles: sc-38393-V and SLUG shRNA (m) Lentiviral Particles: sc-38394-V.

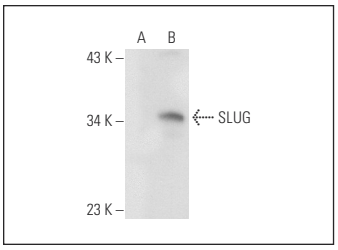
SLUG (H-140) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of SLUG: 30 kDa.

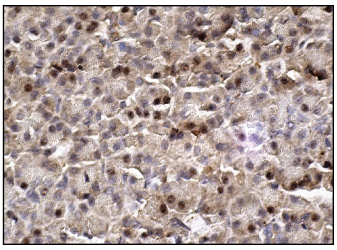
STORAGE

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

DATA



SLUG (H-140): sc-15391. Western blot analysis of SLUG expression in non-transfected: sc-110760 (**A**) and human SLUG transfected: sc-111905 (**B**) 293 whole cell lysates.



SLUG (H-140): sc-15391. Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing nuclear staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Martin, T.A., et al. 2005. Expression of the transcription factors SNAIL, SLUG, and twist and their clinical significance in human breast cancer. Ann. Surg. Oncol. 12: 488-496.
2. Kurrey, N.K., et al. 2005. SNAIL and SLUG are major determinants of ovarian cancer invasiveness at the transcription level. Gynecol. Oncol. 97: 155-165.
3. Giannelli, G., et al. 2005. Laminin-5 with transforming growth factor-β1 induces epithelial to mesenchymal transition in hepatocellular carcinoma. Gastroenterology 129: 1375-1383.
4. Martinez-Orozco, R., et al. 2010. Arachidonic acid promotes epithelial-to-mesenchymal-like transition in mammary epithelial cells MCF10A. Eur. J. Cell Biol. 89: 476-488.
5. Torreggiani, E., et al. 2011. Osteogenic potential of cells derived from nasal septum. Rhinology 49: 148-154.
6. van der Gun, B.T., et al. 2011. Transcription factors and molecular epigenetic marks underlying EpCAM overexpression in ovarian cancer. Br. J. Cancer 105: 312-319.
7. Piva, R., et al. 2015. Slug transcription factor and nuclear Lamin B1 are upregulated in osteoarthritic chondrocytes. Osteoarthritis Cartilage 23: 1226-1230.

RESEARCH USE

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