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, SNAI1 (the human homolog of Drosophila SNAIL) and Smuc. SNAI1 and SLUG are expressed in placenta and in adult heart, liver and skeletal muscle. SNAI1 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 CACCCCTG 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 Bq11.21; SnaI2 (mouse) mapping to 16 A1.

SOURCE

SLUG (A-7) is a mouse monoclonal antibody raised against amino acids 21-160 of SLUG of human origin.

PRODUCT

Each vial contains 200 µg IgG1 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-166476 X, 200 µg/0.1 ml. SLUG (A-7) is available conjugated to agarose (sc-166476 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166476 HRP), 200 µg/ml, for WB, IHC (P) and ELISA; to either phycoerythrin (sc-166476 PE), fluorescein (sc-166476 FITC), Alexa Fluor® 488 (sc-166476 AF488), Alexa Fluor® 594 (sc-166476 AF594) or Alexa Fluor® 647 (sc-166476 AF647), 200 µg/ml, for IF, IHC (P) and FCM; and to either Alexa Fluor® 680 (sc-166476 AF680) or Alexa Fluor® 790 (sc-166476 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.

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

SLUG (A-7) is recommended for detection of SLUG 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 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 (A-7) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of SLUG: 30 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, HeLa whole cell lysate: sc-2200 or MDA-MB-231 cell lysate: sc-2232.

DATA

SELECT PRODUCT CITATIONS


RESEARCH USE

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