SANTA CRUZ BIOTECHNOLOGY, INC.

Scratch1 (N-17): sc-87427

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The Snail family of developmental regulatory proteins is a group of widely conserved zinc finger transcription factors that are involved in morphogenesis, cell division and cell survival. Scratch1, also known as SCRT, SCRT1, transcriptional repressor scratch 1 or scratch homolog 1 zinc finger protein, is a 348 amino acid nuclear protein that is specifically expressed in brain. Scratch1 belongs to the Snail family of C_2H_2-type zinc finger transcription factors and contains five C_2H_2-type zinc fingers. Considered a neural-specific transcriptional repressor, Scratch1 binds to E-box domains and may promote neural differentiation. It is suggested that Scratch1 may be involved in cancers with neuroendocrine features.

REFERENCES

1. Sefton, M., et al. 1998. Conserved and divergent roles for members of the Snail family of transcription factors in the chick and mouse embryo. Development 125: 3111-3121.
2. Hemavathy, K., et al. 2000. Snail/slug family of repressors: slowly going into the fast lane of development and cancer. Gene 257: 1-12.
3. Nieto, M.A. 2002. The Snail superfamily of zinc-finger transcription factors. Nat. Rev. Mol. Cell Biol. 3: 155-166.
4. Katoh, M., et al. 2003. Identification and characterization of human SNAIL3 (SNAI3) gene in silico. Int. J. Mol. Med. 11: 383-388.
5. De Craene, B., et al. 2005. Unraveling signalling cascades for the Snail family of transcription factors. Cell. Signal. 17: 535-547.
6. Marín, F., et al. 2006. The expression of Scratch genes in the developing and adult brain. Dev. Dyn. 235: 2586-2591.
7. Usami, Y., et al. 2008. Snail-associated epithelial-mesenchymal transition promotes oesophageal squamous cell carcinoma motility and progression. J. Pathol. 215: 330-339.

CHROMOSOMAL LOCATION

Genetic locus: SCRT1 (human) mapping to 8q24.3; Scrt1 (mouse) mapping to 15 D3.

SOURCE

Scratch1 (N-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of Scratch1 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-87427 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-87427 X, 100 µg/0.1 ml.

RESEARCH USE

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

APPLICATIONS

Scratch1 (N-17) is recommended for detection of Scratch1 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).

Scratch1 (N-17) is also recommended for detection of Scratch1 in additional species, including bovine.

Suitable for use as control antibody for Scratch1 siRNA (h): sc-77875, Scratch1 siRNA (m): sc-153269, Scratch1 shRNA Plasmid (h): sc-77875-SH, Scratch1 shRNA Plasmid (m): sc-153269-SH, Scratch1 shRNA (h) Lentiviral Particles: sc-77875-V and Scratch1 shRNA (m) Lentiviral Particles: sc-153269-V.

Scratch1 (N-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

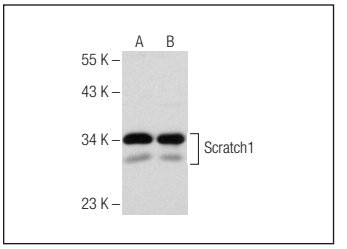
Molecular Weight of Scratch1: 36 kDa.

Positive Controls: Mouse brain extract: sc-2253 or mouse cerebellum extract: sc-2403.

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



Scratch1 (N-17): sc-87427. Western blot analysis of Scratch1 expression in mouse brain (**A**) and mouse cerebellum (**B**) tissue extracts.

STORAGE

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