SANTA CRUZ BIOTECHNOLOGY, INC.

Sil (C-18): sc-32620

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

TAL1 disruption at 1p32, a common rearrangement in the T cell acute lymphoblastic leukemia, usually results in the formation of a SCL interrupting locus (SIL)-TAL1 fusion product. SIL is an immediate early gene whose expression is associated with cell proliferation. The Sil protein exhibits ubiquitous expression in hematopoietic cell lines and tissues. However, Sil protein levels remain tightly regulated during the cell cycle, achieving peak levels in mitosis and diminishing on transition to G_1 phase. Overexpression of Sil in primary adenocarcinomas predicts metastatic spread, especially in lung tumors with increased mitotic activity.

REFERENCES

1. Aplan, P.D., et al. 1991. Structural characterization of Sil, a gene frequently disrupted in T cell acute lymphoblastic leukemia. Mol. Cell. Biol. 11: 5462-5469.
2. Collazo-Garcia, N., et al. 1995. Cloning and characterization of a murine Sil gene. Genomics 30: 506-513.
3. Izraeli, S., et al. 1999. The Sil gene is required for mouse embryonic axial development and left-right specification. Nature 399: 691-694.
4. Raghavan, S.C., et al. 2001. Analysis of the V(D)J recombination efficiency at lymphoid chromosomal translocation breakpoints. J. Biol. Chem. 276: 29126-26133.
5. Curry, J.D., et al. 2003. Measurement of SIL-TAL1 fusion gene transcripts associated with human T-cell lymphocytic leukemia by real-time reverse transcriptase-PCR. Leuk. Res. 27: 575-582.
6. Erez, A., et al. 2004. Sil overexpression in lung cancer characterizes tumors with increased mitotic activity. Oncogene 23: 5371-5377.

CHROMOSOMAL LOCATION

Genetic locus: STIL (human) mapping to 1p33; Stil (mouse) mapping to 4 D1.

SOURCE

Sil (C-18) is available as either goat (sc-32620) or rabbit (sc-32620-R) polyclonal affinity purified antibody raised against a peptide mapping at the C-terminus of SCL interrupting locus 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-32620 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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 or our catalog for detailed protocols and support products.

APPLICATIONS

Sil (C-18) is recommended for detection of Sil of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Sil (C-18) is also recommended for detection of Sil in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Sil siRNA (h): sc-44775, Sil siRNA (m): sc-44776, Sil siRNA (r): sc-270103, Sil shRNA Plasmid (h): sc-44775-SH, Sil shRNA Plasmid (m): sc-44776-SH, Sil shRNA Plasmid (r): sc-270103-SH, Sil shRNA (h) Lentiviral Particles: sc-44775-V, Sil shRNA (m) Lentiviral Particles: sc-44776-V and Sil shRNA (r) Lentiviral Particles: sc-270103-V.

Molecular Weight of Sil: 143 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, Jurkat whole cell lysate: sc-2204 or HEL 92.1.7 cell lysate: sc-2270.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: for goat primary antibody (sc-32620): use donkey anti-goat IgG-HRP: sc-2020 (range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (range: 1:2000-1:5000); for rabbit primary antibody (sc-32620-R): use goat anti-rabbit IgG-HRP: sc-2004 (range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunofluorescence: for goat primary antibody (sc-32620): use donkey anti-goat IgG-FITC: sc-2024 (range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (range: 1:100-1:400); for rabbit primary antibody (sc-32620-R): use goat anti-rabbit IgG-FITC: sc-2012 (range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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