

# Sil (A-6): sc-271910

## 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<sub>1</sub> 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. 1990. Disruption of the human SCL locus by "illegitimate" V-(D)-J recombinase activity. *Science* 250: 1426-1429.
2. 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.
3. Collazo-Garcia, N., et al. 1995. Cloning and characterization of a murine Sil gene. *Genomics* 30: 506-513.
4. Izraeli, S., et al. 1999. The Sil gene is required for mouse embryonic axial development and left-right specification. *Nature* 399: 691-694.
5. Raghavan, S.C., et al. 2001. Analysis of the V(D)J recombination efficiency at lymphoid chromosomal translocation breakpoints. *J. Biol. Chem.* 276: 29126-29133.
6. 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.
7. 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 (A-6) is a mouse monoclonal antibody raised against amino acids 69-1262 mapping at the C-terminus of SIL of mouse origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Sil (A-6) is available conjugated to agarose (sc-271910 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-271910 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-271910 PE), fluorescein (sc-271910 FITC), Alexa Fluor® 488 (sc-271910 AF488), Alexa Fluor® 546 (sc-271910 AF546), Alexa Fluor® 594 (sc-271910 AF594) or Alexa Fluor® 647 (sc-271910 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-271910 AF680) or Alexa Fluor® 790 (sc-271910 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## APPLICATIONS

Sil (A-6) is recommended for detection of Sil 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

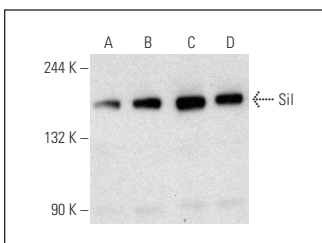
Molecular Weight of Sil: 190 kDa.

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

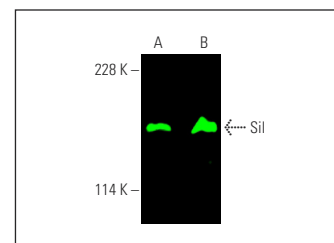
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



Sil (A-6): sc-271910. Western blot analysis of Sil expression in HEL 92.1.7 (A), K-562 (B), Jurkat (C) and ALL-SIL (D) whole cell lysates.



Sil (A-6): sc-271910. Near-infrared western blot analysis of Sil expression in ALL-SIL (A) and K-562 (B) whole cell lysates. Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-IgGκ BP-CFL 680: sc-516180.

## STORAGE

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

## RESEARCH USE

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

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