SANTA CRUZ BIOTECHNOLOGY, INC.

Lyl-1 (H-80): sc-66955

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Lyl-1, TAL1 and TAL2 are part of a family of basic helix-loop-helix (bHLH) proteins implicated in T cell acute leukemia. TAL1 (also designated SCL) is a serine phosphoprotein and basic helix-loop-helix transcription factor known to regulate embryonic hematopoiesis. TAL2 is a protein involved in T cell acute lymphoblastic leukemia through a chromosomal translocation involving TAL2 and T cell receptor β chain genes. TAL2 includes a helix-loop-helix protein dimerization and DNA binding domain that is homologous to TAL1 and Lyl-1 protooncogenes. Lyl-1 (lymphoblastic leukemia derived sequence 1) is a nuclear protein. Endogenous Lyl-1 exists in complex with E2α proteins. Lyl-1 and E2α protein can form heterodimeric complexes with distinctive DNA-binding properties in hematolymphoid cells. This complex has distinctive DNA-binding properties in hematolymphoid cells. Lyl-1 is involved in a chromosomal aberration which causes a form of T cell acute lymphoblastic leukemia (T-ALL).

REFERENCES

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3. Kuo, S.S., Mellentin, J.D., Copeland, N.G., Gilbert, D.J., Jenkins, N.A. and Cleary, M.L. 1991. Structure, chromosome mapping, and expression of the mouse Lyl-1 gene. Oncogene 6: 961-968.
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CHROMOSOMAL LOCATION

Genetic locus: LYL1 (human) mapping to 19p13.2.

SOURCE

Lyl-1 (H-80) is a rabbit polyclonal antibody raised against amino acids 188-267 mapping at the C-terminus of Lyl-1 of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 200 µg IgG 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-66955 X, 200 µg/0.1 ml.

APPLICATIONS

Lyl-1 (H-80) is recommended for detection of Lyl-1 of 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Lyl-1 siRNA (h): sc-45688, Lyl-1 shRNA Plasmid (h): sc-45688-SH and Lyl-1 shRNA (h) Lentiviral Particles: sc-45688-V.

Lyl-1 (H-80) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Lyl-1: 28 kDa.

Positive Controls: JM1 whole cell lysate: sc-364233.

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.

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.