

TCL-1A (h2): 293T Lysate: sc-159145

BACKGROUND

T-cell leukemia/lymphoma protein 1A (TCL-1A), also known as p14TCL1 is a product of the TCL1 gene that is involved in T-cell prolymphocytic leukemia (T-PLL). T-PLL is a rare form of mature T-cell leukemia, which is consistently associated with chromosomal rearrangements characterized by the juxtaposition of the TCRA locus on chromosome 14q11.2 and the TCL1A gene on 14q32.13. TCL-1A is a member of a unique family of β barrel proteins that bind small hydrophobic ligands and function in cell regulation. TCL-1A is an all- β protein containing an eight-stranded antiparallel β barrel which consists of two four-stranded β -meander motifs. The two motifs are related by a twofold axis and connected by a long loop. TCL-1A forms a tight crystallographic dimer. TCL-1A is expressed in pre-B cells, in immature thymocytes, at low levels in activated T cells, and in the cytoplasm.

REFERENCES

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3. Hoh, F., Yang, Y.S., Guignard, L., Padilla, A., Stern, M.H., Lhoste, J.M. and van Tilbeurgh, H. 1998. Crystal structure of p14TCL1, an oncogene product involved in T cell prolymphocytic leukemia, reveals a novel β -barrel topology. *Structure* 6: 147-155.
4. Du Bois, G.C., Song, S.P., Kulikovskaya, I., Virgilio, L., Varnum, J., Germann, M.W. and Croce, C.M. 1998. Purification and characterization of recombinant forms of TCL-1 and MTCP-1 proteins. *Protein Expr. Purif.* 12: 215-225.
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CHROMOSOMAL LOCATION

Genetic locus: TCL1A (human) mapping to 14q32.13.

PRODUCT

TCL-1A (h2): 293T Lysate represents a lysate of human TCL-1A transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

TCL-1A (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive TCL-1A antibodies. Recommended use: 10-20 μ l per lane.

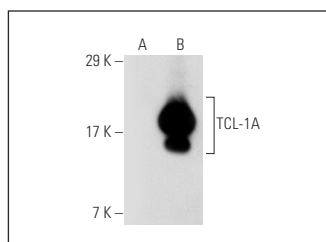
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

TCL-1A (1-21): sc-32331 is recommended as a positive control antibody for Western Blot analysis of enhanced human TCL-1A expression in TCL-1A transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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.

DATA



TCL-1A (1-21): sc-32331. Western blot analysis of TCL-1A expression in non-transfected: sc-117752 (A) and human TCL-1A transfected: sc-159145 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.