



## TCL-1B4 (T-16): sc-11170

### BACKGROUND

T cell leukemia/lymphoma protein 1B, TCL-1B, (also designated TML1, TCL/MTCP1-like 1, Syncytiotrophoblast-specific protein, and SYN-1), is a protein involved in T cell prolymphocytic leukemia (T-PLL). TCL-1B is located within the region on chromosome 14q32.1, which is frequently involved in chromosomal translocations and inversions with one of the T cell receptor loci in human T cell leukemias and lymphomas. TCL-1B is activated by chromosomal rearrangements involving the TCL1 locus. In mouse, TCL-1B is represented by five homologues, TCL-1B 1–5. The crystal structure of TCL-1B suggests that it may play a role in the transport of small molecules such as retinoids, nucleotides, and fatty acids. TCL-1B is found in both the nucleus and the cytoplasm of normal bone marrow and peripheral lymphocytes.

### REFERENCES

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2. Fu, Z.Q., Du Bois, G.C., Song, S.P., Kulikovskaya, I., Virgilio, L., Rothstein, J.L., Croce, C.M., Weber, I.T. and Harrison, R.W. 1998. Crystal structure of MTCP-1: implications for role of TCL-1 and MTCP-1 in T cell malignancies. *Proc. Natl. Acad. Sci. USA* 95: 3413-3418.
3. Sugimoto, J., Hatakeyama, T., Narducci, M.G., Russo, G. and Isobe, M. 1999. Identification of the TCL1/MTCP1-like 1 (TML1) gene from the region next to the TCL1 locus. *Cancer Res.* 59: 2313-2317.
4. Pekarsky, Y., Hallas, C., Isobe, M., Russo, G. and Croce, C.M. 1999. Abnormalities at 14q32.1 in T cell malignancies involve two oncogenes. *Proc. Natl. Acad. Sci. USA* 96: 2949-2951.
5. Hallas, C., Pekarsky, Y., Itoyama, T., Varnum, J., Bichi, R., Rothstein, J. and Croce, C.M. 1999. Genomic analysis of human and mouse TCL1 loci reveals a complex of tightly clustered genes. *Proc. Natl. Acad. Sci. USA* 96: 14418-14423.
6. Pekarsky, Y., Koval, A., Hallas, C., Bichi, R., Tresini, M., Malstrom, S., Russo, G., Tschlis, P. and Croce, C.M. 2000. TCL1 enhances Akt kinase activity and mediates its nuclear translocation. *Proc. Natl. Acad. Sci. USA* 97: 3028-3033.

### CHROMOSOMAL LOCATION

Genetic locus: Tcl1b4 (mouse) mapping to 12 E.

### SOURCE

TCL-1B4 (T-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TCL-1B4 of mouse 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-11170 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

TCL-1B4 (T-16) is recommended for detection of TCL-1B4 of mouse and rat 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).

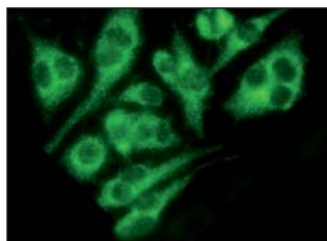
Suitable for use as control antibody for TCL-1B4 siRNA (m): sc-42995.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotting A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### DATA



TCL-1B4 (T-16): sc-11170. Immunofluorescence staining of methanol-fixed NIH/3T3 cells showing cytoplasmic localization.

### 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.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.