

TCL-1B (E-1): sc-515117

BACKGROUND

T cell leukemia/lymphoma protein 1B (TCL-1B), also designated TML1, TCL/MTCP1-like 1, syncytiotrophoblast-specific protein and SYN-1, is involved in T cell polymphocytic leukemia (T-PLL). TCL-1B is located within the region on human chromosome 14q32.13 which, in T cell leukemias and lymphomas, is frequently involved in chromosomal translocations and inversions with one of the T cell receptor loci. TCL-1B is activated by chromosomal rearrangements involving the TCL1 locus. In mouse, TCL-1B is represented by five homologues, TCL-1B1-TCL-1B5. 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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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.
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CHROMOSOMAL LOCATION

Genetic locus: TCL1B (human) mapping to 14q32.13.

SOURCE

TCL-1B (E-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 2-23 at the N-terminus of TCL-1B of human origin.

PRODUCT

Each vial contains 200 µg IgG₃ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-515117 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

TCL-1B (E-1) is recommended for detection of TCL-1B of 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 TCL-1B siRNA (h): sc-42990, TCL-1B shRNA Plasmid (h): sc-42990-SH and TCL-1B shRNA (h) Lentiviral Particles: sc-42990-V.

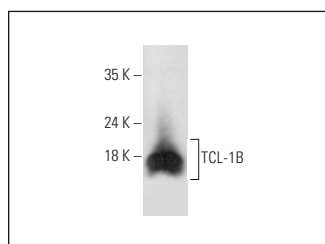
Molecular Weight of TCL-1B: 14 kDa.

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

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



TCL-1B (E-1): sc-515117. Western blot analysis of TCL-1B expression in JM1 whole cell lysate.

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 for detailed protocols and support products.