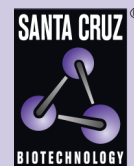


TCL-1B (H-3): sc-365169



The Power to Question

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 prolymphocytic 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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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.

CHROMOSOMAL LOCATION

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

SOURCE

TCL-1B (H-3) is a mouse monoclonal antibody raised against amino acids 1-90 mapping at the N-terminus of TCL-1B of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TCL-1B (H-3) is available conjugated to agarose (sc-365169 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365169 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365169 PE), fluorescein (sc-365169 FITC), Alexa Fluor® 488 (sc-365169 AF488), Alexa Fluor® 546 (sc-365169 AF546), Alexa Fluor® 594 (sc-365169 AF594) or Alexa Fluor® 647 (sc-365169 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-365169 AF680) or Alexa Fluor® 790 (sc-365169 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

TCL-1B (H-3) 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.

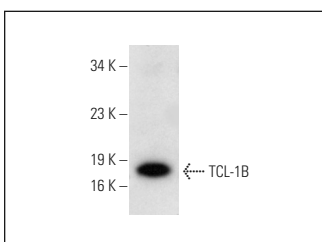
Molecular Weight of TCL-1B: 14 kDa.

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

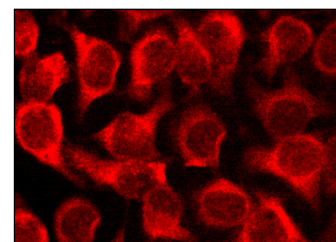
RECOMMENDED SUPPORT REAGENTS

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 (H-3): sc-365169. Western blot analysis of TCL-1B expression in JM1 whole cell lysate.



TCL-1B (H-3): sc-365169. Immunofluorescence staining of methanol-fixed HeLa 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 for detailed protocols and support products.

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