

# MTCP-1 A (N-15): sc-23234

## BACKGROUND

The mature T-cell proliferation 1 (MTCP-1) protein influences the leukemogenic process of mature T cell proliferation. Leukemic cells carrying a t(14;14) (q11;q32) chromosome translocation produce a gene product having sequence similarity with TCL1 and MTCP-1 oncoproteins. MTCP-1 encodes for a cytoplasmic product. Alternative splicing yields a short form (A) and a long form (B).

## REFERENCES

1. Stern, M.H., et al. 1993. MTCP-1: a novel gene on the human chromosome Xq28 translocated to the T cell receptor alpha/delta locus in mature T cell proliferations. *Oncogene* 8: 2475-2483.
2. Soulier, J., et al. 1994. The MTCP-1/c6.1B gene encodes for a cytoplasmic 8 kD protein overexpressed in T cell leukemia bearing a t(X;14) translocation. *Oncogene* 9: 3565-3570.
3. Madani, A., et al. 1995. The 8 kD product of the putative oncogene MTCP-1 is a mitochondrial protein. *Oncogene* 10: 2259-2262.
4. Du Bois, G.C., et al. 1998. Purification and characterization of recombinant forms of TCL-1 and MTCP-1 proteins. *Protein Expr. Purif.* 12: 215-225.
5. Fu, Z.Q., et al. 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.
6. Fu, Z.Q., et al. 1999. Improving the diffraction quality of MTCP-1 crystals by post-crystallization soaking. *Acta Crystallogr. D Biol. Crystallogr.* 55: 5-7.
7. Woffendin, H., et al. 2000. Molecular analysis of the mature T cell proliferation-1 (MTCP-1) gene in Xq28-linked incontinentia pigmenti. *Eur. J. Hum. Genet.* 4: 239-240.
8. Chun, H.H., et al. 2002. TCL-1, MTCP-1 and TML-1 gene expression profile in non-leukemic clonal proliferations associated with ataxia-telangiectasia. *Int. J. Cancer* 97: 726-731.

## CHROMOSOMAL LOCATION

Genetic locus: MTCP1 (human) mapping to Xq28; Mtcp1 (mouse) mapping to X A7.3.

## SOURCE

MTCP-1 A (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of MTCP-1 A of human 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-23234 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

MTCP-1 A (N-15) is recommended for detection of MTCP-1 of mouse, rat and human 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

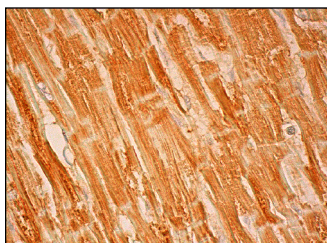
MTCP-1 A (N-15) is also recommended for detection of MTCP-1 in additional species, including equine, bovine and porcine.

Molecular Weight of MTCP-1 A: 8 kDa.

## 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 Blotto 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



MTCP-1 A (N-15): sc-23234. Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes.

## 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.