



# MCTS1 (K-12): sc-101865

## BACKGROUND

MCTS1 (malignant T cell amplified sequence 1), also known as MCT1, is a 181 amino acid protein that is ubiquitously expressed and localizes to the cytoplasm of cells. MCTS1 may play a role in cell cycle regulation by decreasing cell doubling time and by shortening the duration of G<sub>1</sub> transit time and G<sub>1</sub>/S transition. The protein level of Cdk4 and Cdk6 kinases activity and cyclin D1 is enhanced by expression of MCTS1. As a translation enhancer, MCTS1 recruits DENR and binds to the CAP complex of the 5'-terminus of mRNAs, subsequently altering the mRNA translation profile. MCTS1 promotes lymphoid tumor development and contributes to the pathogenesis and progression of breast cancer. MCTS1 positively regulates phosphorylation of ERK 1 and ERK 2.

## REFERENCES

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## STORAGE

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

## CHROMOSOMAL LOCATION

Genetic locus: MCTS1 (human) mapping to Xq24.

## SOURCE

MCTS1 (K-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of MCTS1 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

MCTS1 (K-12) is recommended for detection of MCTS1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for MCTS1 siRNA (h): sc-91081, MCTS1 shRNA Plasmid (h): sc-91081-SH and MCTS1 shRNA (h) Lentiviral Particles: sc-91081-V.

Molecular Weight of MCTS1: 20 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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.

## 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.