


Product datasheet

Anti-MCTS1/MCT-1 antibody ab102678

1 Image

Overview

Product name	Anti-MCTS1/MCT-1 antibody
Description	Rabbit polyclonal to MCTS1/MCT-1
Host species	Rabbit
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Human Predicted to work with: Mouse 
Immunogen	Recombinant fragment corresponding to Human MCTS1/MCT-1 aa 1-200. Database link: AAH01013
Positive control	Jurkat whole cell lysate, 293T and A431 cell lysates
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.00 Preservative: 0.01% Thimerosal (merthiolate) Constituents: 78.99% PBS, 1% BSA, 20% Glycerol (glycerin, glycerine)
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab102678 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500 - 1/3000. Predicted molecular weight: 21 kDa.

Target**Function**

Anti-oncogene that play a role in cell cycle regulation; decreases cell doubling time and anchorage-dependent growth; shortens the duration of G1 transit time and G1/S transition. When constitutively expressed, increases CDK4 and CDK6 kinases activity and CCND1/cyclin D1 protein level, as well as G1 cyclin/CDK complex formation. Plays a role as translation enhancer; Recruits the density-regulated protein/DENR and binds to the cap complex of the 5'-terminus of mRNAs, subsequently altering the mRNA translation profile; Up-regulates protein levels of BCL2L2, TFDP1, MRE11A, CCND1 and E2F1, while mRNA levels remains constant. Hyperactivates DNA damage signaling pathway; increased gamma-irradiation-induced phosphorylation of histone H2AX, and induces damage foci formation. Increases the overall number of chromosomal abnormalities such as larger chromosomes formation and multiples chromosomal fusions when over-expressed in gamma-irradiated cells. May play a role in promoting lymphoid tumor development: lymphoid cell lines over-expressing MCTS1 exhibit increased growth rates and display increased protection against apoptosis. May contribute to the pathogenesis and progression of breast cancer via promotion of angiogenesis through the decline of inhibitory THBS1/thrombospondin-1, and inhibition of apoptosis. Involved in the process of proteasome degradation to down-regulate Tumor suppressor p53/TP53 in breast cancer cell; Positively regulates phosphorylation of MAPK1 and MAPK3.

Tissue specificity

Ubiquitous. Over-expressed in T-cell lymphoid cell lines and in non-Hodgkin lymphoma cell lines as well as in a subset of primary large B-cell lymphomas.

Sequence similarities

Belongs to the MCTS1 family.
Contains 1 PUA domain.

Domain

The PUA RNA-binding domain is critical for cap binding, but not sufficient for translation enhancer function. MCT1 N-terminal region is required to enhance translation possibly trough interaction with other proteins.

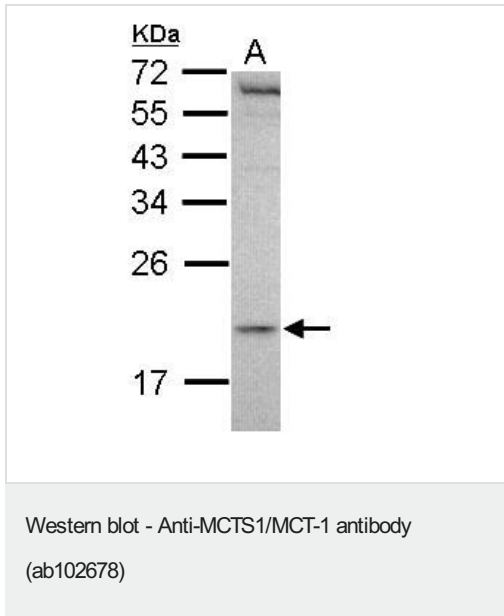
Post-translational modifications

Phosphorylation is critical for stabilization and promotion of cell proliferation.

Cellular localization

Cytoplasm. Nuclear relocalization after DNA damage.

Images



Anti-MCTS1/MCT-1 antibody (ab102678) at 1/1000 dilution +
Jurkat whole cell lysate at 30 µg

Predicted band size: 21 kDa

12% SDS-PAGE

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
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