

**MCT-1 Antibody (N-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP6655a**

**Specification**

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**MCT-1 Antibody (N-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O9ULC4</a>
Other Accession	<a href="#">O9DB27</a> , <a href="#">O7ZV34</a> , <a href="#">O5ZI42</a> , <a href="#">O2KIE4</a> , <a href="#">O5PPY1</a>
Reactivity	Human, Mouse
Predicted	Xenopus, Bovine, Chicken, Zebrafish
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	20555
Antigen Region	1-30

**MCT-1 Antibody (N-term) - Additional Information**

**Gene ID** 28985

**Other Names**

Malignant T-cell-amplified sequence 1, MCT-1, Multiple copies T-cell malignancies, MCTS1, MCT1

**Target/Specificity**

This MCT-1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human MCT-1.

**Dilution**

WB~~1:1000

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

MCT-1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**MCT-1 Antibody (N-term) - Protein Information**

**Name** MCTS1

**Synonyms** MCT1

**Function** Translation regulator forming a complex with DENR to promote translation reinitiation. Translation reinitiation is the process where the small ribosomal subunit remains attached to the mRNA following termination of translation of a regulatory upstream ORF (uORF), and resume scanning on the same mRNA molecule to initiate translation of a downstream ORF, usually the main ORF (mORF). The MCTS1/DENR complex is pivotal to two linked mechanisms essential for translation reinitiation. Firstly, the dissociation of deacylated tRNAs from post-termination 40S ribosomal complexes during ribosome recycling. Secondly, the recruitment in an EIF2-independent manner of aminoacylated initiator tRNA to P site of 40S ribosomes for a new round of translation (PubMed:[16982740](#), PubMed:[20713520](#), PubMed:[37875108](#)). This regulatory mechanism governs the translation of more than 150 genes which translation reinitiation is MCTS1/DENR complex-dependent (PubMed:[16982740](#), PubMed:[20713520](#), PubMed:[37875108](#)). Consequently, modulates various unrelated biological processes including cell cycle regulation and DNA damage signaling and repair (PubMed:[10440924](#), PubMed:[11709712](#), PubMed:[12637315](#), PubMed:[15897892](#), PubMed:[16322206](#), PubMed:[17016429](#), PubMed:[17416211](#), PubMed:[9766643](#)). Notably, it positively regulates interferon gamma immunity to mycobacteria by enhancing the translation of JAK2 (PubMed:[37875108](#)).

#### **Cellular Location**

Cytoplasm. Note=Nuclear relocalization after DNA damage

#### **Tissue Location**

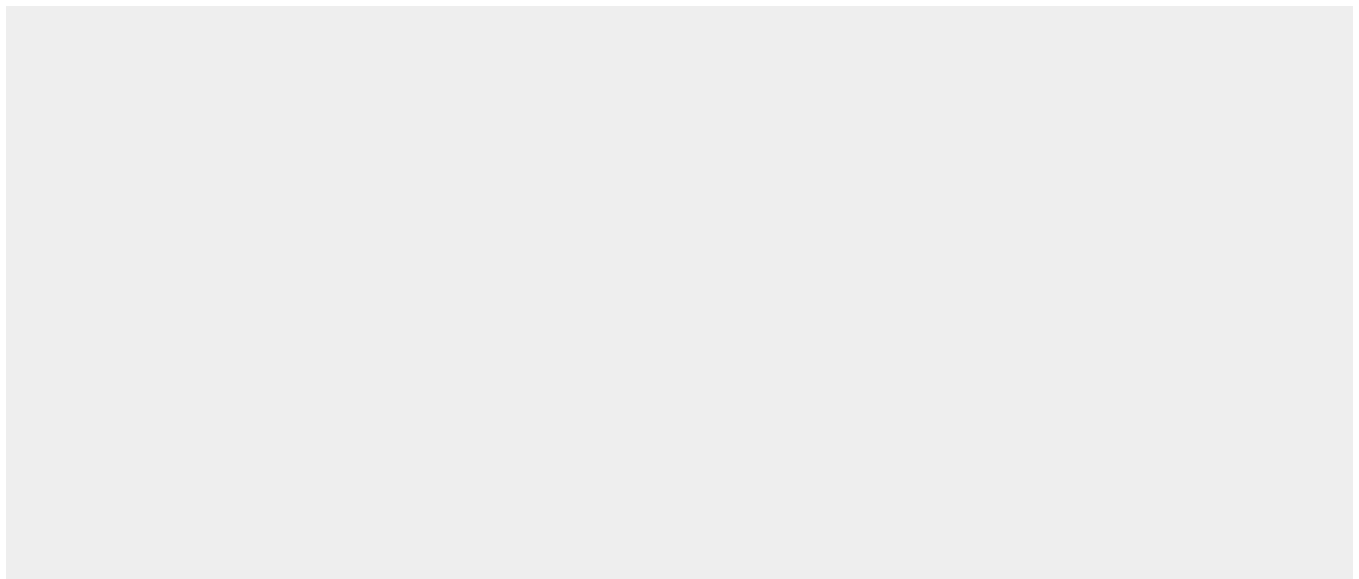
Ubiquitous. Over-expressed in T-cell lymphoid cell lines and in non-Hodgkin lymphoma cell lines as well as in a subset of primary large B-cell lymphomas.

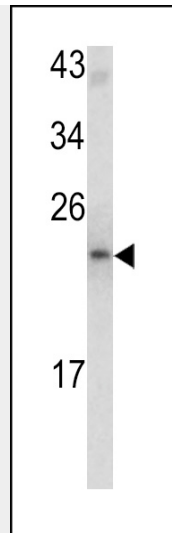
#### **MCT-1 Antibody (N-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **MCT-1 Antibody (N-term) - Images**





Western blot analysis of MCT-1 antibody (N-term) (Cat. #AP6655a) in mouse bladder tissue lysates (35ug/lane). MCTS1 (arrow) was detected using the purified Pab.

#### **MCT-1 Antibody (N-term) - Background**

MCTS1 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.

#### **MCT-1 Antibody (N-term) - References**

- Kasiappan,R., Mol. Cancer Res. 7 (4), 536-548 (2009)
- Mazan-Mamczarz,K., Leuk. Res. 33 (3), 474-482 (2009)
- Shi,B., J. Cell. Biochem. 90 (1), 68-79 (2003)