

**MCTS1 Antibody (N-Term)**  
Peptide-affinity purified goat antibody  
Catalog # AF3876a

**Specification**

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**MCTS1 Antibody (N-Term) - Product Information**

Application	WB
Primary Accession	<a href="#">O9ULC4</a>
Other Accession	<a href="#">NP_054779.1</a> , <a href="#">NP_001131026.1</a> , <a href="#">28985</a>
Reactivity	Human
Predicted	Pig, Dog
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	20555

**MCTS1 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

**Format**

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

MCTS1 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

**MCTS1 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:<a href="http://www.uniprot.org/citations/16982740" target="\_blank">16982740</a>, PubMed:<a href="http://www.uniprot.org/citations/20713520" target="\_blank">20713520</a>, PubMed:<a href="http://www.uniprot.org/citations/37875108" target="\_blank">37875108</a>). This regulatory mechanism governs the translation of more than 150 genes which translation reinitiation is MCTS1/DENR complex-dependent (PubMed:<a href="http://www.uniprot.org/citations/16982740" target="\_blank">16982740</a>, PubMed:<a href="http://www.uniprot.org/citations/20713520" target="\_blank">20713520</a>, PubMed:<a href="http://www.uniprot.org/citations/37875108" target="\_blank">37875108</a>). Consequently, modulates various unrelated biological processes including cell cycle regulation and DNA damage signaling and repair (PubMed:<a href="http://www.uniprot.org/citations/10440924" target="\_blank">10440924</a>, PubMed:<a href="http://www.uniprot.org/citations/11709712" target="\_blank">11709712</a>, PubMed:<a href="http://www.uniprot.org/citations/12637315" target="\_blank">12637315</a>, PubMed:<a href="http://www.uniprot.org/citations/15897892" target="\_blank">15897892</a>, PubMed:<a href="http://www.uniprot.org/citations/16322206" target="\_blank">16322206</a>, PubMed:<a href="http://www.uniprot.org/citations/17016429" target="\_blank">17016429</a>, PubMed:<a href="http://www.uniprot.org/citations/17416211" target="\_blank">17416211</a>, PubMed:<a href="http://www.uniprot.org/citations/9766643" target="\_blank">9766643</a>). Notably, it positively regulates interferon gamma immunity to mycobacteria by enhancing the translation of JAK2 (PubMed:<a href="http://www.uniprot.org/citations/37875108" target="\_blank">37875108</a>).

#### 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.

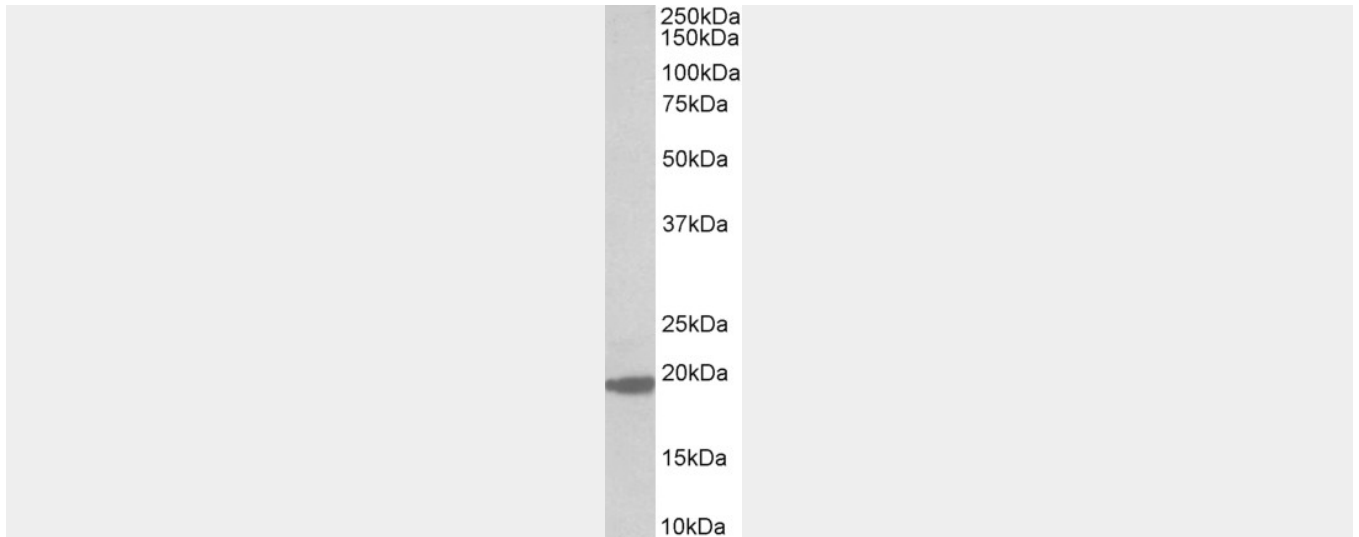
#### MCTS1 Antibody (N-Term) - Protocols

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](#)

#### MCTS1 Antibody (N-Term) - Images





AF3876a (0.3 µg/ml) staining of MOLT4 lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

#### **MCTS1 Antibody (N-Term) - Background**

This antibody is expected to recognize both reported isoforms (NP\_054779.1; NP\_001131026.1).

#### **MCTS1 Antibody (N-Term) - References**

The antagonism between MCT-1 and p53 affects the tumorigenic outcomes. Kasiappan R, Shih HJ, Wu MH, Choy C, Lin TD, Chen L, Hsu HL. Mol Cancer. 2010 Dec 7;9:311. PMID: 21138557