

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

MCTS1 Antibody (N-Term) - Product Information

Application	WB, E
Primary Accession	O9ULC4
Other Accession	NP_054779.1 , NP_001131026.1 , 28985
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

Dilution

WB~~1:1000

E~~N/A

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: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

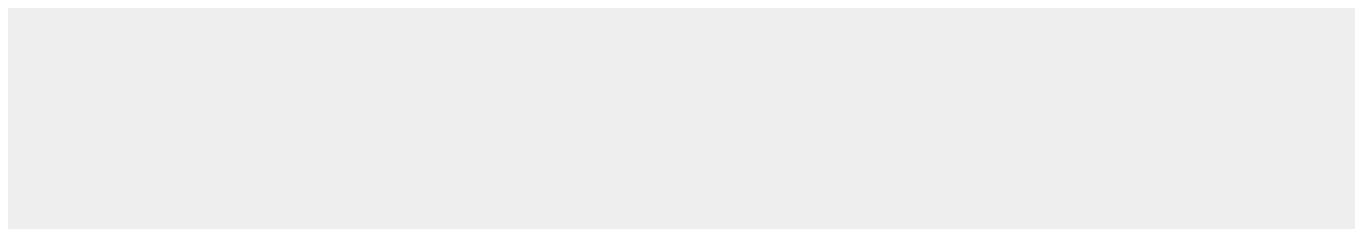
Ubiquitous. Over-expressed in T-cell lymphoid cell lines and in non-Hodgkin lymphoma cell lines as well as in a subset of primary large B-cell lymphomas.

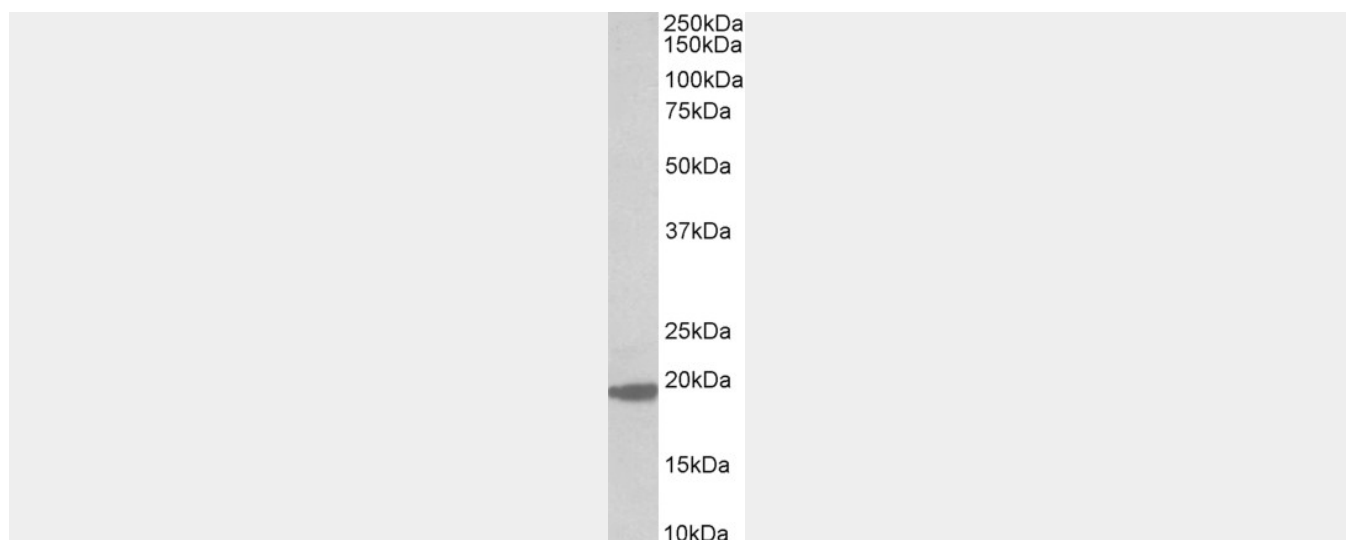
MCTS1 Antibody (N-Term) - Protocols

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