

THEM2 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP1460a**Specification**

THEM2 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [Q9NPJ3](#)**THEM2 Antibody (N-term) Blocking Peptide - Additional Information**

Gene ID 55856

Other Names

Acyl-coenzyme A thioesterase 13, Acyl-CoA thioesterase 13, 312-, Thioesterase superfamily member 2, Acyl-coenzyme A thioesterase 13, N-terminally processed, ACOT13, THEM2

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP1460a](/product/products/AP1460a) was selected from the N-term region of human THEM2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

THEM2 Antibody (N-term) Blocking Peptide - Protein InformationName ACOT13 ([HGNC:20999](#))

Synonyms THEM2

Function

Catalyzes the hydrolysis of acyl-CoAs into free fatty acids and coenzyme A (CoASH), regulating their respective intracellular levels (PubMed: [16934754](http://www.uniprot.org/citations/16934754), PubMed: [19170545](http://www.uniprot.org/citations/19170545)). Has acyl-CoA thioesterase activity towards medium (C12) and long-chain (C18) fatty acyl-CoA substrates (By similarity) (PubMed: [16934754](http://www.uniprot.org/citations/16934754), PubMed: [19170545](http://www.uniprot.org/citations/19170545)). Can also hydrolyze 3-hydroxyphenylacetyl-CoA and 3,4-dihydroxyphenylacetyl-CoA (in vitro) (By similarity) (PubMed: [16934754](http://www.uniprot.org/citations/16934754)),

PubMed: [19170545](http://www.uniprot.org/citations/19170545)).
May play a role in controlling adaptive thermogenesis (By similarity).

Cellular Location

Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q9CQR4}. Mitochondrion {ECO:0000250|UniProtKB:Q9CQR4}. Nucleus {ECO:0000250|UniProtKB:Q9CQR4} Cytoplasm, cytoskeleton, spindle {ECO:0000250|UniProtKB:Q9CQR4} Note=During interphase, found both in the nucleus and in the cytoplasm At mitosis, localizes to the spindle. Colocalizes with tubulin {ECO:0000250|UniProtKB:Q9CQR4}

THEM2 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

THEM2 Antibody (N-term) Blocking Peptide - Images**THEM2 Antibody (N-term) Blocking Peptide - Background**

Human thioesterase superfamily member 2 (hTHEM2) belongs to the hotdog-fold enzyme superfamily. The encoding gene is highly expressed in the kidney, and moderately expressed in the liver, brain, large intestine, and small intestine. THEM2 is essential for cell sustained proliferation based on small interference RNA silencing studies. THEM2 co-localizes with microtubules in immunostaining and GFP-Tag experiments.

THEM2 Antibody (N-term) Blocking Peptide - References

Cheng,Z., Biochem. Biophys. Res. Commun. 350 (4), 850-853 (2006) Cheng,Z., Biochem. Biophys. Res. Commun. 349 (1), 172-177 (2006)