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ACSM1 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP9284a

Specification

ACSM1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q08AH1

ACSM1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 116285

Other Names
Acyl-coenzyme A synthetase ACSM1, mitochondrial, Acyl-CoA synthetase medium-chain family member 1, Butyrate--CoA ligase 1, Butyryl-coenzyme A synthetase 1, Lipoate-activating enzyme, Middle-chain acyl-CoA synthetase 1, ACSM1, BUCS1, LAE, MACS1

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP9284a was selected from the N-term region of human ACSM1. 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.

ACSM1 Antibody (N-term) Blocking Peptide - Protein Information

Name ACSM1

Synonyms BUCS1, LAE {ECO:0000250|UniProtKB:Q9BEA2

Function
Catalyzes the activation of fatty acids by CoA to produce an acyl-CoA, the first step in fatty acid metabolism (PubMed:10434065). Capable of activating medium-chain fatty acids (e.g. butyric (C4) to decanoic (C10) acids), and certain carboxylate-containing xenobiotics, e.g. benzoate (PubMed:10434065). Also catalyzes the activation of lipoate to lipoyl-nucleoside monophosphate (By similarity). Activates lipoate with GTP at a 1000-fold higher rate than with ATP and activates both (R)- and (S)-lipoate to the respective lipoyl-GMP, with a preference for (R)-lipoate (By similarity).

Cellular Location
Mitochondrion matrix {ECO:0000250|UniProtKB:Q91VA0}. Mitochondrion {ECO:0000250|UniProtKB:Q91VA0}

ACSM1 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

ACSM1 Antibody (N-term) Blocking Peptide - Images

ACSM1 Antibody (N-term) Blocking Peptide - Background

ACSM1 has medium-chain fatty acid:CoA ligase activity with broad substrate specificity (in vitro). This protein acts on acids from C(4) to C(11) and on the corresponding 3-hydroxy-and 2,3-or 3,4-unsaturated acids (in vitro). This protein functions as GTP-dependent lipoate-activating enzyme that generates the substrate for lipoyltransferase

ACSM1 Antibody (N-term) Blocking Peptide - References

Celis,J.E., et.al., Mol. Cell Proteomics 7 (10), 1795-1809 (2008)Sullivan,P.F., et.al., Mol. Psychiatry 13 (6), 570-584 (2008)Haketa,A., et.al., J. Hypertens. 22 (10), 1903-1907 (2004)