

BAAT Blocking Peptide (N-Term)
Synthetic peptide
Catalog # BP22035a**Specification**

BAAT Blocking Peptide (N-Term) - Product InformationPrimary Accession [Q14032](#)**BAAT Blocking Peptide (N-Term) - Additional Information**

Gene ID 570

Other Names

Bile acid-CoA:amino acid N-acyltransferase, BACAT, BAT, 2.3.1.65, Glycine N-choloyltransferase, Long-chain fatty-acyl-CoA hydrolase, 3.1.2.2, BAAT

Target/Specificity

The synthetic peptide sequence is selected from aa 137-148 of HUMAN BAAT

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.

BAAT Blocking Peptide (N-Term) - Protein Information**Name** BAAT**Function**

Catalyzes the amidation of bile acids (BAs) with the amino acids taurine and glycine (PubMed:12239217, PubMed:12810727, PubMed:2037576, PubMed:8034703). More than 95% of the BAs are N-acyl amidates with glycine and taurine (PubMed:8034703). Amidation of BAs in the liver with glycine or taurine prior to their excretion into bile is an important biochemical event in bile acid metabolism (PubMed:12810727). This conjugation (or amidation) plays several important biological roles in that it promotes the secretion of BAs and cholesterol into bile and increases the detergent properties of BAs in the intestine, which facilitates lipid and vitamin absorption (PubMed:12810727). May also act as an acyl-CoA thioesterase that regulates intracellular levels of free fatty acids

(PubMed:12239217, PubMed:12810727, PubMed:8034703). In vitro, catalyzes the hydrolysis of long- and very long-chain saturated acyl-CoAs to the free fatty acid and coenzyme A (CoASH), and conjugates glycine to these acyl-CoAs (PubMed:12810727).

Cellular Location

Cytoplasm, cytosol. Peroxisome {ECO:0000250|UniProtKB:Q63276}

Tissue Location

Expressed in the gallbladder mucosa and pancreas (PubMed:12810727, PubMed:2037576).
Expressed in hepatocytes (at protein level) (PubMed:12810727, PubMed:2037576, PubMed:23415802)

BAAT Blocking Peptide (N-Term) - Protocols

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

- [Blocking Peptides](#)

BAAT Blocking Peptide (N-Term) - Images**BAAT Blocking Peptide (N-Term) - Background**

Involved in bile acid metabolism. In liver hepatocytes catalyzes the second step in the conjugation of C24 bile acids (choloneates) to glycine and taurine before excretion into bile canaliculi. The major components of bile are cholic acid and chenodeoxycholic acid. In a first step the bile acids are converted to an acyl-CoA thioester, either in peroxisomes (primary bile acids deriving from the cholesterol pathway), or cytoplasmic at the endoplasmic reticulum (secondary bile acids). May catalyze the conjugation of primary or secondary bile acids, or both. The conjugation increases the detergent properties of bile acids in the intestine, which facilitates lipid and fat-soluble vitamin absorption. In turn, bile acids are deconjugated by bacteria in the intestine and are recycled back to the liver for re-conjugation (secondary bile acids). May also act as an acyl-CoA thioesterase that regulates intracellular levels of free fatty acids. In vitro, catalyzes the hydrolysis of long- and very long-chain saturated acyl-CoAs to the free fatty acid and coenzyme A (CoASH), and conjugates glycine to these acyl-CoAs.

BAAT Blocking Peptide (N-Term) - References

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Humphray S.J.,et al.Nature 429:369-374(2004).
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Johnson M.R.,et al.J. Biol. Chem. 266:10227-10233(1991).