BACKGROUND

BAAT (bile acid coenzyme A (CoA):amino acid N-acyltransferase), also known as BAT, BACAT or glycineN-choloyltransferase, is a member of the C/M/P thioester hydrolase family of proteins. Localizing to the cytoplasm and to peroxisomes, BAAT plays an essential role in bile acid metabolism, being the sole enzyme responsible for catalyzing the second step in the conjugation of bile acids to taurine or glycine. The first step in this reaction is the conversion of bile acids to CoA thioesters by ACSVL6 (bile acid CoA ligase). The conjugation of bile acids is important for its excretion into bile and it is also important for protection against toxicity by the accumulation of unconjugated bile acids. BAAT can be found in liver, pancreas, intestine and gallbladder mucosa. Mutations in the gene encoding BAAT have been associated with familial hypercholanemia (FHCA), a disease characterized by fat malabsorption, an increase in serum bile acid concentrations and itching.

REFERENCES

tion by PPAR α activation favors the formation of unconjugated bile acids. J. Lipid Res. 45: 1051-1060.

CHROMOSOMAL LOCATION

Genetic locus: BAAT (human) mapping to 9q31.1.

SOURCE

BAAT (ZA-18) is a mouse monoclonal antibody raised against recombinant BAAT of human origin.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PRODUCT

Each vial contains 100 μg IgG κ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

BAAT (ZA-18) is recommended for detection of BAAT of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for BAAT siRNA (h): sc-92727, BAAT shRNA Plasmid (h): sc-92727-SH and BAAT shRNA (h) Lentiviral Particles: sc-92727-V.

Molecular Weight of BAAT: 50 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA

BAAT (ZA-18) sc-100475. Western blot analysis of BAAT expression in Hep G2 whole cell lysate.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our website at www.scbt.com for detailed protocols and support products.