Creative Enzymes®

cholate-CoA ligase

Cat. No. EXWM-5709

Lot. No. (See product label)

Introduction

Description Requires Mg2+ for activity. The mammalian enzyme is membrane-bound and catalyses the first step in the conjugation of bile acids with amino acids, converting bile acids into their acyl-CoA thioesters. Chenodeoxycholate, deoxycholate, lithocholate and trihydroxycoprostanoate can also act as substrates. The bacterial enzyme is soluble and participates in an anaerobic bile acid 7 α-dehydroxylation pathway.

Synonyms BAL; bile acid CoA ligase; bile acid coenzyme A ligase; choloyl-CoA synthetase; choloyl coenzyme A synthetase; cholic thiokinase; cholate thiokinase; cholic acid:CoA ligase; 3α,7α,12α-trihydroxy-5β-cholestanoyl coenzyme A synthetase; 3α,7α,12α-trihydroxy-5β-cholestanoate-CoA ligase; 3α,7α,12α-trihydroxy-5β-cholestanoate-CoA synthetase; THCA-CoA ligase; 3α,7α,12α-trihydroxy-5β-cholestanate-CoA ligase; 3α,7α,12α-trihydroxy-5β-cholestanate:CoA ligase (AMP-forming); cholyl-CoA synthetase; trihydroxycoprostanoyl-CoA synthetase

Product Information

Form Liquid or lyophilized powder

EC Number EC 6.2.1.7

CAS No. 9027-90-1

Reaction (1) ATP + cholate + CoA = AMP + diphosphate + choloyl-CoA; (2) ATP + (25R)-3α,7α,12α-trihydroxy-5β-cholestan-26-oate + CoA = AMP + diphosphate + (25R)-3α,7α,12α-trihydroxy-5β-cholestanoyl-CoA

Notes This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

Storage and Shipping Information

Storage Store it at +4 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.