

bile acid CoA-transferase

Cat. No. EXWM-3421

Lot. No. (See product label)

Introduction

Description

The enzyme, characterized from the gut bacterium *Clostridium scindens*, catalyses the last step in bile acid 7 α -dehydroxylation, the removal of the CoA moiety from the products. By using a transferase rather than hydrolase, the bacteria conserve the thioester bond energy, saving ATP molecules. *Clostridium scindens* possesses two forms of the enzyme, encoded by the baiF and baiK genes. While the enzymes have a broad acceptor specificity and can use allocholate, ursodeoxycholate, and β -muricholate, the donor specificity is more strict. BaiF acts on lithocholoyl-CoA and deoxycholoyl-CoA, and BaiK acts only on the latter.

Synonyms

baiF (gene name); baiK (gene name); bile acid coenzyme A transferase

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 2.8.3.25

Reaction

(1) lithocholoyl-CoA + cholate = lithocholate + choloyl-CoA; (2) deoxycholoyl-CoA + cholate = deoxycholate + choloyl-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 °C for short term. For long term storage, store it at -20 °C~-80 °C.