

2-hydroxypropyl-CoM lyase

Cat. No. EXWM-5325

Lot. No. (See product label)

Introduction

Description

Requires zinc. Acts on both enantiomers of chiral epoxyalkanes to form the corresponding (R)- and (S)-2-hydroxyalkyl-CoM adducts. The enzyme will function with some other thiols (e.g., 2-sulfanylethanol) as the nucleophile. Uses short-chain epoxyalkanes from C2 (epoxyethane) to C6 (1,2-epoxyhexane). This enzyme forms component I of a four-component enzyme system {comprising EC 4.4.1.23 (2-hydroxypropyl-CoM lyase; component I), EC 1.8.1.5 [2-oxopropyl-CoM reductase (carboxylating); component II], EC 1.1.1.268 [2-(R)-hydroxypropyl-CoM dehydrogenase; component III] and EC 1.1.1.269 [2-(S)-hydroxypropyl-CoM dehydrogenase; component IV]} that is involved in epoxyalkane carboxylation in *Xanthobacter* sp. strain Py2.

Synonyms

epoxyalkane:coenzyme M transferase; epoxyalkane:CoM transferase; epoxyalkane:2-mercaptoethanesulfonate transferase; coenzyme M-epoxyalkane ligase; epoxyalkyl:CoM transferase; epoxypropane:coenzyme M transferase; epoxypropyl:CoM transferase; EaCoMT; 2-hydroxypropyl-CoM:2-mercaptoethanesulfonate lyase (epoxyalkane-ring-forming); (R)-2-hydroxypropyl-CoM 2-mercaptoethanesulfonate lyase (cyclizing; (R)-1,2-epoxypropane-forming)

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 4.4.1.23

CAS No.

244301-07-3

Reaction

(1) (R)-2-hydroxypropyl-CoM = (R)-1,2-epoxypropane + HS-CoM; (2) (S)-2-hydroxypropyl-CoM = (S)-1,2-epoxypropane + HS-CoM

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.