Creative Enzymes®

coproporphyrinogen dehydrogenase

Cat. No. EXWM-1418

Lot. No. (See product label)

Introduction

Description This enzyme differs from EC 1.3.3.3, coproporphyrinogen oxidase, by using S-adenosyl-L-methionine (AdoMet) instead of oxygen as oxidant. It occurs mainly in bacteria, whereas eukaryotes use the oxygen-dependent oxidase. The reaction starts by using an electron from the reduced form of the enzyme's [4Fe-4S] cluster to split AdoMet into methionine and the radical 5'-deoxyadenosin-5'-yl. This radical initiates attack on the 2-carboxyethyl groups, leading to their conversion into vinyl groups. This conversion, -·CH-CH2-COO- → -CH=CH2 + CO2 + e- replaces the electron initially used.

Synonyms oxygen-independent coproporphyrinogen-III oxidase; HemN; coproporphyrinogen III oxidase

Product Information

Form Liquid or lyophilized powder

EC Number EC 1.3.98.3

Reaction coproporphyrinogen III + 2 S-adenosyl-L-methionine = protoporphyrinogen IX + 2 CO2 + 2 L-methionine + 2 5'-deoxyadenosine

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 ℃.