Creative Enzymes®

sirohydrochlorin ferrochelatase

Cat. No. EXWM-5361

Lot. No. (See product label)

Introduction

Description This enzyme catalyses the third of three steps leading to the formation of siroheme from uroporphyrinogen III. The first step involves the donation of two S-adenosyl-L-methionine-derived methyl groups to carbons 2 and 7 of uroporphyrinogen III to form precorrin-2 (EC 2.1.1.107, uroporphyrin-III C-methyltransferase) and the second step involves an NAD+-dependent dehydrogenation to form sirohydrochlorin from precorrin-2 (EC 1.3.1.76, precorrin-2 dehydrogenase). In Saccharomyces cerevisiae, the last two steps are carried out by a single bifunctional enzyme, Met8p. In some bacteria, steps 1-3 are catalysed by a single multifunctional protein called CysG, whereas in Bacillus megaterium, three separate enzymes carry out each of the steps, with SirB being responsible for the above reaction.

Synonyms CysG; Met8P; SirB; sirohydrochlorin ferro-lyase (incorrect)

Product Information

Form Liquid or lyophilized powder

EC Number EC 4.99.1.4

Reaction siroheme + 2 H+ = sirohydrochlorin + Fe2+

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 ℃.