

## 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<sup>+</sup>-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<sup>+</sup> = sirohydrochlorin + Fe<sup>2+</sup>

**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.