

3-demethylubiquinol 3-O-methyltransferase

Cat. No. EXWM-1966

Lot. No. (See product label)

Introduction

Description

This enzyme is involved in ubiquinone biosynthesis. Ubiquinones from different organisms have a different number of prenyl units (for example, ubiquinone-6 in *Saccharomyces*, ubiquinone-9 in rat and ubiquinone-10 in human), and thus the natural substrate for the enzymes from different organisms has a different number of prenyl units. However, the enzyme usually shows a low degree of specificity regarding the number of prenyl units. For example, the human COQ3 enzyme can restore biosynthesis of ubiquinone-6 in coq3 deletion mutants of yeast. The enzymes from yeast, *Escherichia coli* and rat also catalyse the methylation of 3,4-dihydroxy-5-*all-trans*-polyprenylbenzoate (a reaction that is classified as EC 2.1.1.114, polyprenyldihydroxybenzoate methyltransferase).

Synonyms

5-demethylubiquinone-9 methyltransferase; OMHMB-methyltransferase; 2-octaprenyl-3-methyl-5-hydroxy-6-methoxy-1,4-benzoquinone methyltransferase; S-adenosyl-L-methionine:2-octaprenyl-3-methyl-5-hydroxy-6-methoxy-1,4-benzoquinone-O-methyltransferase; COQ3 (gene name); Coq3 O-methyltransferase; ubiG (gene name, ambiguous)

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 2.1.1.64

CAS No.

63774-48-1

Reaction

S-adenosyl-L-methionine + 3-demethylubiquinol-n = S-adenosyl-L-homocysteine + ubiquinol-n

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.