Creative Enzymes®

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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.