Creative Enzymes®

polyprenyldihydroxybenzoate methyltransferase

Cat. No. EXWM-1713

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 and rat also catalyse the methylation of 3-demethylubiquinol-6 and 3-demethylubiquinol-9, respectively (this activity is classified as EC 2.1.1.64, 3-demethylubiquinol 3-O-methyltransferase).
Synonyms	3,4-dihydroxy-5-hexaprenylbenzoate methyltransferase; dihydroxyhexaprenylbenzoate methyltransferase; COQ3 (gene name); Coq3 O-methyltransferase; DHHB O-methyltransferase

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 2.1.1.114
CAS No.	139569-31-6
Reaction	S-adenosyl-L-methionine + 3,4-dihydroxy-5-all-trans-polyprenylbenzoate = S-adenosyl-L-homocysteine + 3-methoxy-4-hydroxy-5-all-trans-polyprenylbenzoate
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 ℃.