Creative Enzymes®

diphthine methyl ester synthase

Cat. No. EXWM-1922

Lot. No. (See product label)

Introduction

Description	This eukaryotic enzyme is part of the biosynthetic pathway of diphthamide. Different from the archaeal enzyme, which performs only 3 methylations, producing diphthine (cf. EC 2.1.1.98). The relevant histidine of elongation factor 2 is His715 in mammals and His699 in yeast. The order of the 4 methylations is not known.
Synonyms	S-adenosyl-L-methionine:elongation factor 2 methyltransferase (ambiguous); diphthine methyltransferase (ambiguous); Dph5 (ambiguous)

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 2.1.1.314
Reaction	4 S-adenosyl-L-methionine + 2-[(3S)-3-carboxy-3-aminopropyl]-L-histidine-[translation elongation factor 2] = 4 S-adenosyl-L-homocysteine + diphthine methyl ester-[translation elongation factor 2]
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 ℃.