

tRNA 4-demethylwyosine synthase (AdoMet-dependent)

Cat. No. EXWM-4921

Lot. No. (See product label)

Introduction

Description

This enzyme, which is a member of the superfamily of S-adenosyl-L-methionine-dependent radical (radical AdoMet) enzymes, binds two [4Fe-4S] clusters. Carbons C2 and C3 from pyruvate are incorporated into 4-demethylwyosine. The enzyme is found in eukaryotes where it is part of the pathway for wybutosine synthesis, and in archaea, where it is involved in the biosynthesis of archaeal wye bases, such as wyosine, isowyosine, and methylwyosine.

Synonyms

TYW1

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 4.1.3.44

Reaction

N1-methylguanine³⁷ in tRNAPhe + pyruvate + S-adenosyl-L-methionine = 4-demethylwyosine³⁷ in tRNAPhe + L-methionine + 5'-deoxyadenosine + CO₂ + H₂O

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.