Creative Enzymes®

tRNAPhe [7-(3-amino-3-carboxypropyl)wyosine37-O]-methyltransferase

Cat. No. EXWM-1897

Lot. No. (See product label)

Introduction

Description The enzyme is found only in eukaryotes, where it is involved in the biosynthesis of wybutosine, a hypermodified tricyclic base found at position 37 of certain tRNAs. The modification is important for translational reading-frame maintenance. In some species that produce hydroxywybutosine the enzyme uses 7-(2-hydroxy-3-amino-3-carboxypropyl)wyosine37 in tRNAPhe as substrate. The enzyme also has the activity of EC 2.3.1.231, tRNAPhe 7-[(3S)-4-methoxy-(3-amino-3-carboxypropyl)wyosine37-O]-carbonyltransferase.

Synonyms TYW4 (ambiguous); tRNA-yW synthesizing enzyme-4 (ambiguous)

Product Information

Form Liquid or lyophilized powder

EC Number EC 2.1.1.290

Reaction S-adenosyl-L-methionine + 7-[(3S)-3-amino-3-carboxypropyl]wyosine37 in tRNAPhe = S-adenosyl-L-homocysteine + 7-[(3S)-3-amino-3-(methoxycarbonyl)propyl]wyosine37 in tRNAPhe

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 ℃.