CCA tRNA nucleotidyltransferase

Cat. No. EXWM-3284

Lot. No. (See product label)

Introduction

Description

The acylation of all tRNAs with an amino acid occurs at the terminal ribose of a 3' CCA sequence. The CCA sequence is added to the tRNA precursor by stepwise nucleotide addition performed by a single enzyme that is ubiquitous in all living organisms. Although the enzyme has the option of releasing the product after each addition, it prefers to stay bound to the product and proceed with the next addition.

Synonyms

CCA-adding enzyme; tRNA adenylyltransferase; tRNA cytidylyltransferase; tRNA CCA-pyrophosphorylase; tRNA-nucleotidyltransferase; transfer-RNA nucleotidyltransferase; transfer ribonucleic acid nucleotidyl transferase; CTP(ATP):tRNA nucleotidyltransferase; transfer ribonucleate adenylyltransferase; transfer ribonucleate adenyltransferase; transfer RNA adenylyltransferase; transfer ribonucleate nucleotidyltransferase; ATP (CTP):tRNA nucleotidyltransferase; ribonucleic cytidylic cytidylic adenylic pyrophosphorylase; transfer ribonucleic adenylyl (cytidylyl) transferase; transfer ribonucleic-terminal trinucleotide nucleotidyltransferase; transfer ribonucleate cytidylyltransferase; ribonucleic cytidylyltransferase; -C-C-A pyrophosphorylase; ATP(CTP)-tRNA nucleotidyltransferase; tRNA adenylyl(cytidylyl)transferase; CTP:tRNA cytidylyltransferase

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 2.7.7.72

Reaction

a tRNA precursor + 2 CTP + ATP = a tRNA with a 3' CCA end + 3 diphosphate (overall reaction); (1a) a tRNA precursor + CTP = a tRNA with a 3' cytidine end + diphosphate; (1b) a tRNA with a 3' cytidine + CTP = a tRNA with a 3' CC end + diphosphate; (1c) a tRNA with a 3' CC end + ATP = a tRNA with a 3' CCA end + diphosphate

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 ℃.