

preQ1 synthase

Cat. No. EXWM-1606

Lot. No. (See product label)

Introduction

Description

The reaction occurs in the reverse direction. This enzyme catalyses one of the early steps in the synthesis of queuosine (Q-tRNA), and is followed by the action of EC 2.4.2.29, queuine tRNA-ribosyltransferase. Queuosine is found in the wobble position of tRNAGUN in Eukarya and Bacteria and is thought to be involved in translational modulation. The enzyme is not a GTP cyclohydrolase, as was thought previously based on sequence-homology studies.

Synonyms

YkvM; QueF; preQ0 reductase; preQ0 oxidoreductase; 7-cyano-7-deazaguanine reductase; queuine synthase (incorrect as queuine is not the product); queuine:NADP⁺ oxidoreductase (incorrect as queuine is not the product)

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.7.1.13

CAS No.

1256460-80-6

Reaction

7-aminomethyl-7-carbaguanine + 2 NADP⁺ = 7-cyano-7-carbaguanine + 2 NADPH + 2 H⁺

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.