Creative Enzymes®

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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.