

archaeosine synthase

Cat. No. EXWM-2938

Lot. No. (See product label)

Introduction

Description

In Euryarchaeota the reaction is catalysed by ArcS. In Crenarchaeota, which do not have an ArcS homologue, the reaction is catalysed either by a homologue of EC 6.3.4.20, 7-cyano-7-deazaguanine synthase that includes a glutaminase domain (cf. EC 3.5.1.2), or by a homologue of EC 1.7.1.13, preQ1 synthase. The enzyme from the Euryarchaeon *Methanocaldococcus jannaschii* can also use arginine and ammonium as amino donors.

Synonyms

ArcS; TgtA2; MJ1022 (gene name); glutamine:preQ0-tRNA amidinotransferase (incorrect)

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 2.6.1.97

Reaction

L-glutamine + 7-cyano-7-carbaguanine¹⁵ in tRNA + H₂O = L-glutamate + archaeine¹⁵ in tRNA

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.