Creative Enzymes®

diphthine-ammonia ligase

Cat. No. EXWM-5717

Lot. No. (See product label)

Introduction

Description	This amidase catalyses the last step in the conversion of an L-histidine residue in the translation elongation factor EF2 to diphthamide. This factor is found in all archaebacteria and eukaryotes, but not in eubacteria, and is the target of bacterial toxins such as the diphtheria toxin and the Pseudomonas exotoxin A (see EC 2.4.2.36, NAD+-diphthamide ADP-ribosyltransferase). The substrate of the enzyme, diphthine, is produced by EC 2.1.1.98, diphthine synthase.
Synonyms	diphthamide synthase; diphthamide synthetase; DPH6 (gene name); ATPBD4 (gene name); diphthine:ammonia ligase (AMP-forming)

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 6.3.1.14
CAS No.	114514-33-9
Reaction	ATP + diphthine-[translation elongation factor 2] + NH3 = AMP + diphosphate + diphthamide-[translation elongation factor 2]
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 ℃.