

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 archaeobacteria 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 $\text{ATP} + \text{diphthine-[translation elongation factor 2]} + \text{NH}_3 = \text{AMP} + \text{diphosphate} + \text{diphthamide-[translation elongation factor 2]}$

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