

NAD⁺-diphthamide ADP-ribosyltransferase

Cat. No. EXWM-2664

Lot. No. (See product label)

Introduction

Description

Diphtheria toxin and some other bacterial toxins catalyse this reaction, which inactivates translation elongation factor 2 (EF2). The acceptor is diphthamide, a unique modification of a histidine residue in the elongation factor found in archaeobacteria and all eukaryotes, but not in eubacteria. cf. EC 2.4.2.31 NAD(P)⁺-protein-arginine ADP-ribosyltransferase. The relevant histidine of EF2 is His715 in mammals, His699 in yeast and His600 in *Pyrococcus horikoshii*.

Synonyms

ADP-ribosyltransferase; mono(ADPriboseyl)transferase; NAD-diphthamide ADP-ribosyltransferase; NAD⁺:peptide-diphthamide N-(ADP-D-riboseyl)transferase

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 2.4.2.36

CAS No.

52933-21-8

Reaction

NAD⁺ + diphthamide-[translation elongation factor 2] = nicotinamide + N-(ADP-D-riboseyl)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.