

ADP-ribosyl cyclase/cyclic ADP-ribose hydrolase

Cat. No. EXWM-3988

Lot. No. (See product label)

Introduction

Description

This multifunctional enzyme catalyses both the synthesis and hydrolysis of cyclic ADP-ribose, a calcium messenger that can mobilize intracellular Ca^{2+} stores and activate Ca^{2+} influx to regulate a wide range of physiological processes. In addition, the enzyme also catalyses EC 2.4.99.20, 2'-phospho-ADP-ribosyl cyclase/2'-phospho-cyclic-ADP-ribose transferase. cf. EC 3.2.2.5, NAD⁺ glycohydrolase.

Synonyms

NAD⁺ nucleosidase; NADase (ambiguous); DPNase (ambiguous); DPN hydrolase (ambiguous); NAD hydrolase (ambiguous); nicotinamide adenine dinucleotide nucleosidase (ambiguous); NAD glycohydrolase (misleading); NAD nucleosidase (ambiguous); nicotinamide adenine dinucleotide glycohydrolase (misleading); CD38 (gene name); BST1 (gene name)

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 3.2.2.6

CAS No.

9032-65-9

Reaction

$\text{NAD}^+ + \text{H}_2\text{O} = \text{ADP-D-ribose} + \text{nicotinamide}$ (overall reaction); (1a) $\text{NAD}^+ = \text{cyclic ADP-ribose} + \text{nicotinamide}$; (1b) $\text{cyclic ADP-ribose} + \text{H}_2\text{O} = \text{ADP-D-ribose}$

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.