

PRODUCT INFORMATION



2'-deoxy NAD⁺ (sodium salt)

Item No. 38386

CAS Registry No.: 1514900-83-4
Formal Name: 2'-deoxy-adenosine 5'-(trihydrogen diphosphate), P'²→5'-ester with 3-(aminocarbonyl)-1-β-D-ribofuranosylpyridinium, inner salt, monosodium salt

Synonym: 2'-deoxy Nicotinamide adenine dinucleotide

MF: C₂₁H₂₆N₇O₁₃P₂ • Na

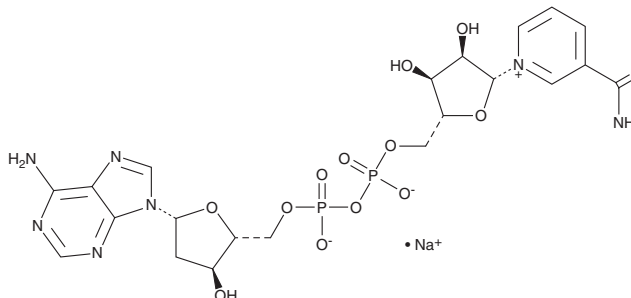
FW: 669.4

Purity: ≥95%

Supplied as: A solid

Storage: -80°C

Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

2'-deoxy NAD⁺ (sodium salt) is supplied as a solid. A stock solution may be made by dissolving the 2'-deoxy NAD⁺ (sodium salt) in water. We do not recommend storing the aqueous solution for more than one day.

Description

2'-deoxy NAD⁺ is a transient receptor potential melastatin 2 (TRPM2) agonist.¹ It increases calcium-induced currents in an inside-out patch clamp assay using HEK293 cells expressing human TRPM2 when used at a concentration of 30 μM. 2'-deoxy NAD⁺ has been found in Jurkat T cells. It also is a substrate of poly(ADP-ribose) transferases (PARPs) for the ADP-ribosylation of non-histone proteins in nuclei isolated from HeLa cells and rat livers.²

References

1. Fliegert, R., Bauche, A., Pérez, A.-M.W., *et al.* 2'-Deoxyadenosine 5'-diphosphoribose is an endogenous TRPM2 superagonist. *Nat. Chem. Biol.* **13**(9), 1036-1044 (2017).
2. Lichtenwalner, D.M. and Suhadolnik, R.J. Adenosine diphosphate ribosylation of histone and nonhistone chromosomal proteins with oxidized nicotinamide adenine dinucleotide and 2'-deoxynicotinamide adenine dinucleotide using nuclei isolated from rat liver and HeLa cells. *Biochemistry* **18**(17), 3749-3755 (1978).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user [must](#) review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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