bio-techne
TOCRIS

Print Date: Apr 18th 2024

Certificate of Analysis

www.tocris.com

Product Name: **Biotin-NAD+** **Catalog No.: 6573** **Batch No.: 6**

CAS Number: 146385-37-7

IUPAC Name: β-Nicotinamide-N^6-[2-[[6-[biotinyl]amino]hexyl]amino]-2-oxoethyl]adenine dinucleotide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{39}H_{57}N_{11}O_{17}P_2S$

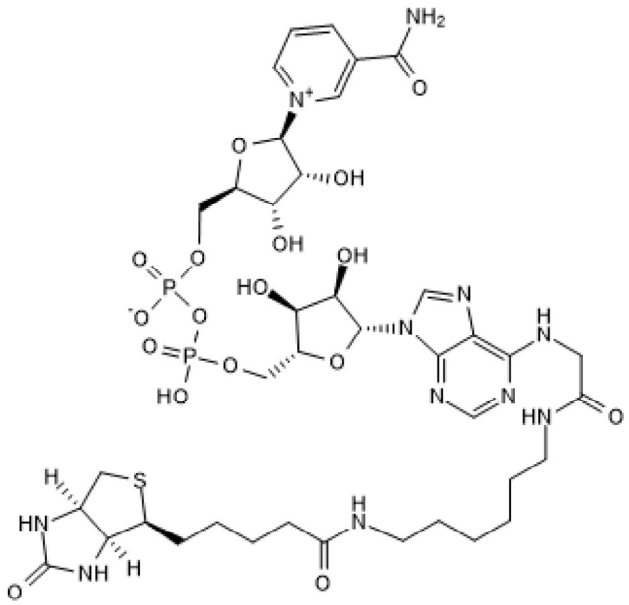
Batch Molecular Weight: 1045.95

Physical Appearance: Colourless solution

Solubility: Soluble in water (supplied pre-dissolved at a concentration of 0.25mM)

Storage: Store at -80°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 88.9% purity

Mass Spectrum: Consistent with structure

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Description:

Biotin-NAD+ is a provides a convenient non-isotopic alternative to radiolabeled NAD^+ for determination of IC_{50} values for candidate PARP inhibitors and studies requiring this substrate. Biotinylated-NAD^+ allows an indirect measure of PARP activity when biotin incorporation is detected using a conjugated-streptavidin detection system. Acts as a substrate for ADP-ribosylation. Can be used to label and purify biotinyl-ADP ribosylated proteins. This product is a replacement for R&D Systems product 4670-500-01. 131 µg is supplied as 500 µl of a 0.25 mM solution in water. Please see product specific page on www.tocris.com for full description.

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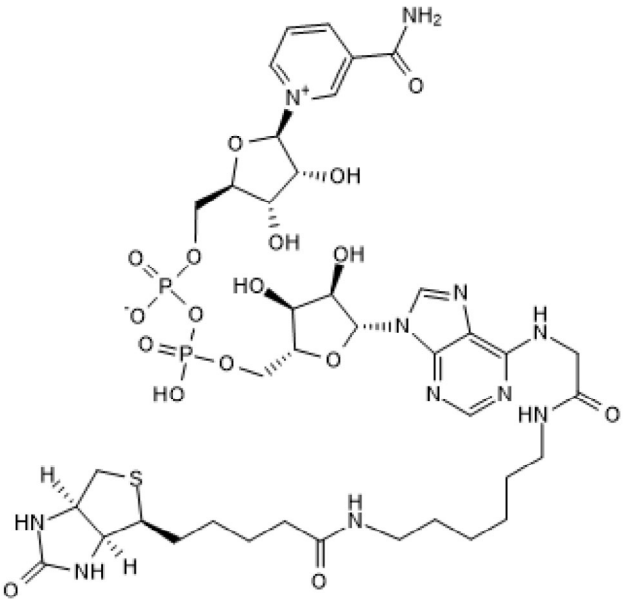

Storage: Store at -80°C

Solubility & Usage Info:

Soluble in water (supplied pre-dissolved at a concentration of 0.25mM)

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Schuster *et al* (2017) The Hsp90 machinery facilitates the transport of diphtheria toxin into human cells. Sci.Rep. ***7*** 613. PMID: 28377614.

Yang *et al* (2017) Ubiquitin Modification by the E3 Ligase/ADP-Ribosyltransferase Dtx3L/Parp9 Mol. Cell ***66*** 613. PMID: 28525742.

Yang (2013) Antitumor activity of a pyrrole-imidazole polyamide. Proc.Natl.Acad.Sci.USA ***110*** 1863. PMID: 23319609.