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NAD-Hexylamine, Lithium Salt

A functionalized version of NAD containing an amino group that permits it to be fixable in a gel matrix. This property makes NAD-hexylamine useful for constructing wearable biosensors that comprise a dehydrogenase enzyme such as diaphorase.

Product attributes

CAS number	102029-94-7

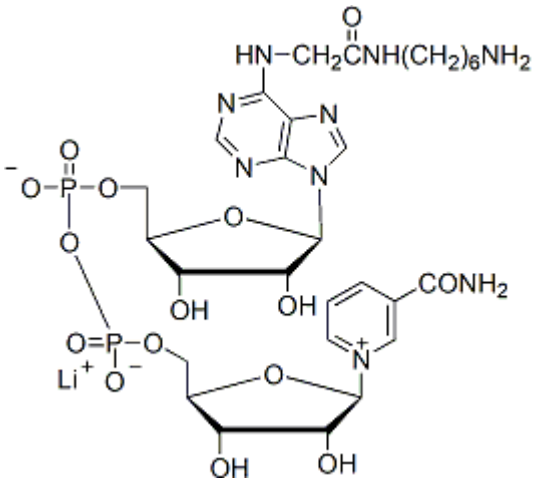
Product Description

NAD (nicotinamide adenine dinucleotide) is a ubiquitous electron carrier and cofactor for a number of oxidoreductase or dehydrogenase enzymes that are central to cellular metabolism.

Biotium's NAD-Hexylamine (N6-((6-aminohexyl)carbamoylmethyl)nicotinamide adenine dinucleotide, or NAD-NH2) is a functionalized version of NAD containing an amino group that permits it to be fixable in a gel matrix. This property makes NAD-hexylamine useful for constructing wearable biosensors that comprise a dehydrogenase enzyme such as diaphorase (1). NAD-Hexylamine may also be used for affinity chromatography, or as a functioning coenzyme to study enzyme mechanisms or topography (2).

NAD exists as a coenzyme redox pair with an oxidized NAD+ form and a reduced NADH form. In addition to redox reactions, NAD also participates in ADP-ribose transfer reactions as a donor of ADP-ribose units for enzymes such as ADP-ribosyltransferases and ADP-ribosyl cyclases.

- White solid soluble in water
- Stored desiccated at -20°C
- $C_{29}H_{42}N_9O_{15}Li\ P_2$
- MW: 826
- [102029-94-7]



References

1. JDST(2021) 15, 4, 768-774, DOI: 10.1177/19322968211008185
2. Eur J Bioche (1973) 40, 187, DOI: 10.1111/j.1432-1033.1973.tb03184.x