

# Product Information

## NAD-Hexylamine, Lithium Salt

**Catalog Number:** 10064

**Unit Size:** 1 mg

### Storage and Handling

Store at -20°C, desiccated and protected from light. Product is stable for at least 12 months from date of receipt when stored as recommended.

Stock solutions may be prepared in water. Solutions can be stored at -20°C for up to 6 months.

**Molecular Information:** C<sub>29</sub>H<sub>42</sub>N<sub>9</sub>O<sub>15</sub>LiP<sub>2</sub>

**CAS number:** 102029-94-7

**Molecular Weight:** 826

**Color and Form:** White solid

**Solubility:** Soluble in water

### Product Description

Nicotinamide adenine dinucleotide (NAD) is a ubiquitous electron carrier and enzyme cofactor that is central to cellular metabolism. NAD exists as a coenzyme redox pair with an oxidized NAD<sup>+</sup> form and a reduced NADH form. A primary function of NAD is the transfer of electrons that facilitate dehydrogenase reactions in vital metabolic pathways. 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.

Biotium's NAD-Hexylamine (N6-((6-aminohexyl)carbamoylmethyl) nicotinamide adenine dinucleotide, or NAD-NH<sub>2</sub>) 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).

### References

1. JDST 15, 768 (2021); 2. Eur J Bioche 40, 187 (1973).

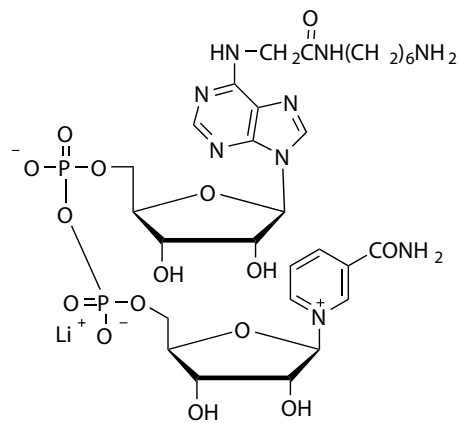


Figure 1. Structure of NAD-Hexylamine, Lithium Salt.

### Related Products

Cat. No.	Product
10024, 10025	Chromogenic β-Galactosidase Substrate Sampler
10022	Chromogenic Phosphatase Substrate Sampler
10061	10-Acetyl-3,7-dihydroxyphenoxazine (Amplex® Red)
10063	CTC (5-Cyano-2,3-dityl tetrazolium chloride)
10062	Resorufin (High Purity)
10054	Resazurin (alamarBlue®), Sodium Salt
30025	Resazurin Cell Viability Assay Kit (alamarBlue®)
30006	MTT Cell Viability Assay Kit
30007	XTT Cell Viability Assay Kit
70054... 70082	MitoView™ Mitochondrial Dyes
70082	MitoView™ Fix 640

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