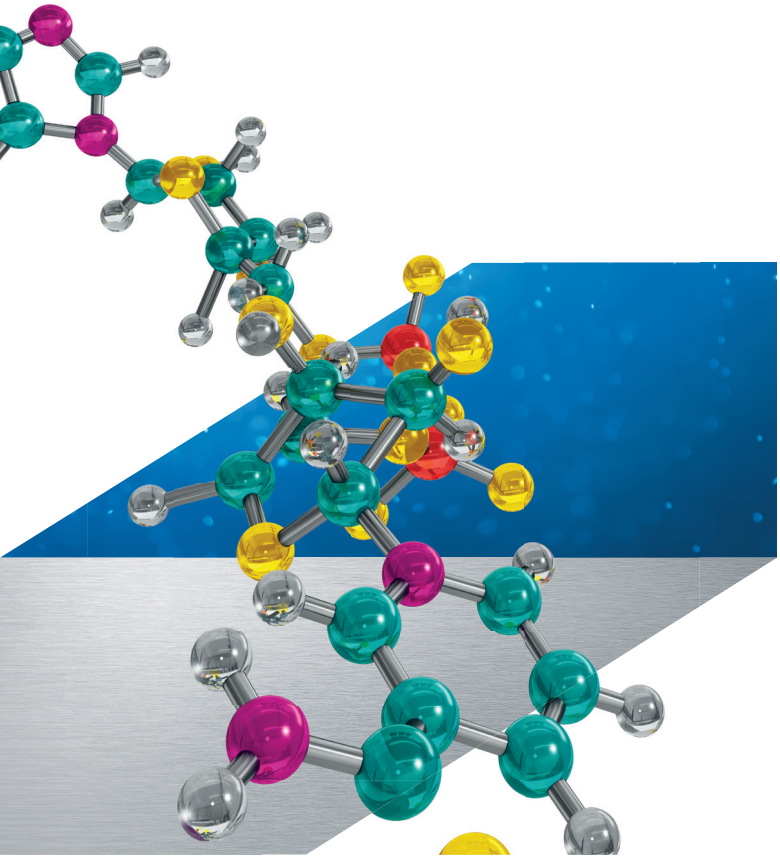
NADH Food Grade

The energy supplement

Function and effects of NADH

NADH is the short form of the reduced nicotinamide adenine dinucleotide und represents the active coenzyme of vitamin B3 (niacin). NADH exists in each human body cell and was coined as coenzyme 1 due to its central role in more than 100 different enzymatic reactions.



NADH is particularly involved in the energy production of the cells. As a sort of biological “fuel” it raises the cellular energy production directly by increasing the ATP production (adenosine triphosphate) by its activated and highly energetic hydrogen ion.

Simultaneously, NADH is required for the body’s formation of the neurotransmitter dopamine, adrenaline, noadrenaline and serotonin. Using serotonin as a precursor, NADH also controls sleep pattern and quality by formation of melatonin in the pineal gland.

These neurotransmitters determine mental health, resilience as well as cognitive performance like concentration and memory.

Application of NADH, Food Grade

Dietary supplement raw material in food and pharmaceutical industries

Benefits

- **Animal- and component-free product**
  The production process of NADH, Food Grade is free of animal, vegetable, cereal or fruit raw material and no solvents according to 2009/32/EC are used.

- **Large lot sizes and high lot-to-lot consistency**
  Roche CustomBiotech is an experienced supplier and partner for the biopharmaceutical industry supplying large scale volumes at high quality.

CUSTOMBIOTECH

For further processing only.

Specification

NADH Food Grade	
Appearance	White to slightly yellowish lyophilized substance
Solubility (c = 50 mg/mL)	Clear, colorless to slightly yellowish
pH value (of solution c = 100 mg/mL)	8–9
NADH-Na_2 (calc. from value found enzym. based on dry weight)	≥ 98%
NADH (enzymatically)	≥ 85%
NADH (A260, ε = 14.3 [L x $mmol^{-1}$ x cm^{-1}])	≥ 85%
NADH (HPLC)	≥ 95 area%
Na (flame photometric)	6–7%
Water (K.Fischer)	≤ 6%
Ethanol (GC)	≤ 0.2%
NAD (enzymatically)	≤ 2%
AMP (enzymatically)	≤ 0.2%
Heavy metals (as Pb)	≤ 10 ppm
Pb (AAS)	≤ 3 ppm
Cd (AAS)	≤ 1 ppm
Hg (AAS)	≤ 0.1 ppm
Total bioburden	≤ 10^4 CFU/g
Coliforme	≤ 10^2 CFU/g
Yeasts and moulds	≤ 3 x 10^2 CFU/g
Staphylococcus aureus	Negative
Salmonellae	Negative
E.coli	Negative
Stability	At –15 to –25°C within specification range for 24 months

Please note: Although no animal derived raw materials are used a Kosher/Halal compliance certificate is currently not available.

Ordering information

Product	Pack size	Cat. number
NADH Food Grade Disodium salt	custom fill	03 277 372 103

Regulatory disclaimer

For further processing only.

custombiotech.roche.com

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Published by
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