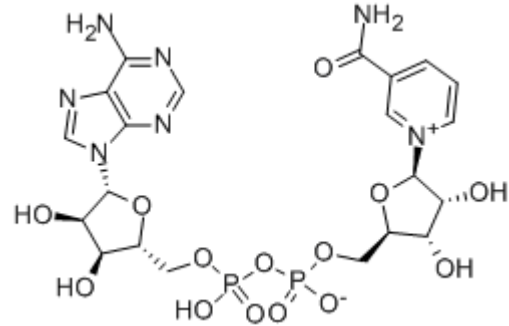


Certificate of Analysis

Product Name	Nicotinamide Adenine Dinucleotide(NAD)		
Molecular Formula	C ₂₁ H ₂₇ N ₇ O ₁₄ P ₂		
CAS No.	53-84-9	Code	BIOJNDI001
Batch No	MLP-NAD-20240530	Mfg Date	May.30, 2024
Retest. Date	May.29, 2026	Quantity	500G

Testing Items	Specifications	Results
Appearance	White to yellowish powder or crystalline powder	Conforms
Identification	Conform with NMR	Conforms
Na content(ICP-OES)	≤0.50%	0.002%
Water	≤10.0%	2.6%
pH	2.0~4.0	3.1
Purity(HPLC)	≥98.5%	99.71%
Assay	≥97.0%	99.58%
Heavy metal	Lead(Pb) ≤0.5ppm Arsenic(As) ≤0.5ppm Cadmium(Cd) ≤0.5ppm Mercury(Hg) ≤0.5ppm	Conforms Conforms Conforms Conforms
Spectroscopy detection:		
A340/A260	0.39-0.47(0.43±0.04)	0.41
A250/A260	0.75-0.91(0.83±0.08)	0.84
A280/A260	0.19-0.23(0.21±0.02)	0.20
ε 260(pH=7.5)	16.2-19.8(10 ³ L · mol ⁻¹ · cm ⁻¹)(18.0±1.8)x10 ³	17.9x10 ³
ε 340(pH=10)	5.7-6.9(10 ³ L · mol ⁻¹ · cm ⁻¹)(6.3±0.6)x10 ³	6.3x10 ³
Residual solvent	Methanol≤1.0% Ethanol≤2.0%	ND 0.08%
Microbial	Colonies Number≤750cfu/g Escherichia Coli≤3MPN/g	<750cfu/g ND
Conclusion	This product conforms to In-house standard	

***Storage Condition: Store at 2°C~8°C, Protect from moisture and light**