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Certificate of Analysis

CERTIFICAT D'ANALYSE

Document AA6A70C543 · Lot ND-2609-43 · Issued / Émis September
21, 2026

Nicotinamide Adenine Dinucleotide (NAD⁺), 500 mg Lyophilized Vial

Lyophilized powder in a sealed 3 mL glass vial · 500 mg per vial



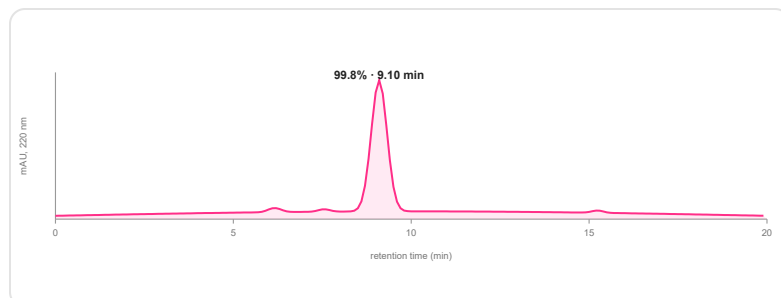
Verify this lot / Vérifier ce lot
canada-peptides.net/lots/#nd-2609-43

Catalogue no. / N° de catalogue	CMP-NAD-500	Lot / Lot	ND-2609-43
Date of analysis / Date d'analyse	September 21, 2026	Retest date / Date de réanalyse	September 21, 2028
CAS	53-84-9	Molecular formula / Formule	C ₂₁ H ₂₇ N ₇ O ₁₄ P ₂
Molecular weight / Masse moléculaire	663.4 g/mol	Quantity / Quantité	500 mg per vial
Form / Forme	Lyophilized powder in a sealed 3 mL glass vial	Storage / Conservation	Lyophilized powder: store sealed at -20 °C, protected from light and moisture. Ships at ambient temperature with desiccant.

RESULTS / RÉSULTATS

TEST / ESSAI	METHOD / MÉTHODE	SPECIFICATION / SPÉCIFICATION	RESULT / RÉSULTAT
Appearance / Apparence	Visual, USP <631>	White to off-white lyophilized powder	White lyophilized powder
Purity / Pureté	RP-HPLC, C18, 220 nm, area %	≥99%	99.8%
Identity / Identité	ESI-MS, positive mode	[M+H] ⁺ 664.41 ± 0.1%	[M+H] ⁺ 664.49 (Δ 0.012%)
Net peptide content / Teneur nette	Gravimetric, corrected for water and counter-ion	500 mg per vial	497.87 mg (100.2% of label)
Water content / Teneur en eau	Karl Fischer titration	≤ 8.0%	2.6%
Counter-ion / Contre-ion	Ion chromatography	Acetate, TFA below 1%	6.7% acetate
Bacterial endotoxin / Endotoxine	LAL, kinetic turbidimetric	< 1.0 EU/mg	< 0.21 EU/mg

CHROMATOGRAM / CHROMATOGRAMME



PEAK	RT (MIN)	AREA %	ASSIGNMENT / ATTRIBUTION
1	6.09	0.08	Related impurity
2	6.24	0.02	Related impurity
3	7.55	0.09	Related impurity

MASS SPECTRUM / SPECTRE DE MASSE



METHODS / MÉTHODES

RP-HPLC. Reversed-phase HPLC on a C18 column with a water/acetonitrile gradient (0.1% TFA), detection at 220 nm; purity is the main peak area as a percentage of the total peak area.

ESI-MS. Electrospray ionization mass spectrometry in positive mode; identity is confirmed when the observed [M+H]⁺ (or [M+2H]²⁺) ion lies within 0.1% of the calculated mass.

PEAK	RT (MIN)	AREA %	ASSIGNMENT / ATTRIBUTION
4	9.10	99.80	Nicotinamide Adenine Dinucleotide (NAD+) (main peak)
5	15.24	0.02	Related impurity

Karl Fischer. Coulometric titration of a weighed aliquot for water content, reported as a percentage of the lyophilized mass.

Ion chromatography. Counter-ion content (acetate, residual trifluoroacetate) by anion-exchange chromatography with conductivity detection.

LAL. Kinetic turbidimetric Limulus amebocyte lysate assay for bacterial endotoxin, reported per milligram of peptide.

Analyst / Analyste QC laboratory · signed electronically September 21, 2026	Reviewed / Vérifié QC reviewer · signed electronically September 21, 2026	Released / Libéré Quality assurance · released for sale Document AA6A70C543
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This certificate reports the lot record held by Vita Science Peptides for lot ND-2609-43; results apply to that lot only. Document AA6A70C543 can be checked against the lot register at <https://canada-peptides.net/lots/#nd-2609-43>. Store as stated above; retest date September 21, 2028. Generated 2026-09-24 · <https://canada-peptides.net>