

SAMPLE RECEIVED
August 5, 2026

COA ISSUED
August 10, 2026

SAMPLE INFORMATION

Vendor Optimal Bio Labs	Sample Name L-Carnitine 1200mg	Sample Type Clear liquid
Lot Number LC12-2698	MW (g/mol) 161.2	

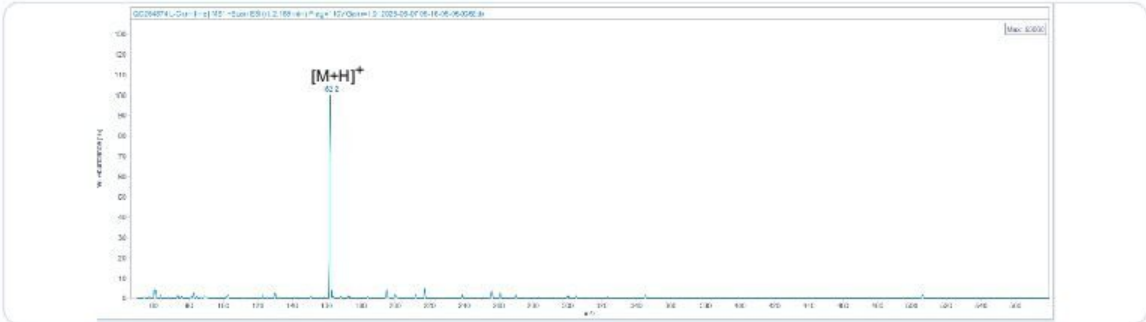
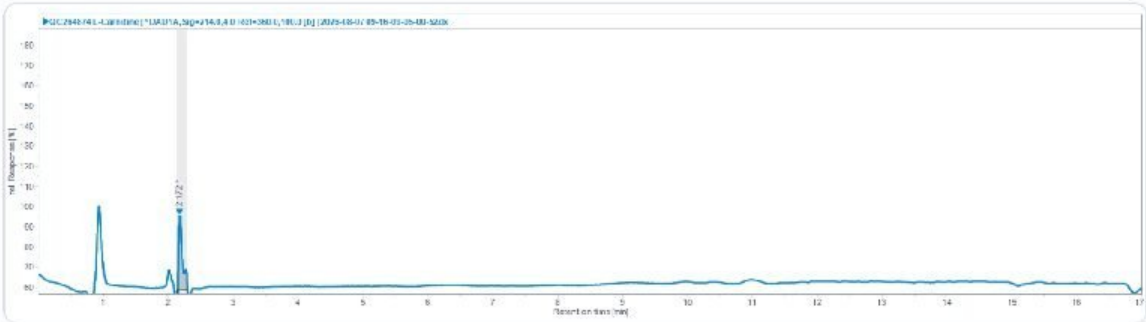
ANALYTICAL METHODS

Identity: Confirmed via LC-MS/MS
Purity: RP-HPLC (214 nm)
Content: HPLC quantitation

TEST RESULTS

Specification	Result	Method	Status
Identity: L-Carnitine	L-Carnitine	LC-MS/MS	✓ Conforms
Content	1210.36 mg	HPLC Quantitation	✓ Conforms
Overall Purity	99.69%	RP-HPLC (214 nm)	✓ Conforms

HPLC Chromatogram · Retention Time 2.172 min



Certification: This Certificate of Analysis confirms that the tested material meets or exceeds Bioviridian's analytical quality specifications for peptide research use. Verify authenticity at bioviridians.com/coa-search.html using the Web Verification Code above.



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L-Carnitine 1200mg / 10ml Technical Data Sheet

OPTIMAL BIO LABS — TECHNICAL DATA SPECIFICATION SHEET

[✓] ORIGINAL COA / TEST REPORT ATTACHED — PAGE 1

[✓] QUALITY ASSURANCE PROGRAM — PAGE 3

CORE TECHNICAL DATA MATRIX

Product Nomenclature	L-Carnitine
Molecular Classification	Quaternary ammonium metabolite in liquid formulation
Molecular Formula	C7H15NO3
Molar Mass	161.20 g/mol

MATERIAL PARAMETERS & SPECIFICATIONS

Form	Liquid formulation
Baseline Quality Standard	Verified ≥98.0% via high-performance liquid chromatography (HPLC).
Lot Verification	Sequence matrix matched via analytical mass spectrometry (MS) profile.
Storage Environment	Maintain sealed containment at -20°C, fully insulated from ambient moisture and light. Follow lot-specific instructions when supplied.
Target Application	Intended solely for parallel laboratory research mapping multi-variable hormone axis models.
Analytical Documentation	Results apply only to the sample and lot identified in the attached report.

Target application: For in-vitro laboratory research only. Not for human or veterinary use.

Chemical reference: PubChem compound record. Product specification: Optimal Bio Labs product listing.

Quality Assurance Protocol & Sourcing Transparency

1. Specification Baseline & Quality Threshold

Optimal Bio Labs operates under a standardized Quality Assurance Program. Every synthesized lot is managed against a 99%+ batch target, with a strict baseline purity threshold set at 98.0%. For product variations where a pre-linked independent analysis is unavailable, our internal quality validation framework remains fully active to ensure structural and analytical compliance before inventory release.

2. Sourcing Transparency & Verification Channels

We maintain direct, long-term relationships with a highly selective network of primary synthesis manufacturers. To protect proprietary trade channels and supply logistics, we do not utilize third-party brokers or downstream distributors.

Analytical data and reference documentation are compiled using multi-layered validation sources, which may include direct facility mapping, industry-standard third-party auditing via Fennrick, or independent validation by domestic testing laboratories. Where external reports are generated, they are often routed through the primary source (c/o Optimal Bio Labs) to ensure unaltered documentation for that specific batch variation. Qualifying independent records can be cross-referenced directly through the testing facility's verification systems.

3. Specification Discrepancy & Account Adjustments

We stand behind our strict quality baseline. In the event that a sealed, unopened reference unit from a qualifying lot is submitted to Fennrick for independent verification and returns an objective analytical purity reading below our 98.0% baseline threshold, the following standardized adjustment protocols apply:

- **Material Valuation Credit:** A balance reallocation will be applied to the account covering the baseline cost of the verified lot variation.
- **Logistical Cost Offset:** Account adjustments include credit allocations for standard logistics costs associated with the independent verification process and sample delivery, subject to our published terms and conditions.

Authenticity Through Verifiable Analysis.