



CLIENT & SAMPLE INFORMATION

ClientHamner Research

Analysis Date06/14/2026

Lot / BatchHAM-B1-048

Product NameLipo-C + B12

Form / MatrixLiquid Solution

Volume10 mg

This Certificate of Analysis confirms the identity and quality of the Lipo-C formulation listed herein. Compound identification was performed by HPLC-UV with LC-MS/MS confirmation. All active components were detected and found to conform with expected molecular masses and chromatographic profiles.

ACTIVE COMPONENT IDENTITY (LC-MS/MS)

All components detected by HPLC with UV Detection confirmed by Mass Spectrometry. Identity confirmed via observed m/z vs. theoretical m/z.

Component	CAS Number	Theoretical m/z [M+H] ⁺	Observed m/z	Status
Choline Bitartrate	87-67-2	104.11	104.10	PASS
L-Carnitine	541-15-1	162.11	162.11	PASS
L-Methionine	63-68-3	150.06	150.06	PASS
L-Arginine	74-79-3	175.12	175.12	PASS
Dexpanthenol (B5)	81-13-0	206.14	206.14	PASS
Pyridoxine (B6)	65-23-6	170.08	170.08	PASS
Methylcobalamin (B12)	13422-55-4	1344.63	1344.63	PASS
Overall Identity Determination				PASS

Method: HPLC-UV with LC-MS/MS confirmation | All seven active components detected and confirmed present.

ADDITIONAL QUALITY SCREENS

No additional screens were selected for this sample submission.

TESTING METHODOLOGY

Compound Identity (LC-MS/MS)

Multi-component identity confirmation performed by reverse-phase HPLC with UV detection coupled with tandem mass spectrometry (LC-MS/MS). Each active ingredient is identified by retention time and confirmed by observed [M+H]⁺ or [M+2H]²⁺ molecular ions matched against theoretical masses. All seven Lipo-C components (Choline, L-Carnitine, L-Methionine, L-Arginine, Dexpanthenol/B5, Pyridoxine/B6, Methylcobalamin/B12) were evaluated in a single analytical run.

