

Title: Phosphatidyl Choline	
Allergy Research Group® / NutriCology®	
Document No.: 72240CA	Revision: 014

Certificate of Analysis

Part Number	72240		
Lot Number	680145		
Product Count & Form	100 Softgels		
Packaging, Closure	300 cc bottle, desiccant		
Storage Condition	Room Temperature		
Shelf Life	36 months	Expiration Date	03/2023
Label Number, Size	72240L, J		
Retain Sample	1 bottle from beginning, middle and end of production run.		

ANALYSIS

Physical

Attribute	Method / SOP	Specification	Test Result
Product Color, Size	QC011	Translucent yellow, size "S3"	Complies
Product Weight Variation	SOP 514	Meets USP <2091> 1129.5 – 1380.5 mg	1305.2 mg†
Disintegration Time	SOP 522	Meets USP <2040>	Complies†

*Production and Process Control, † Per CMO's CoFA

Purity/Strength per Softgel

Active Ingredients	Label Claim	Release Limits	Test Result
Phosphatidylcholine	385 mg	100-150% LC by P ³¹ -NMR	411.0 mg/softgel
Other Ingredients			
Gelatin, Glycerin, purified water, polyglycitol syrup, soybean oil			

*Production and Process Control

Identification \ Chemical \ Heavy Metals

Attribute	Method / SOP	Specification	Test Result
Identity	Bulk Certificate of Analysis Review	Approved	Approved
Arsenic (inorganic)	ICP-MS per USP <2232>	≤ 15 mcg/day Ψ	BQL
Cadmium	ICP-MS per USP <2232>	≤ 5 mcg/day Ψ	0.002 mcg/day
Mercury (total)	ICP-MS per USP <2232>	≤ 15 mcg/day Ψ	BQL
Lead	ICP-MS per USP <2232>	≤ 10 mcg/day Ψ	BQL

Ψ – Permitted Daily Exposure, *Production and Process Control

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Microbiology

Attribute	Method / SOP	Specification	Test Result
Total Aerobic Count	USP/ AOAC/ FDA BAM	$\leq 1 \times 10^3$ CFU/g	< 10 CFU/g
Total Yeast & Mold	USP/ AOAC/ FDA BAM	$\leq 1 \times 10^2$ CFU/g	< 10 CFU/g
Coliform	USP/ AOAC/ FDA BAM	$\leq 1 \times 10^2$ CFU/g	< 10 CFU/g
Escherichia coli	USP/ AOAC/ FDA BAM	None Detected	None Detected
Staphylococcus aureus	USP/ AOAC/ FDA BAM	None Detected	None Detected
Salmonella	USP/ AOAC/ FDA BAM	None Detected	None Detected

*Production and Process Control

Approval: 	Digitally signed by Kimberly Vennebush Date: 2020.05.28 08:48:14 -06'00'	Date: 28MAY2020
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If you liked our service, please tell a friend. If you didn't, please tell us!

Test Certificate

Description: Phosphatidyl Choline
 Sample ID: 42240/E00680145
 Lot No:
 Location:
 Received: 4/3/2020
 Completed: 4/8/2020

Client: Allergy Research Group
 2300 N Loop Rd.
 Alameda, CA 94502

Lab No: 192747-01

Analysis	Result	Per Unit	Specifications	Method
Total Aerobic Microbial Count	< 10	CFU/g	< 1,000 CFU/g	USP <2021>
Coliform	< 10	CFU/g	< 100 CFU/g	AOAC 991.14
E.Coli	Absent	per 10 grams	Absent	USP <2022>
Staphylococcus aureus	Absent	per 10 grams	Absent	USP <2022>
Salmonella	Absent	per 10 grams	Absent	USP <2022>
Total Yeast & Mold	< 10	CFU/g	< 100 CFU/g	USP <2021>
Yeast *	< 10	CFU/g	< 100 CFU/g	USP <2021>
Mold *	< 10	CFU/g	< 100 CFU/g	USP <2021>

* For informational purposes only.

THESE RESULTS APPLY ONLY TO THE SAMPLE SUBMITTED AND NOT TO THE PRODUCT FROM WHICH IT WAS TAKEN. THESE RESULTS ARE PROVIDED ONLY FOR THE BENEFIT OF CLIENT, WITHOUT REPRESENTATION OR WARRANTY OF ANY KIND, EXCEPT FOR THE EXPRESS LIMITED WARRANTY PROVIDED SOLELY TO CLIENT IN ADVANCED LABORATORIES' TERMS OF SERVICE.

THIS CERTIFICATE SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL FROM ADVANCED LABORATORIES.

Results Approved By: 
 Kristina Noll - Quality Technician

Dated: 4/8/2020

Printed: 4/8/2020 4:38:47 PM



If you liked our service, please tell a friend. If you didn't, please tell us!

Test Certificate

Description: Phosphatidyl Choline
Sample ID: 42240/E00680145
Lot No:
Location:
Received: 4/3/2020
Completed: 4/10/2020

Client: Allergy Research Group
2300 N Loop Rd.
Alameda, CA 94502

Lab No: 192749-01

Analysis	Result	Per Unit	Specifications	Method
Mercury	< 0.001	µg/g	< 50 µg/g	ICP-MS USP <730>
Lead	< 0.001	µg/g	< 50 µg/g	ICP-MS USP <730>
Arsenic	< 0.001	µg/g	< 50 µg/g	ICP-MS USP <730>
Cadmium	0.001	µg/g	< 50 µg/g	ICP-MS USP <730>
† Phosphatidylcholine	411.0	mg/softgel	> 385 mg/softgel	HPLC

Analysis performed on a composite sample made from ten softgels.

Average fill weight = 1,305.2 mg

Phosphatidylcholine analysis performed by methodology adapted from Becart J et al., J High Resolution Chromatogr 1990, 13, 126; utilizing a hydrolytic organic extraction technique, solvent evaporate and samples dissolved in chloroform/methanol/water (70/25/5) and separated utilizing a binary gradient of chloroform and methanol solutions on a column of Lichrospher Si 60, 5 µm, 12 cm x 4, with Mobile phase A: chloroform/methanol/ammonium hydroxide, 80/19.5/0.5 (v/v) Mobile phase B: chloroform/methanol/water/ ammonium hydroxide, 60/34/5.5/0.5 (v/v) 0-14 min: linear from A/B, 50/50 to 100% B, 14-25 min: hold 100% B, 25-30 min: 100% B to A/B, 50/50 and a flow rate 1 ml/min with RI and ELSD detection

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Results Approved By:


Kristina Noll - Quality Technician

Dated:

4/10/2020

Tests marked with † were done at Atlas Bioscience Labs, LLC, a joint venture with Advanced Laboratories. -
1775 S. Pantano Rd - Ste #110, Tucson, AZ 85710

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