CERTIFICATE OF ANALYSIS



12661 HOOVER STREET GARDEN GROVE, CA 92841 | P. 714-754-4372 | F. 714-668-9972 | WWW.ALKEMIST.COM

Report Issued To: Science Only LLC

2609 E 14TH ST PMB 430

BROOKLYN NY 11235-3915

USA

Sample Name: Berberine capsules

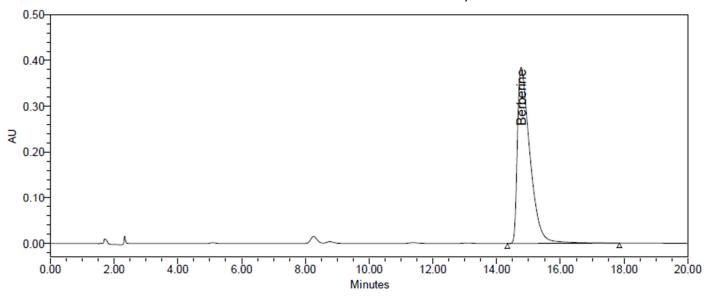
Description: Capsule powder; Tan powder in clear

capsules **Lot #:** 12496124

AL #: 25084NGT_2 **Analysis ID:** 257541

Received: 03/25/25

Determination of Berberine Content by HPLC



Ret. Time (min) Compound Name Amount (%) Amount (mg/cap) Specification Result 14.8 Berberine HCl 25.158 165.671 ≥ 150 Pass mg/capsule

Chromatographic Conditions:

Method: ATM-815-0234

Column: AP389 Gemini 5µ C18 110A (150 x 4.6 mm)

Temperature: 25°C
Flow Rate: 1 mL/min
Injection Volume: 10 µL
UV Detection: 346 nm

Mobile Phase: Acetonitrile: 0.1 M Potassium Phosphate (24:76)

HPLC Instrument: Alliance_4

Sample Preparation:

Composited the contents of 10 capsules. Mixed sample well. Transferred approximately 50 mg of sample into a 50 mL volumetric flask. Added approximately 35 mL MeOH, vortexed 30 seconds and sonicated for 30 minutes at room temperature. Let it cool. Filled to volume with MeOH. Mixed well by inversion. Filtered through 0.45 μ m PTFE syringe filter into HPLC vial for analysis.

Report Summary:

Conclusion: This "Berberine capsules" test sample contains 166 mg/capsule Berberine HCl on the as is basis.

Fill weight: 658.517 mg/capsule

OOS Reference: N/A

Notebook Reference: 08425 Berberine

Analysis Date: 03/27/25 Analyzed By: T Tong Authorized By: Celine Decasiano,
Analytical Chemistry Supervisor

The analytical method used has not been verified or validated for this product by Alkemist Labs. This report applies to the sample investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. This report is for the exclusive use of the party who requested the report and not for public dissemination or use by third parties, including for promotional purposes, without the prior written permission of Alkemist Labs. This report provides technical results for a specific sample and the report shall not be altered, modified, supplemented or abstracted in any manner. Any violation of these conditions renders the report and its results void. Pass/Fail decision is based on laboratory results as found.

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CERTIFICATE OF ANALYSIS



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Report Issued To: Science Only LLC

2609 E 14TH ST PMB 430 BROOKLYN NY 11235-3915

USA

Sample Name: Berberine capsules

Description: Capsule powder; Tan powder in clear

capsules **Lot #:** 12496124

AL #: 25084NGT_1 alvsis ID: 258319

Analysis ID: 258319 **Received:** 03/25/25

Determination of Bacterial Contaminants by Petrifilm and MDS

Microorganism	Amount (cfu/g)	USP Specification	Result	
E. coli	Absent	Absent in 10g	Pass	
Aerobic Bacteria	ND	< 10 ⁴	Pass	
Yeast and Mold	ND	< 10 ³	Pass	
Enterobacteria	ND	< 10 ²	Pass	
Salmonella	Absent	Absent in 25g	Pass	

Conditions:

Method: ATM-815-0315, 0316, 0317, 0318, 0319

Instrument: 3M Petrifilm Plate Reader, 3M Molecular Detection System (MDS)

Sample Preparation:

For E.Coli, Aerobic count, Yeast & Mold, and Enterobacteria. Transferred approximately 10g of sample to sterile filter bag with 90 mL of Tryptic Soy Broth. Mixed until homogenous. Diluted 1:10 and 1:100. For each of these four tests, different incubations are performed on petrifilm. For E.Coli, an additional step of incubation with MacConkey broth is performed at 42 C for 24 hours +/- 2 hours, before placing on petrifilm. For Salmonella, transferred 25 g of sample to an enrichment pouch. Massaged pouch enrichment suspension until homogeneous. Incubated at 37 C for 24 hours +/- 2 hours.

Report Summary:

Conclusion: This "Berberine capsules" test sample has no detected aerobic bacteria, no detected yeast and mold,

no detected enterobacteria, and no detectable trace of Salmonella spp. and E. coli.

OOS Reference: N/A

Notes: This matrix has been verified fit-for-purpose using Petrifilm and MDS

Notebook Reference: 09025 Petrifilm, 09025 MDS

Analysis Date: 04/04/25 Analyzed By: R Garcia Authorized By: Anthony Fontana, Ph.D. Laboratory Director

CERTIFICATE OF ANALYSIS



12661 HOOVER STREET. GARDEN GROVE, CA 92841 | P. 714-754-4372 | F. 714-668-9972 | WWW.ALKEMIST.COM

Report Issued To: Science Only LLC **Sample Name:** Berberine capsules

2609 E 14TH ST PMB 430

Description: Capsule powder; Tan powder in clear

USA Lot #: 12496124
AL #: 25084NGT_3

Analysis ID: 257871 **Received:** 03/25/25

Determination of Heavy Metals Content by USP <233>

Element	Amount (µg/g)	USP <561> Limit (µg/g)	Result
Arsenic	0.100	2.0	Pass
Cadmium	0.062	0.5	Pass
Mercury	< 0.010	1.0*	Pass
Lead	< 0.020	5.0	Pass

Chromatographic Conditions:

Method: ATM-815-0307 (Validated by USP <233> Elemental Impurities – Procedures)

Preparation: Microwave Digestion

Instrument: ICP-MS

Sample Preparation:

Combined the contents of 5 capsules and mixed well. Transferred 500 mg of sample to a glass test tube. Added 4 mL nitric acid and 1 mL hydrochloric acid and shook well. Let sit for 30 minutes. Digested sample using microwave digestor. Let cool and transferred to a 50 mL Digitube and filled to volume with water. Mixed well and transferred to test tube for analysis.

Report Summary:

Conclusion: This "Berberine capsules" test sample has 0.100 µg/g arsenic, 0.062 µg/g cadmium, <0.010 µg/g

mercury, and $<0.020 \mu g/g$ lead.

OOS Reference: N/A

Notes: *Methylmercury determination is not necessary when the content for total mercury is less than the

 $0.2ppm\ limit\ for\ methylmercury.$

MassHunter File: 08525 Heavy Metals

Analysis Date: 04/01/25 Analyzed By: C Lopez Authorized By: Latrece Brown,
Lead Analytical Chemist