

47 W Polk St. STE 100-241 Chicago, IL 60605 liftmode@liftmode.com



# Mucuna pruriens Extract

## (Mucuna pruriens Extract)

Material Lot #: MPL8489 **Test Date:** 08/19/2021 Country of Origin: Re-Test Date: 08/16/2024

**Analysis** Claim Result L-DOPA ≥20% 26%

Test	Specification	Result
Plant Extract Identification (HPTLC)	Consistent with Reference Sample	Consistent with Reference Sample
L-DOPA (HPLC)	≥20%	26%
Heavy Metals  Lead  Mercury  Cadmium  Arsenic	≤1 ppm ≤1 ppm ≤1 ppm ≤1 ppm	0.0825 ppm <0.00500 ppm <0.00500 ppm 0.0445 ppm
Total Aerobic Plate Count	<1000 cfu/g	<10 cfu/g
Yeast Moulds Escherichia coli Coliforms Salmonella Staphylococcus aureus	<100 cfu/g <100 cfu/g <10 cfu/g <10 cfu/g Not Detected per 25 g <10 cfu/g	<10 cfu/g <10 cfu/g <10 cfu/g <10 cfu/g <10 cfu/g Not Detected per 25 g <10 cfu/g

Mucuna pruriens Extract should be stored at or below room temperature in a tightly sealed durable container. Mucuna pruriens Extract should be protected from excess heat, direct sunlight, excess humidity, and moisture. Mucuna pruriens Extract has a retesting period of 3 years from the date of analysis when properly stored.

Certificate Issued To: Synaptent 47 W. Polk St. Chicago, Illinois 60605



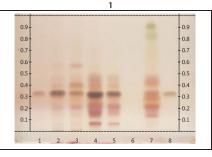
Work performed at: Alkemist Labs

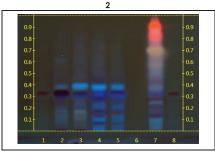
12661 Hoover Street Garden Grove, CA 92841

714-754-HERB (4372) 714-668-9972 (FAX) Sales@Alkemist.com www.Alkemist.com

# Certificate of Analysis: Mucuna pruriens PE (MPL8489)

High Performance Thin-Layer Chromatography with Photo-Documentation





Company Name: Synaptent

Mucuna pruriens PE Plant Part

Sample Received: 07/29/19

Sample Packagina: Light Sensitive Glass Bottle or Jar

Form of Botanical: powdered extract Blue plastic bottle Appearance:

(MPL8489) →Lanes 4(6ul), 5(2ul) Lot Number:

19210PEO 1 Sample:

Latin Name: Mucuna pruriens (L.) DC. [Fabaceae]

Reference Sample: Lane 2(6µl) (XK30010CRB), Lane 3(6µl) (XK20106AP); Lane 7(6µl) (XK22306AP1) Mucuna pruriens (herb (leaf, stem));

held at Alkemist Labs, Garden Grove, CA.

A. Davis, J. Kim, N. Afendikova, M. Edwards, S. Rodriguez, S. Kabbaj, M. Lababidi, N. Hoang, K. Tran 122803 Analyst:

Sample Preparation: 0.3g+3mL Methanol, sonicate/heat at 50°C for 30 min.

Stationary Phase: Silica gel 60, HPTLC plates Mobile Phase:

n-butanol: Acetic acid: water [8/2/2] Detection: (1) Ninhydrin, 120°C, 5min, vis (Reich, E., 2007)

(2) Ninhydrin, 120°C, 5min, 366nm (Reich, E., 2007)

Reference Standard: Lanes 1(3µI) and 8(3µI) L-dopa (4995-2599, CHR), Methanol (0000206696, BDH) Reference Source: Method Developed by Alkemist Labs

IDT-SOP-72-01

Comments & Conclusions: Lanes 4, 5 are the test sample Mucuna pruriens PE (MPL8489). Lanes 2, 3, 6, 7, are the reference samples used for comparison. This test sample, Mucuna pruriens PE (MPL8489) is consistent with the chromatographic profile of the reference samples of Mucuna pruriens, used above. This test sample Mucuna pruriens PE (MPL8489) has characteristics of Mucuna pruriens seed.

NOTE: The above conclusion may be a function of the natural variance found in botanicals &/or the extraction process used to create specific extracts. The growing and drying conditions, age, seasonal variations, geographic location, extraction solvents, etc. all play a role in the phytochemical fingerprint of botanicals as well as their extracts; hence, chromatographic variations are expected.

Digitally signed by Sidney Sudberg

Date: Report Date: 08/02/19 16:58:30 -07'00'

Examined, Reviewed & Authorized by: Sidney Sudberg, Chief Scientific Officer, Alkemist Labs ISO/IEC 17025



Note: Any unidentified lanes in the above chromatograms are confidential and may represent internal studies or other test samples not related to MPL8489 Note: Any underlined until a time down or unformation of a confidence of the quality or condition of appenently identical or similar products. This report applies to the sample investigated and is not necessarily indicative of the quality or condition of appenently 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, Inc. This report provides technical results for a specific sample and the report shall not be aftered, modified, supplemented or abstracted in any manner. Any violation of these conditions renders the report and its results void. © 2019Alkemist Labs, Inc. All Rights Reserved

#### **CERTIFICATE OF ANALYSIS**



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

Report Issued To:

Synaptent 47 W. Polk St.; 100-241 Chicago IL 60605-2000 USA

Sample Name: Mucuna pruriens

Description: Powdered extract; Fine dull brown powder [clear plastic jar]

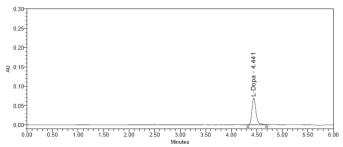
Lot #: MPL8489

# 212311XL\_1

Analysis 10: 19218

Received: 08/19/21

Determination of L-Dopa Content by HPLC



Ret. Time (min)	Compound Name	Prep 1 (%)	Prep 2 (%)	Average (%)	Specification	Result
4.4	L-Dopa	25.723	25.395	25.559	≥ 20%	Pass

Chromatographic Conditio
Method: ATM
Column: API
Temperature: 60°
Flow Rate: 0.8
Injection Volume: 2 µ
UV Detection: 225
Mobille Phase: Wat
HPLC Instrument: Allia

ditions: ATM-815-0171-R1 AP193 Gemini 5µ C18 110A (250 x 4.6 mm) 60°C 0.8 mL/min 2 µL 225 mm Water-Methanol:Phosphoric Acid (975.5:19.5:1) Alliance\_3

Sample Preparation:
Mixed sample well and transferred approximately 100 mg to a 10 mL volumetric flask. Added 8 mL of 0.1N HCl and vortexed 30 seconds. Sonicated for 30 minutes at room temperature. Let cool to room temperature. Filled to volume with 0.1N HCl. Diluted 1:25 in 0.1N HCl.Centrifuged for 10 minutes and transferred supernatant to an HPLC vial for analysis.

Report Summary: Conclusion: OOS Reference: Empower Reference:

This "Mucuna pruriens" test sample contains an average of 26% L-Dopa on the as-is basis.

N/A
23821 L-Dopa

A Office Series

Celine Deneuve Senior Analytical Chemiz

Analysis Date: 08/27/21 Analyzed By: L Alonzo

Authorized By: Celine Deneuve, Analytical Chemistry Supervisor

This report applies to the sample investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. Th 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 Aklemit Labs. This report provides technical results for a specific sample and the report shall not be albred, modified, supplemented or abstracted in any manner, any violation of these conditions renders the report and its results void 0 2018 Aklemist Labs I Rightins Reserved

Synaptent

ANALYTICAL REPORT Joseph Watkins

1442 W. Fulton Street Chicago, IL 60607

AR-21-QH-047898-01

Client Code: QH0000902 Received On: 19Aug2021 Reported On: 03Sep2021

PO#: 20210817

			- 101 0001	
Eurofins Sample Code: 477-2021-081903	222	Sample Registration	Date: 19Aug2021	
Client Sample Code: MPL8489		Condition Upon Rece	eipt:acceptable, 21.5°C	
Sample Description: Mucuna pruriens Extr	act	Sample Reference:		
UMIB1 - Yeast - FDA BAM Chapter 18 mod.	Reference FDA BAM Chap	ter 18 mod.		Completed 24Aug2021
Parameter Yeast	Result < 10 cfu/g			
Parameter Moulds	Result < 10 cfu/g			
UMVSE - Aerobic Plate Count - CMMEF Chapter 8.72	Reference CMMEF Chapte	r 8.72	Accreditation ISO/IEC 17025:2017 A2LA 3329.07	Completed 22Aug2021
Parameter Aerobic Plate Count	Result < 10 cfu/g			
ZM1AK - Confirmation Salmonella spp AOAC-RI 121501	Reference FDA BAM Chap	ter 5	Accreditation ISO/IEC 17025:2017 A2LA 3329.07	Completed 22Aug2021

Not Detected per 25 g

Result

Synaptent

Joseph Watkins 1442 W. Fulton Street Chicago, IL 60607

Staphylococcus aureus

### **ANALYTICAL REPORT**

AR-21-QH-047898-01

Client Code: QH0000902 PO#: 20210817

Received On: 19Aug2021 Reported On: 03Sep2021

Eurofins Sample Code: 477-2021-08190	222	Sample Registration	Date: 19Aug2021		
Client Sample Code: MPL8489		Condition Upon Rece	eipt:acceptable, 21.5°C		
Sample Description: Mucuna pruriens Extr	act	Sample Reference:			
FS001 - Heavy Metals (As, Cd, Hg, and Pb)	Reference AOAC 2011.19	and 993.14 (modified)	Accreditation ISO/IEC 17025:2017 A2LA 2918.01	Completed 27Aug2021	Sub 1
Parameter Arsenic Cadmium Lead Mercury	Result 44.5 ppb < 5.00 ppb 82.5 ppb < 5.00 ppb				
UM8VD - Total Coliforms - CMMEF Chapter 9.933	Reference CMMEF Chapte	er 9.933	Accreditation ISO/IEC 17025:2017 A2LA 3329.07	Completed 20Aug2021	
Parameter Coliforms Parameter	Result < 10 cfu/g Result				
Escherichia coli	< 10 cfu/g				
UMHBM - Staphylococcus aureus - BAM Chapter 12	Reference BAM Chapter 1	2	Accreditation ISO/IEC 17025:2017 A2LA 3329.07	Completed 21Aug2021	
Parameter	Result				

Page 2 of 5 9/3/21 10:37 am



< 10 cfu/a

812 Meadow Lark Lane, Goodlettsville, TN 37072 Telephone: 615-239-8604

Certificate of Analysis

Synaptent LLC 47 W Polk Street, 100-241 Chicago, IL 60654

Product Name	Mucuna Pruriens	Product Lot Number	MPL8489
Report Date	08/15/2019	Laboratory Number	12467

Description	Method	Result
L-Dopa	HPLC	21.8%
Lead	ICP-MS USP <730>	0.143 ppm
Arsenic	ICP-MS USP <730>	0.096 ppm
Cadmium	ICP-MS USP <730>	0.019 ppm
Mercury	ICP-MS USP <730>	0.005 ppm
Total Aerobic Count	Biolumix	<1000 cfu/g
Yeast & Mold	Biolumix	<100 cfu/g
E. Coli	Biolumix	Negative
Coliform	Biolumix	<10 cfu/g
Salmonella	AOAC 967.26	Negative

Collin Thomas MSC Laboratory Manager

08/15/2019 8/15/19

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