

LIFTMODE

LIFTMODE
47 W. Polk St. STE 100-241
Chicago, IL 60605

liftmode@liftmode.com
liftmode.com

CERTIFICATE OF ANALYSIS

Matrine

(*Sophora flavescens* extract)

Material Lot #: 20457
Country of Origin: China

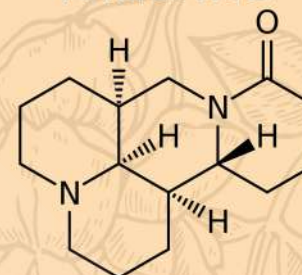
Analysis Date: 09/11/2020
Retesting Date: 09/11/2023

Analysis	Claim	Result
Matrine	≥98%	99.8%

Test	Specification	Result
HNMR ID HPLC Assay	Conforms ≥98%	Conforms 99.8%
ICP-MS Arsenic Lead Cadmium Mercury	≤1.5 ppm ≤0.5 ppm ≤0.5 ppm ≤0.5 ppm	<0.001 ppm 0.006 ppm 0.021 ppm <0.001 ppm
Total Aerobic Count Yeast & Mold Coliform <i>E. coli</i> Salmonella	<1000 cfu/g <100 cfu/g <10 cfu/g Negative Negative	Conforms Conforms Conforms Conforms Conforms

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

Matrine



Main Benefits

- **Matrine** is an alkaloid found in *Sophora flavescens*, an herb primarily associated with Tradition Chinese Medicine (TCM).
- **Matrine** has potent anti-inflammatory effects and has been shown to reduce expression of inflammatory mediators COX-2, TNF- α , IL-6 and ICAM-1, among other targets.
- **Matrine** binds both mu and kappa opioid receptors, though its affinity for the kappa receptor is believed to be significantly higher than the mu receptor.

Main Cautions

- While neuroprotective and hepatoprotective in lower doses, high doses of **Matrine** may be both neurotoxic and hepatotoxic. Do not exceed the recommended dose.
- Due to the kappa opioid activity of **Matrine**, high doses may also cause negative psychotropic effects, discomfort, nausea, and malaise.
- Consult your healthcare provider before use if you have a medical condition or if you are taking any prescription medications.

Usage Tips

- A 0.15cc measuring scoop is included. Three level scoops contains one serving of approximately **250mg Matrine**. As a dietary supplement, take 1 serving up to 2 times per day. Start at the lower suggested quantity to assess response.
- Anecdotal evidence suggests **Matrine** may potentiate natural mu opioid agonists such as Kratom (*Mitragyna speciosa*).
- **Matrine** is a freebase despite being soluble in water, so use of capsules is recommended. Mixing **Matrine** with acidic solutions such as vinegar or lemon juice may help reduce bitterness and causticity.
- This dietary supplement is not intended to treat, diagnose, prevent, or cure any diseases. Consult your healthcare provider before use if you have a medical condition or if you are taking any prescription medications.
- It is safe to stack **Matrine** with other supplements as long as the amount consumed does not exceed the suggested serving size.
- The benefits of **Matrine** are most effective when they are supported by a healthy diet and plenty of exercise.



Certificate of Analysis

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

Sample Collected By: Client

Product Name	Matrine	Product Lot Number	20457
Report Date	09/11/20	Laboratory Number	20080814

Description	Method	Specification Limit	Result
Identification	H-NMR	Conforms	Conforms
Assay	HPLC	NLT 98%	99.8%
Lead	ICP-MS	< 1 ppm	0.006 ppm
Arsenic	ICP-MS	< 1 ppm	<0.001 ppm
Cadmium	ICP-MS	< 1 ppm	0.021 ppm
Mercury	ICP-MS	< 1 ppm	<0.001 ppm
Total Aerobic Count	Biolumix	<1,000 cfu/g	<1,000 cfu/g
Yeast & Mold	Biolumix	<100 cfu/g	<100 cfu/g
E. Coli	Biolumix	Absent	Absent
Coliform	Biolumix	<10 cfu/g	<10 cfu/g
Salmonella	Biolumix	Absent	Absent

Collin Thomas *Collin Thomas*
 Laboratory Manager

09/11/2020 *9/11/20*
 Date

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

Client: Matrine
 NAME: Matrine
 PRODUCT: Matrine
 ID: 20200814
 DATA: 20200814
 INSTRUM: spect
 METHOD: HPLC
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 TO: NAME: 20200814
 BY: NAME: 20200814
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 P100: 18.000000

1H NMR of Matrine
 in DMSO
 Lot # 20080814
 Colmaric Analytical
 400 MHz
 8-20-20

