

Certificate of Analysis

Product Code:	Mitragyna spp.	Manufacturers Batch Number:	KR-MGM15-2003-2025
Date of release:	16JUN2025	Expiry Date:	16MAR2026

The undersigned hereby certifies the following data to be true specification of the obtained results of tests and assays.

TEST RESULTS

Mitragyna Alkaloids (UPLC-MS/MS)

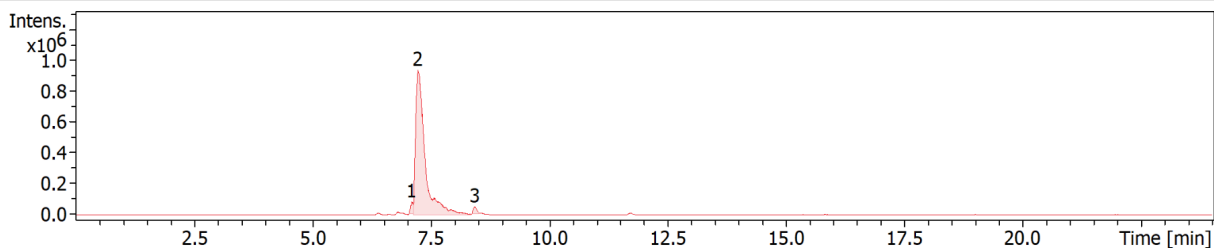
Tested: 16SEP2025

Compound	MW(g/mol)	Specification	Result	Unit
Mitragynine	398.45	Report Results	~ 1.72%	w/w%
7-Hydroxymitragynine	414.45	Report Results	< 0.1%	w/w%
Speciogynine	398.45	Report Results	< 0.1%	w/w%
Speciociliatine	398.45	Report Results	< 0.1%	w/w%
Corynantheidine	368.45	Report Results	< 0.1%	w/w%
Mitragynine Pseudoindoxyl	414.45	Report Results	~ 2.05%	w/w%
Speciogynine Pseudoindoxyl	414.45	Report Results	< 0.1%	w/w%
MGM-15	416.51	Report Results	~ 96.2%	w/w%

Testing Item	Specification	Result
Appearance	Uniform Powder	Conforms
Water content	< 3.0%	< 0.1%
Storage	2-8 C	
Heavy Metals	TESTED	PASSED
Residual Solvents	TESTED	PASSED

Acquisition Parameter

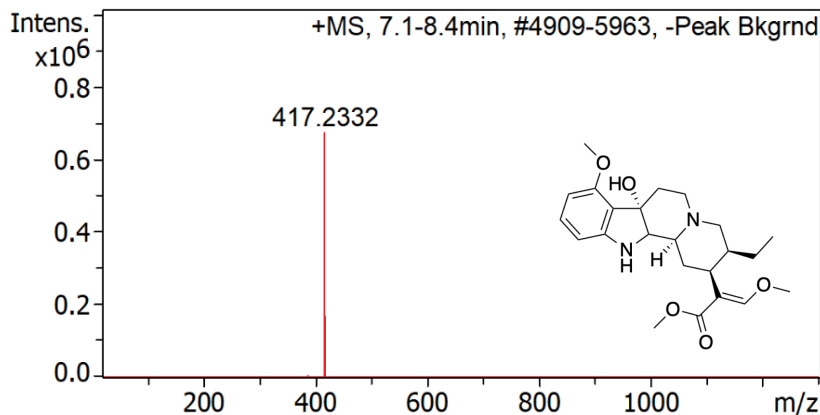
Source Type	ESI	Ion Polarity	Positive	Set Nebulizer	2.2 Bar
Focus	Active	Set Capillary	4500 V	Set Dry Heater	220 °C
Scan Begin	20 m/z	Set End Plate Offset	-500 V	Set Dry Gas	10.0 l/min
Scan End	1300 m/z	Set Collision Cell RF	700.0 Vpp	Set Divert Valve	Waste



#	RT [min]	Area	Int. Type	I	S/N	Trace	Max. m/z	FWHM [min]
1	7.1	276628	Manual	86896	318.7	BPC +All MS	415.2178	0.1
2	7.2	13001195	Manual	939711	3811.0	BPC +All MS	417.2332	0.2
3	8.4	232832	Manual	53609	187.6	BPC +All MS	399.2232	0.1



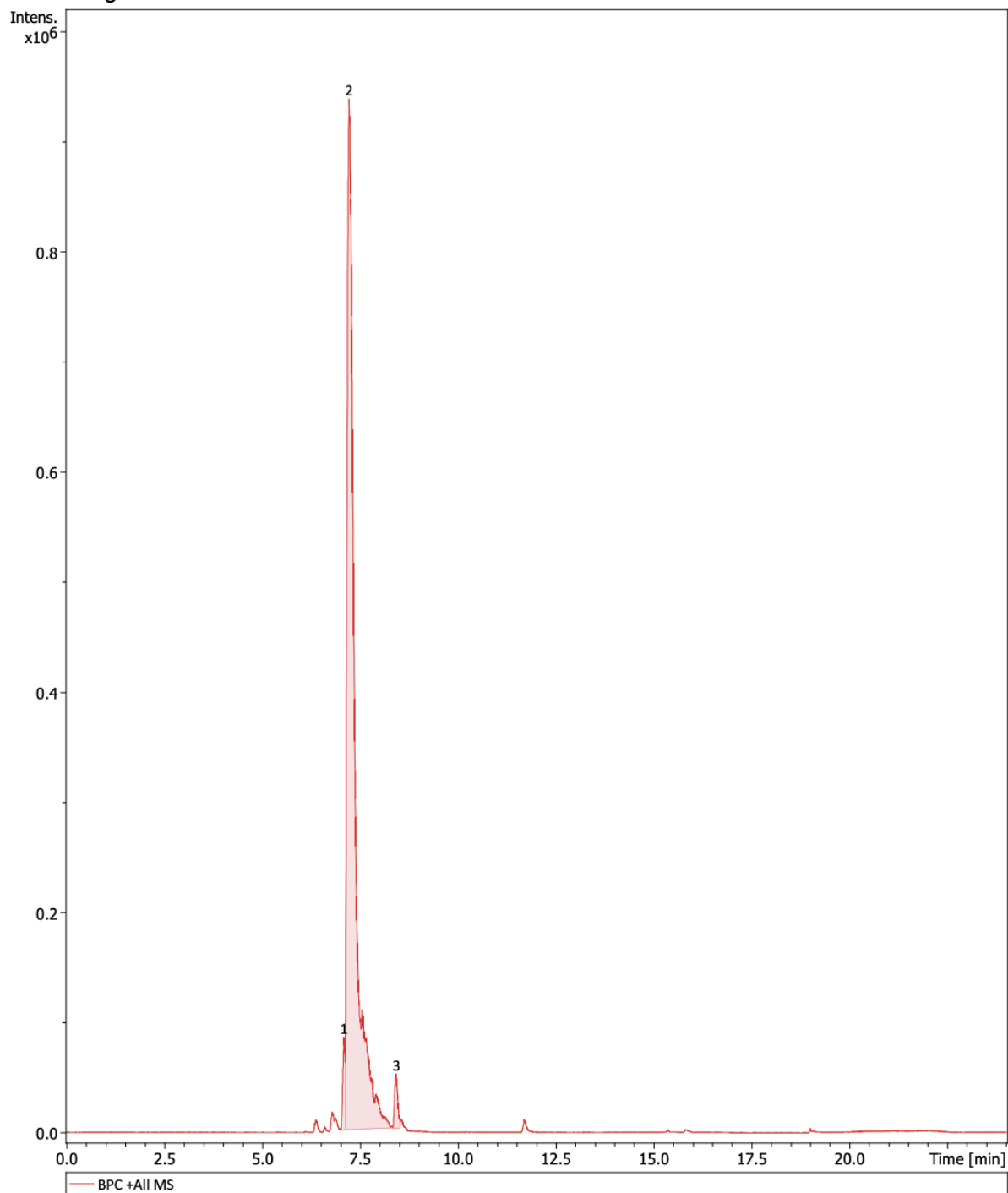
Cmpd 2, 7.2 min



#	m/z	Res.	S/N	I	I %	FWHM
1	387.2237	30030	470.4	4515	0.7	0.0129
2	417.2332	43999	70330.8	675131	100.0	0.0095
3	417.3864	32062	1535.9	14744	2.2	0.0130
4	417.4905	11169	1171.5	11246	1.7	0.0374
5	417.5430	31573	113.5	1089	0.2	0.0132
6	417.5922	21090	105.7	1015	0.2	0.0198
7	418.2365	42397	17482.2	167818	24.9	0.0099
8	418.3921	66989	111.1	1066	0.2	0.0062
9	419.2396	32318	2747.9	26379	3.9	0.0130
10	420.2425	28219	148.4	1425	0.2	0.0149

Window Display Report

Chromatogram



Notes:

HEAVY METALS	Action Level	Result
Lead (Pb)	15 ppb	Not Detected
Mercury (Hg)	2 ppb	Not Detected
Cadmium (Cd)	5 ppb	Not Detected
Arsenic (As)	10 ppb	Not Detected
Chromium (Cr)	100 ppb	Not Detected
Nickel (Ni)	100 ppb	Not Detected
Cobalt (Co)	100 ppb	Not Detected
Copper (Cu)	1300 ppb	Not Detected
Zinc (Zn)	5000 ppb	Not Detected
Iron (Fe)	300 ppb	Not Detected
Thallium (Tl)	2 ppb	Not Detected
Aluminum (Al)	200 ppb	Not Detected

* Based on South Carolina Action Limits

Residual Solvents	Action Level	Quantitative Result
Benzene	2 ppm	Not Detected
Carbon Tetrachloride	4 ppm	Not Detected
Chloroform	80 ppm	Not Detected
Methanol	3000 ppm	62 ppm
Acetonitrile	410 ppm	Not Detected
Tetrahydrofuran	720 ppm	Not Detected
N-Hexane	290 ppm	Not Detected
Ethyl Acetate	5000 ppm	Not Detected
Ethanol	5000 ppm	Not Detected
Acetone	5000 ppm	Not Detected
Isopropyl Alcohol	5000 ppm	Not Detected
Dichloromethane	600 ppm	Not Detected
Toluene	500 ppm	Not Detected
Methylcyclohexane	500 ppm	Not Detected

Residual Solvents analysis is performed using Gas Chromatography / Mass Spectrometry.

*Based on SC Action Limits.