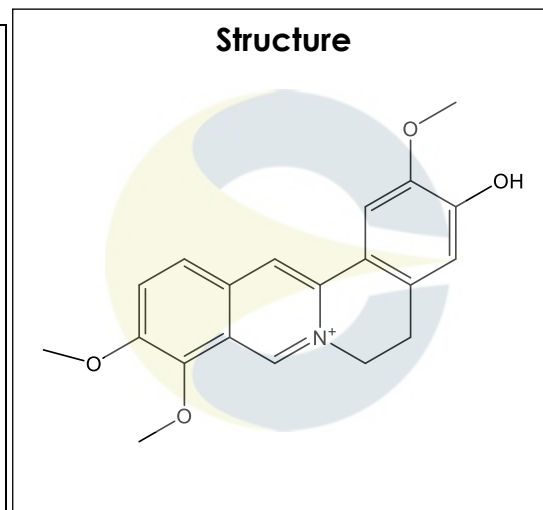


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PRODUCT NAME	Jatrorrhizine
PART NUMBER	00010150
STANDARD TYPE	Primary (P)
LOT NUMBER	00010150-0451
REPORT NUMBER	CDXA-RSS-5405-02
SAMPLE NUMBER	CDXA-13-0451
DATE OF SAMPLE	01/22/2013
DATE OF RE-EVALUATION	04/19/2017 (1 st); 04/26/2021 (2 nd)
DATE OF REPORT	05/10/2021



CHEMICAL NAMES	7,8,13,13a-Tetradecahydro-3-hydroxy-2,9,10-trimethoxyberbinium; Neprotine; Jatrorrhizine
CHEMICAL FORMULA	C ₂₀ H ₂₀ NO ₄
MOLECULAR WEIGHT (MW)	338.38
CHEMICAL FAMILY	Alkaloids
CAS NUMBER	[3621-38-3]
EC#(EINECS)	222-817-3
RTECS	HQ1798850

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	90.0%
HPLC	0.700.10.2.METH22	≥ 90%	98.6%
NMR	4.5.3-CD-4.0-000338	Conforms to structure	Conforms to structure
Mass Spectrum	99.1-CDXA-2.0-000126	Conforms	Conforms
Residual Solvent	99.1-CD-9.0-000115	NA	ND
Water	0.700.12.37	NA	8.7%
Appearance	NA	NA	Orange powder

ADJUSTED PURITY: 90.0% IS BASED ON (100 - 0.0 SOLVENTS - 8.7 WATER) X 98.6% HPLC

STORAGE CONDITIONS

STORAGE	Room Temperature in a dry place.
EXPIRATION DATE	04/2026 under the above conditions.

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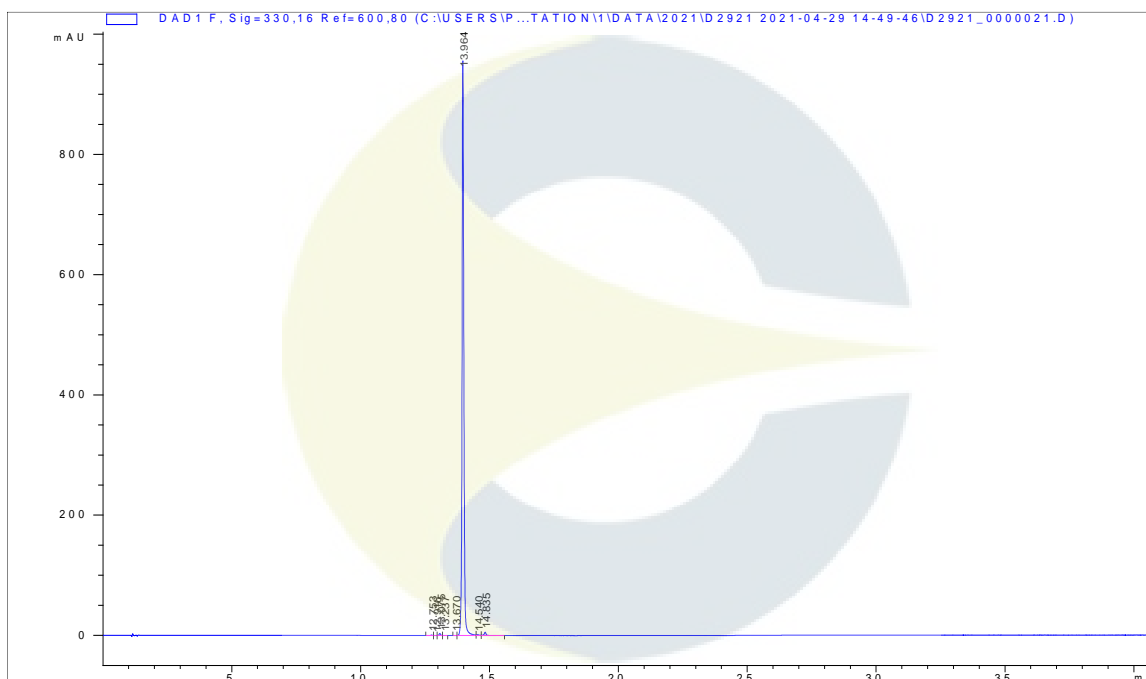
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ANALYTICAL CONDITIONS

INSTRUMENT	AGILENT 1260 HPLC UV-VIS (DAD); AGILENT 6510 QTOF
COLUMN	Phenomenex Luna C18(2) 150 x 2.00 mm, 5 µm particle size
MOBILE PHASE	A - 0.1% Trifluoroacetic acid in Ultrapure water, B - Acetonitrile; Isocratic 5% B for 5 minutes, then increasing to 95% B over 20 minutes. Hold at 95% B for 15 minutes.
COLUMN TEMP.	60 °C
FLOW RATE	0.4 mL/minute
INJECTION VOL.	0.4 µL
INJECTION CONC.	1.3 mg/mL in Methanol
DETECTION	330 ± 8 nm

HPLC CHROMATOGRAM OF JATRORRHIZINE (CDXA-13-0451)

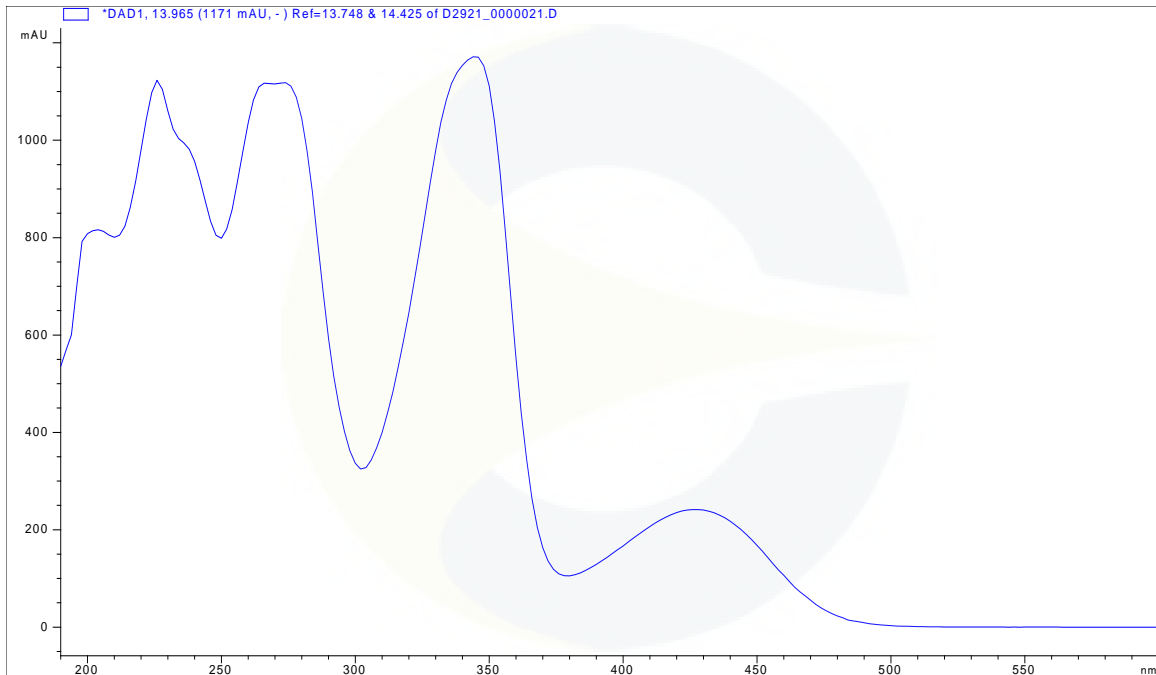


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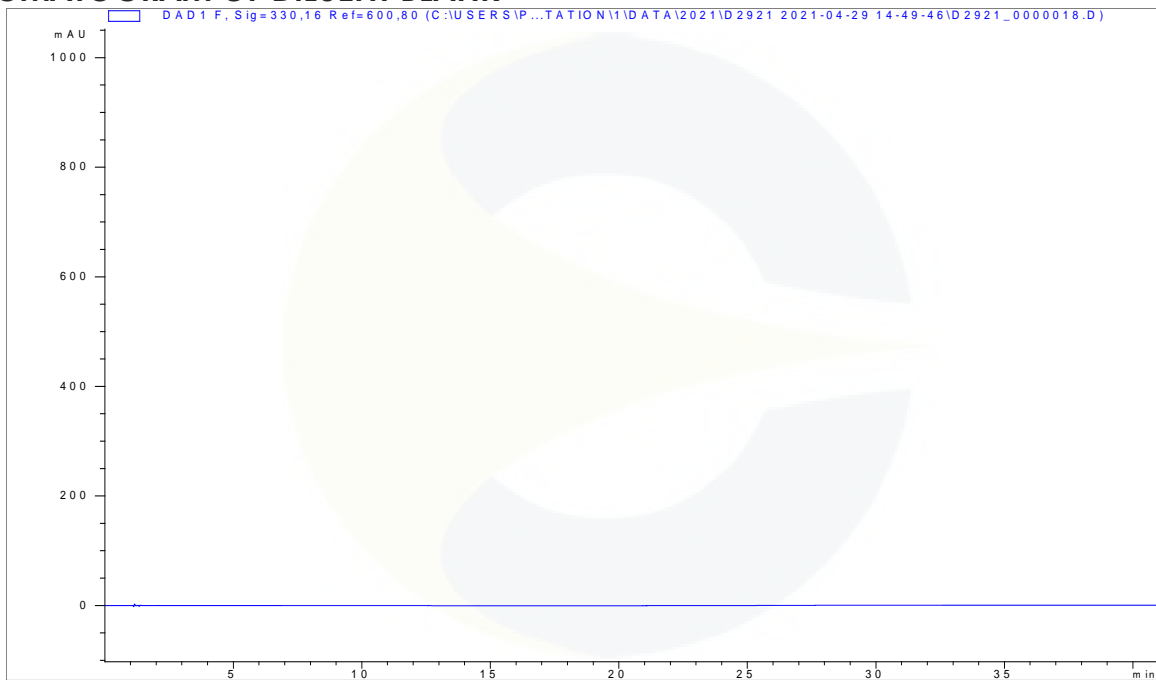
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UV SPECTRUM AT RT 14.0 MINUTES



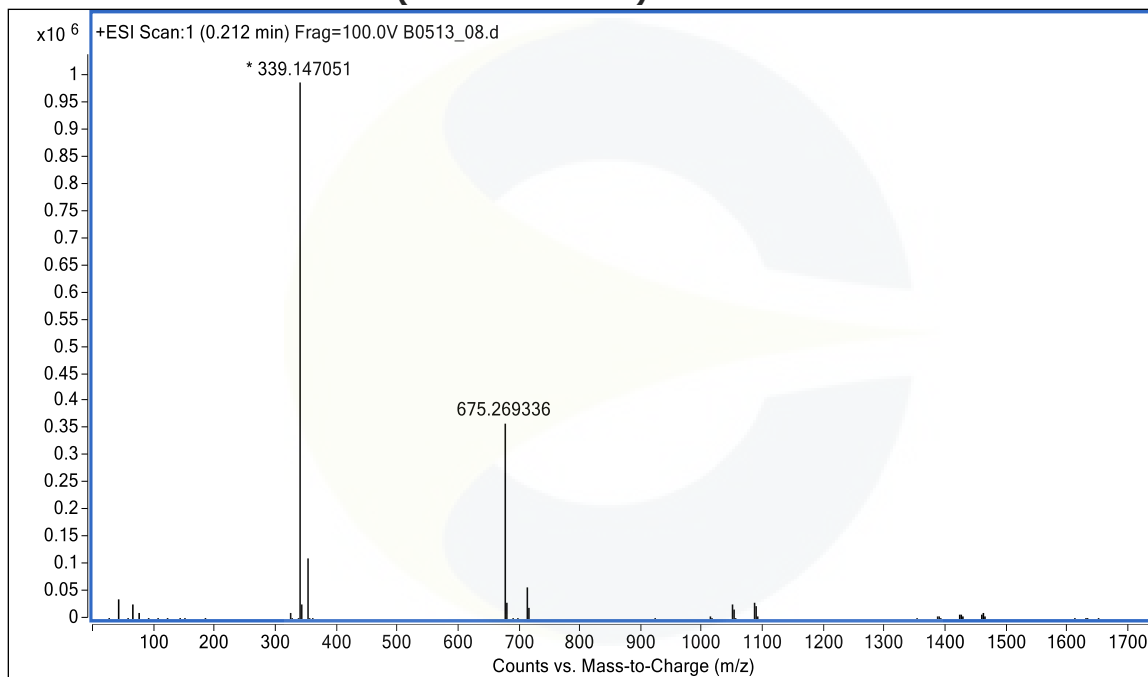
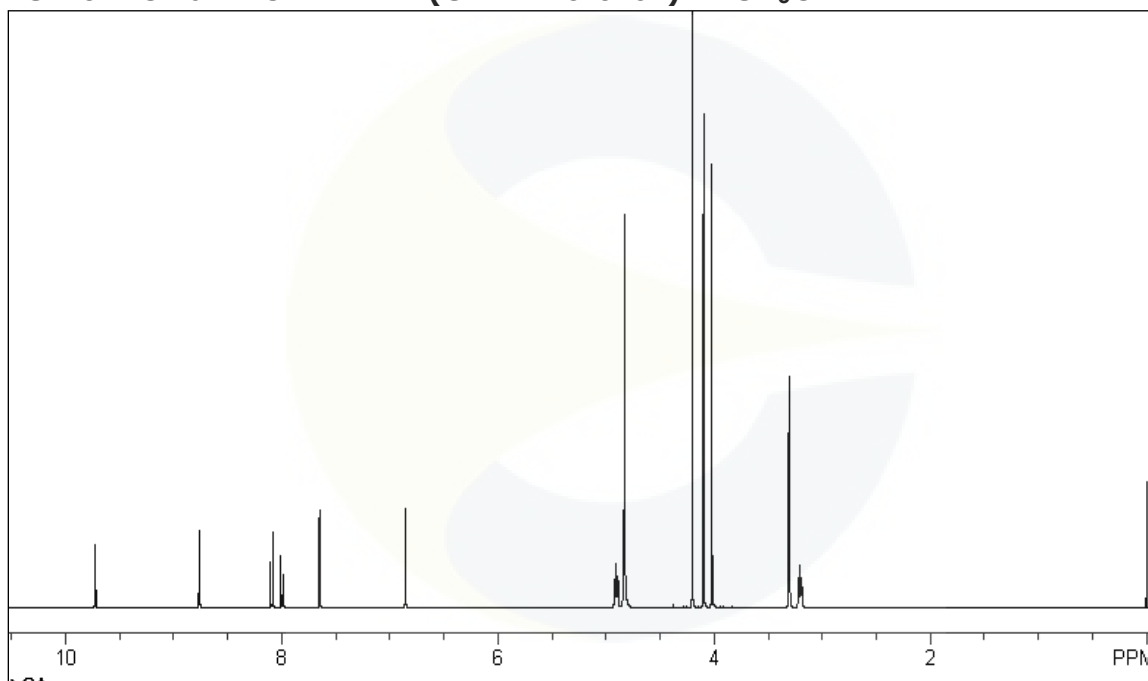
HPLC CHROMATOGRAM OF DILUENT BLANK



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Email: customerservice@lifetechindia.com Website: www.lifetechindia.com

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MASS SPECTRUM OF JATRORRHIZINE (CDXA-13-0451)

¹H-NMR SPECTRUM OF JATRORRHIZINE (CDXA-13-0451) IN CD₃OD


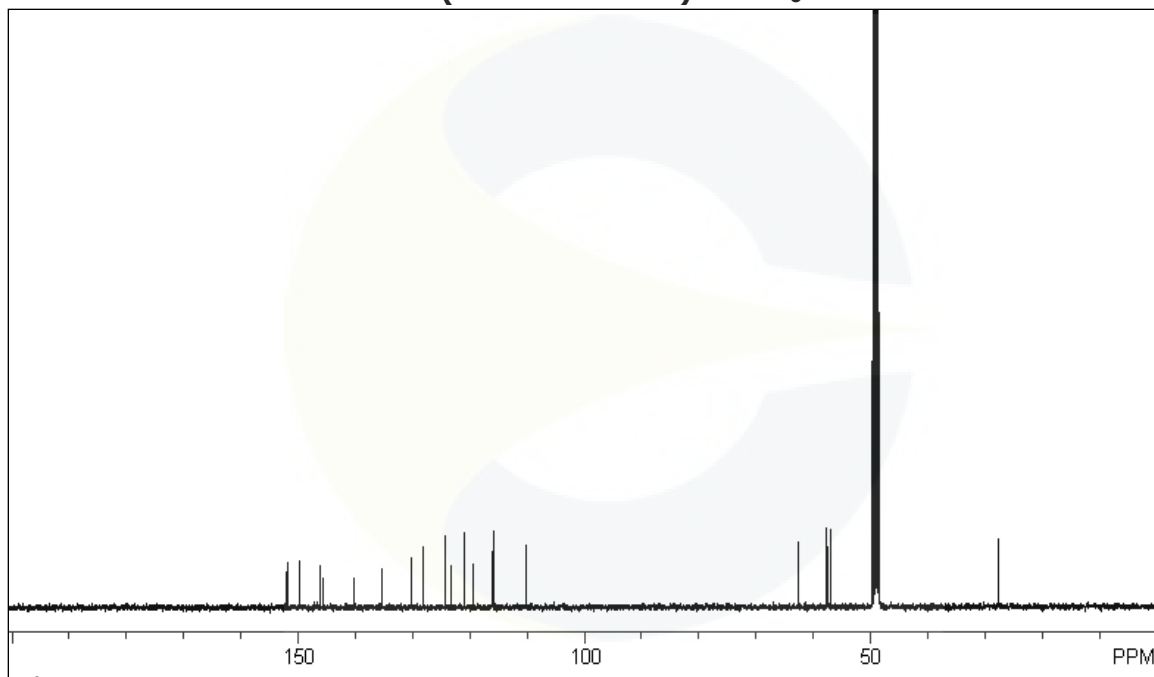
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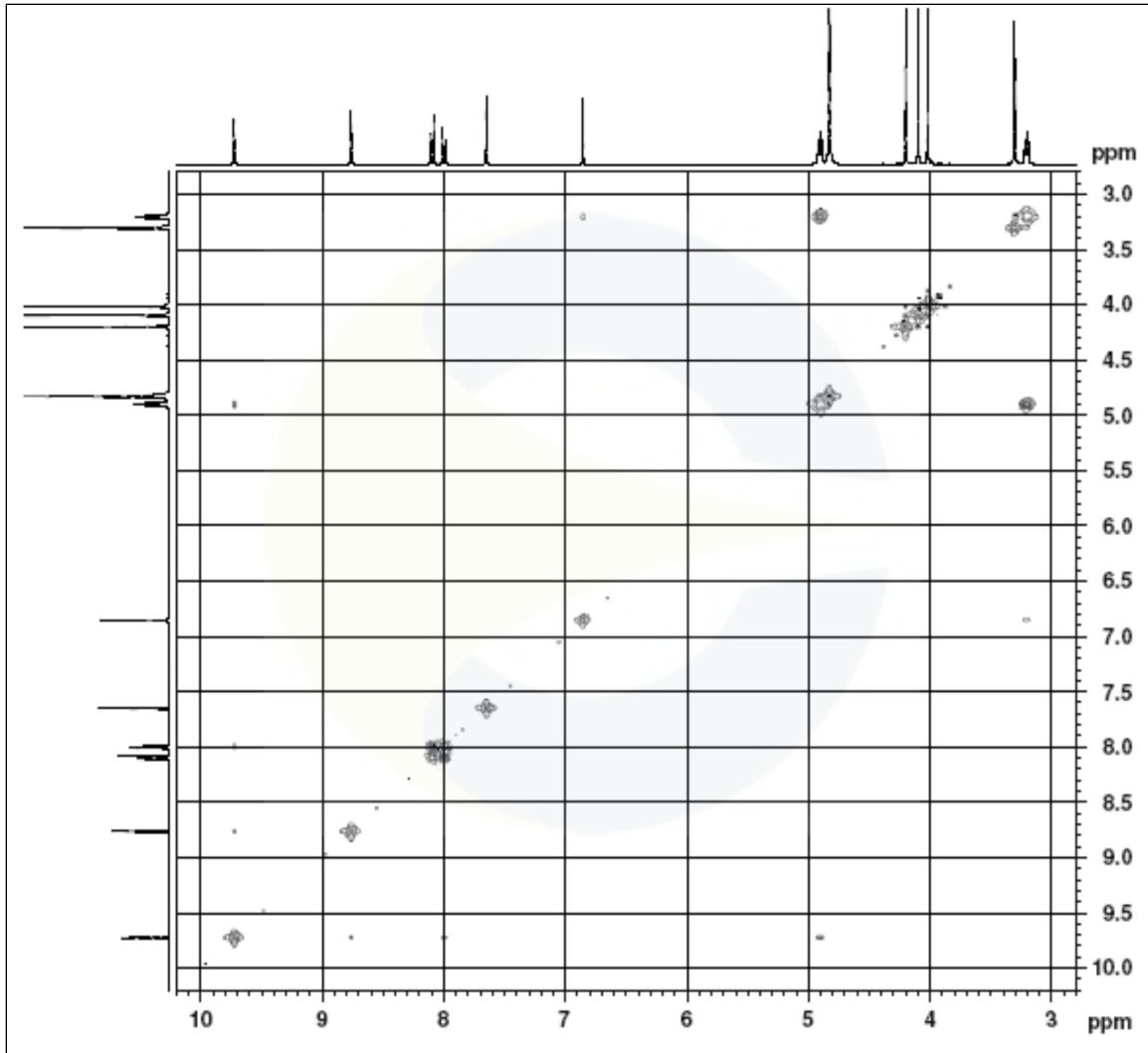
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¹³C-NMR SPECTRUM OF JATRORRHIZINE (CDXA-13-0451) IN CD₃OD

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COSY-NMR SPECTRUM OF JATRORRHIZINE (CDXA-13-0451) IN CD₃OD

REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	02/08/2013	New report
01	05/10/2017	Passed re-evaluation by HPLC, KF. Updated expiration date, analytical conditions, analytical chromatograms, and results.
02	05/10/2021	Passed second re-evaluation by HPLC and KF. Added RTECS and removed melting point. Updated expiration date, analytical data, results, and chromatograms.

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