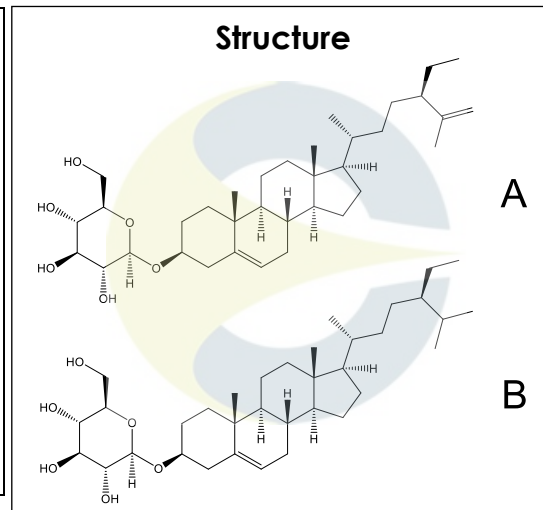


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PRODUCT NAME	Charantin
PART NUMBER	00003386
STANDARD TYPE	Primary (P)
LOT NUMBER	00003386-928
REPORT NUMBER	CDXA-RSS-8310-01
SAMPLE NUMBER	CDXP-18-01030
DATE OF SAMPLE	10/03/2018
DATE OF RE-EVALUATION	03/03/2021
DATE OF REPORT	03/23/2021



CHEMICAL NAMES	Mixture: A – Stigmasta-5,25-dien-3β-yl, β-D-glucopyranoside; B – β-Sitosteryl glucoside
CHEMICAL FORMULA	A – C ₃₅ H ₅₈ O ₆ ; B – C ₃₅ H ₆₀ O ₆
MOLECULAR WEIGHT (MW)	A – 574.83; B – 576.85
CHEMICAL FAMILY	Steroids
CAS NUMBER	[57126-62-2]; A – [4281-99-6]; B – [474-58-8]
EC#(EINECS)	A – NA; B - NA
RTECS	A – NA; B – WJ2508000

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	90.7%
HPLC	See below	≥ 90%	91.2% (A – 79.7%; B – 11.5%)
NMR	99.1-04-2.0-000122	Conforms to structure	Conforms to structure
Mass Spectrum	See below	Conforms	Conforms
Residual Solvent	99.1-CDXA-3.0-000621	NA	Acetone < 0.1%
Water	0.700.12.37	NA	0.6%
Appearance	NA	NA	White powder

ADJUSTED PURITY: 90.7% IS BASED ON (100 - 0.0 SOLVENTS - 0.6 WATER) X 91.2% HPLC

STORAGE CONDITIONS

STORAGE	+4 °C in a dry place.
EXPIRATION DATE	03/2026 under the above conditions.



Digitally signed by
Elizabeth Hughes
 Date: 2021.03.23
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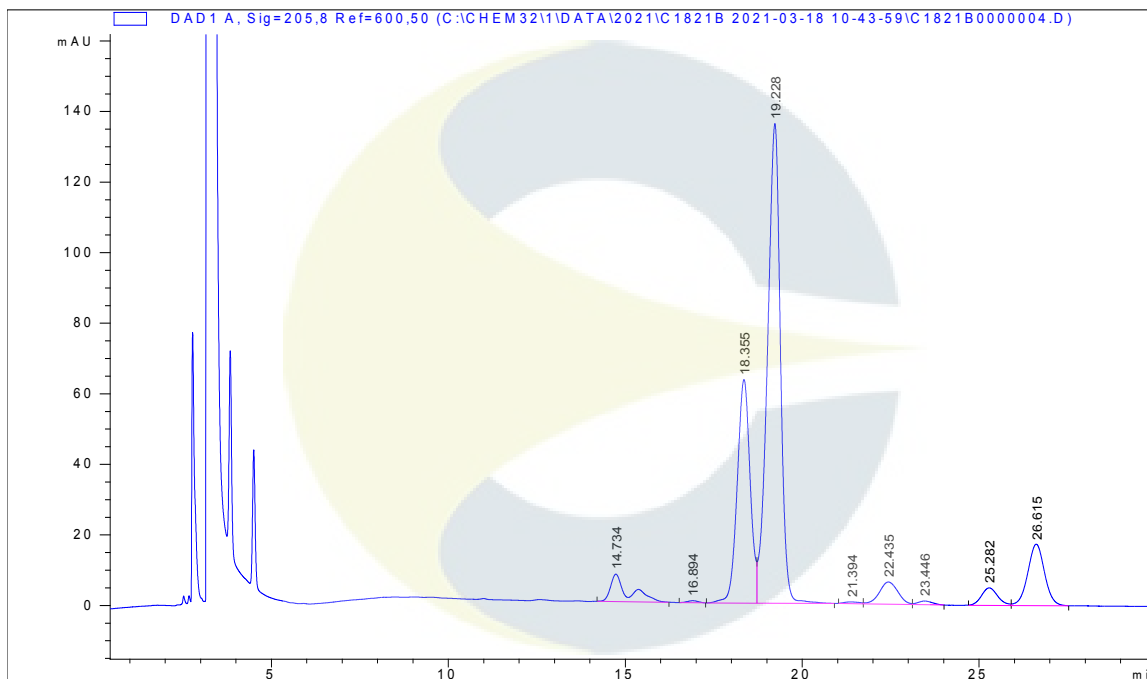
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ANALYTICAL CONDITIONS

INSTRUMENT	AGILENT 1260 HPLC UV-VIS (DAD); AB-SCIEX 6600 TRIPLE TOF
COLUMN	Phenomenex Luna C18 250 x 4.6 mm, 5 µm particle size
MOBILE PHASE	A – 0.05% Phosphoric acid in Ultrapure water, B - Acetonitrile; 93% B increasing to 97% B over 15 minutes. Hold at 97% B for 15 minutes. Decreasing to 93% B over 0.1 minutes. 3 minutes post-time.
COLUMN TEMP.	30 °C
FLOW RATE	1.0 mL/minute
INJECTION VOL.	10.0 µL
INJECTION CONC.	1.1 mg/mL in Methanol:Chloroform [1:1]
DETECTION	205 ± 4 nm

HPLC CHROMATOGRAM OF CHARANTIN (CDXP-18-01030)

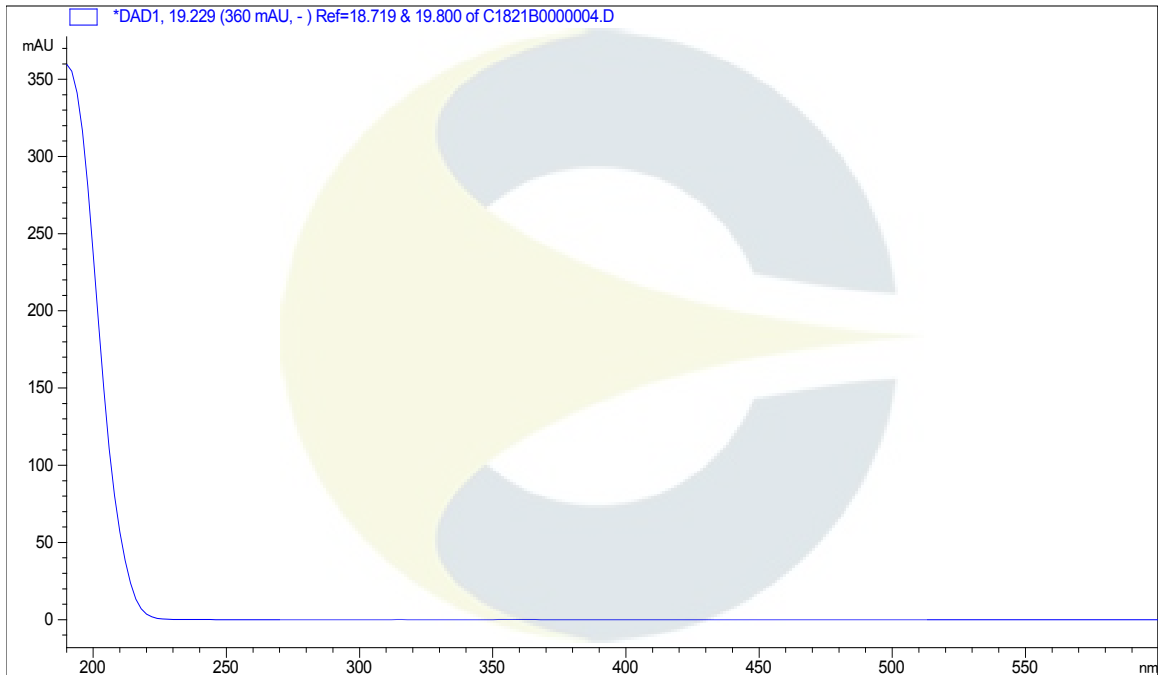


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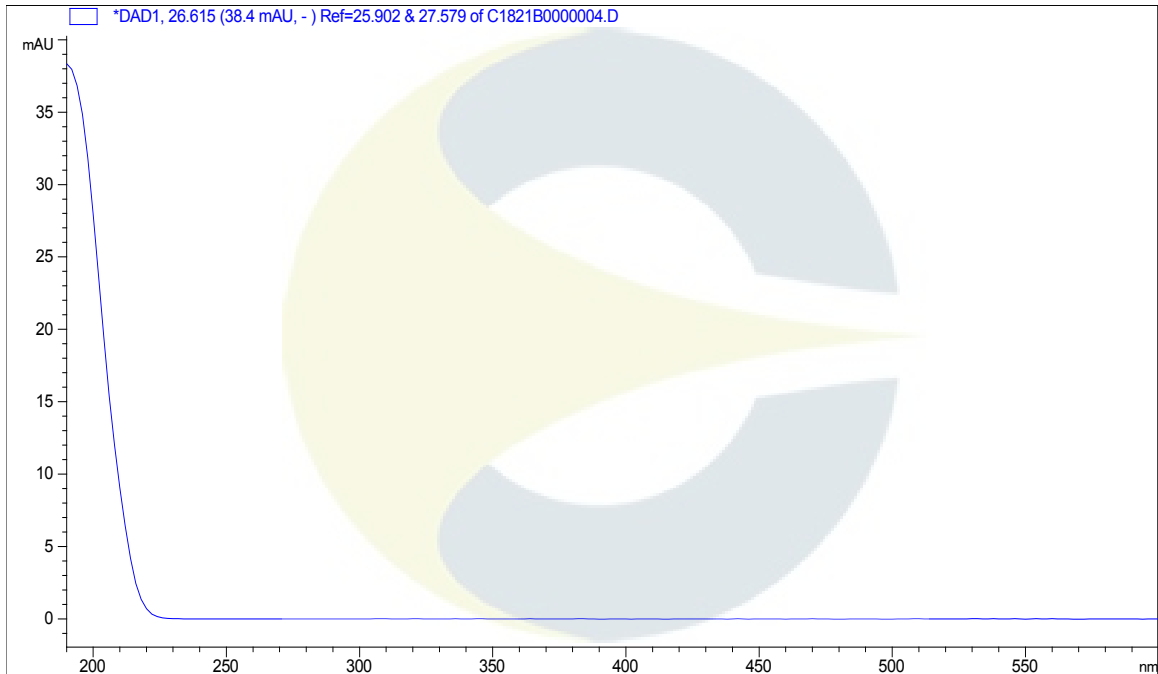
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UV SPECTRUM OF CHARANTIN A AT RT = 19.2 MINUTES



UV SPECTRUM OF CHARANTIN B AT RT = 26.6 MINUTES

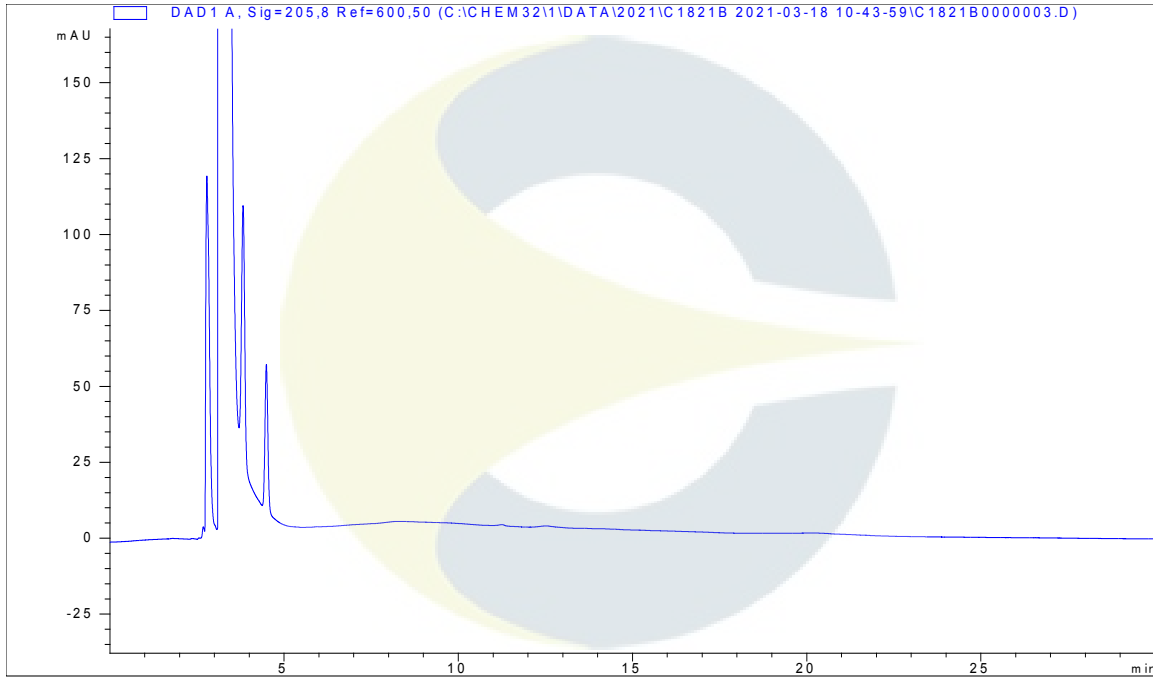


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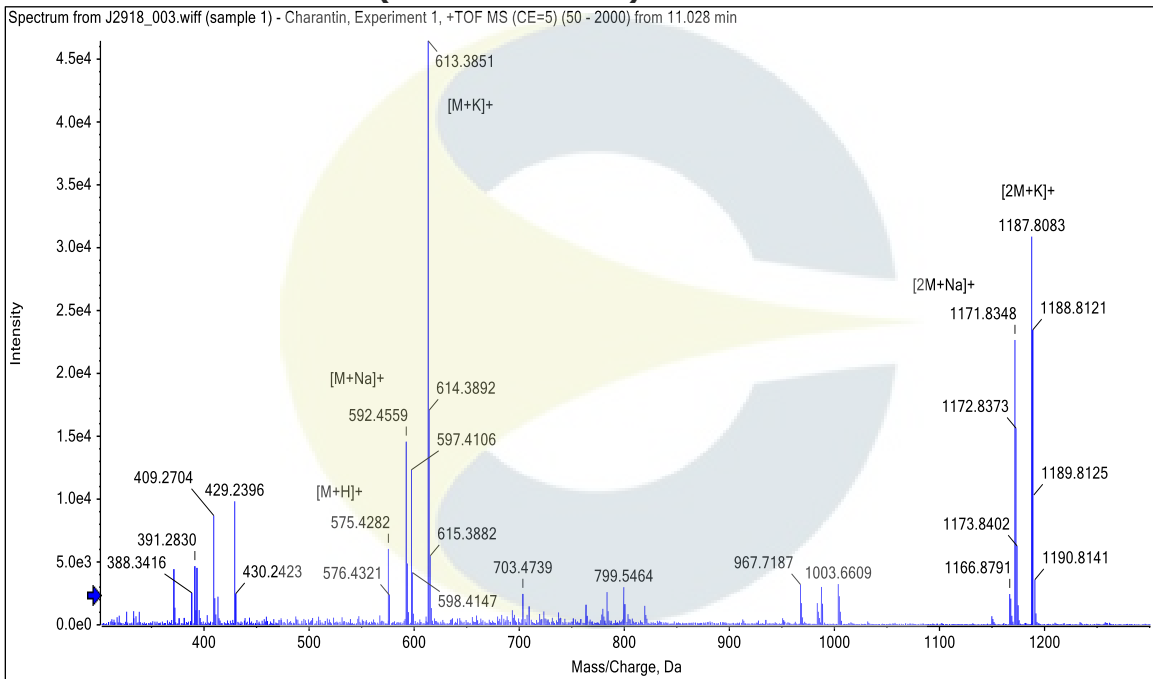
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HPLC CHROMATOGRAM OF DILUENT BLANK

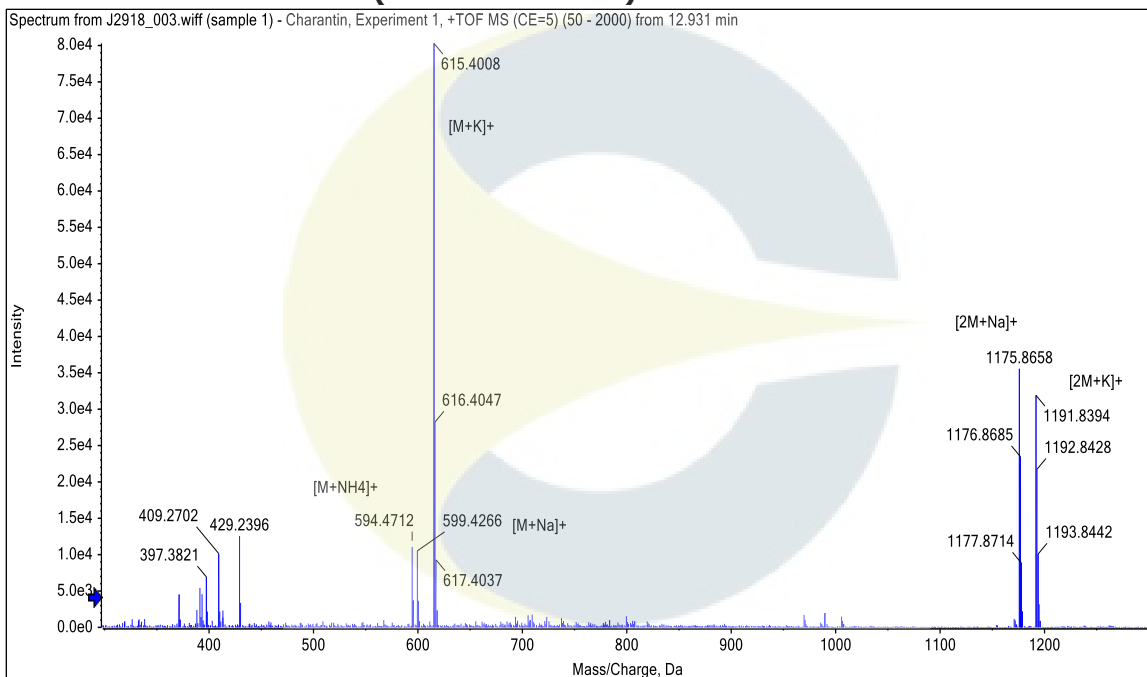


MASS SPECTRUM OF CHARANTIN A (CDXP-18-01030)

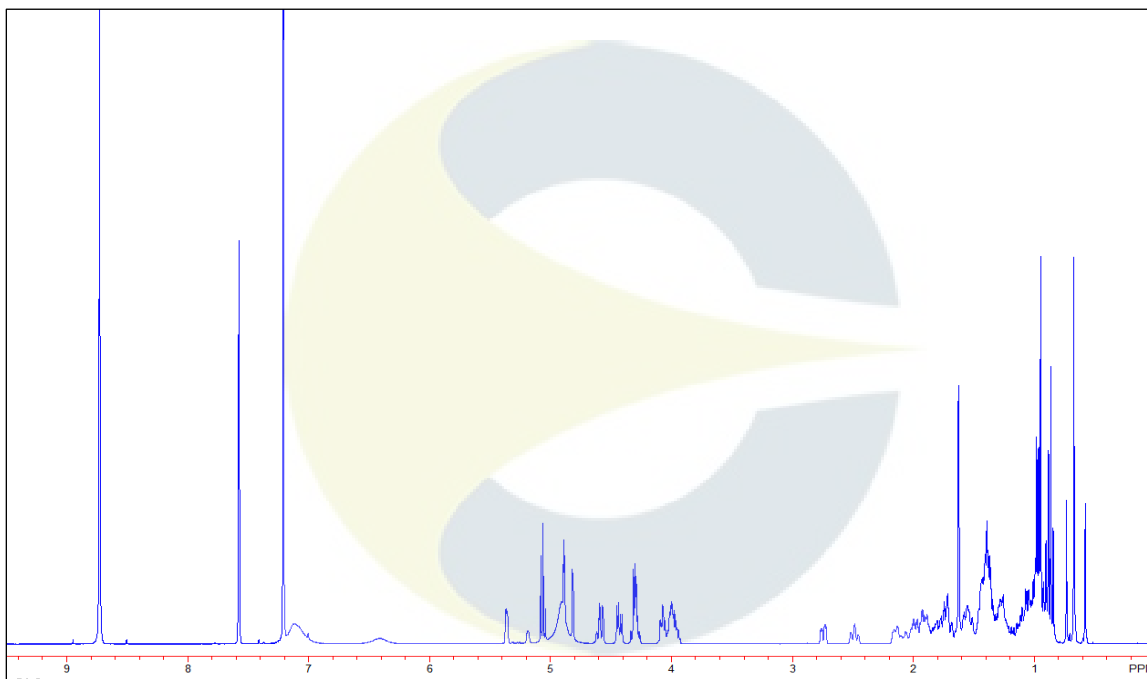


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MASS SPECTRUM OF CHARANTIN B (CDXP-18-01030)



¹H-NMR SPECTRUM OF CHARANTIN (CDXP-18-01030) IN PYRIDINE-d₅

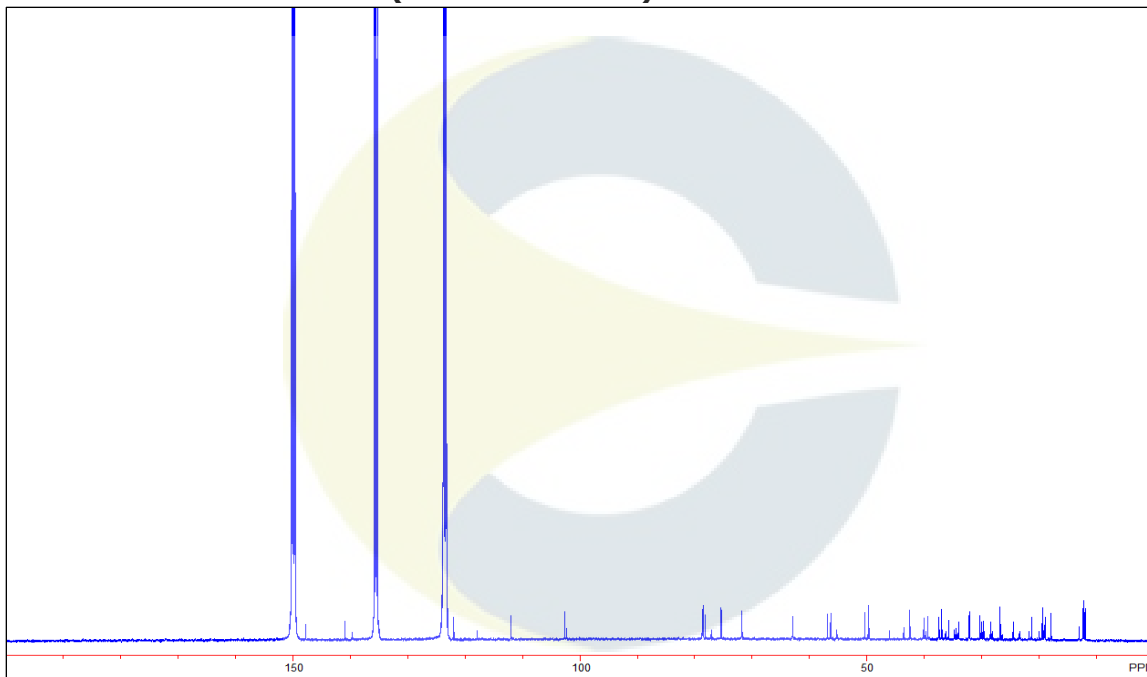


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¹³C-NMR SPECTRUM OF CHARANTIN (CDXP-18-01030) IN PYRIDINE-d₅

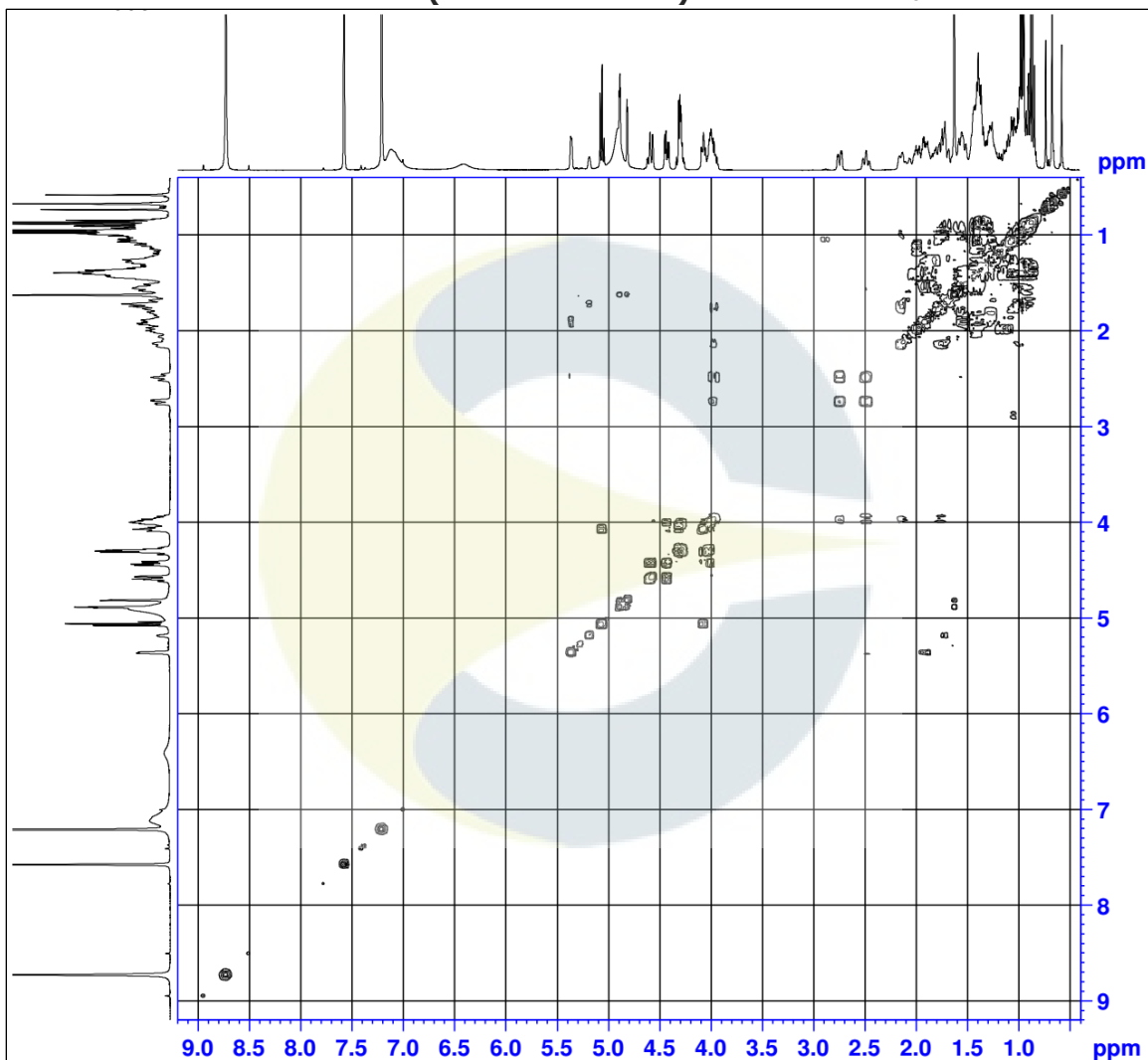


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COSY-NMR SPECTRUM OF CHARANTIN (CDXP-18-01030) IN PYRIDINE-*d*₅

REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	11/13/2018	New report
01	03/23/2021	Passed re-evaluation by HPLC and KF. Updated analytical conditions, chromatograms, and expiration date.

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