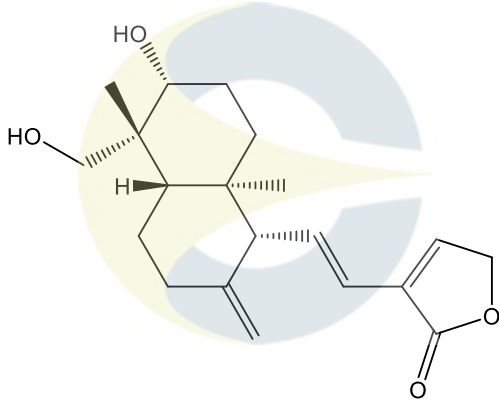


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PRODUCT NAME	14-Deoxy-11,12-didehydroandrographolide	<div style="text-align: center;"> Structure  </div>
PART NUMBER	00004155	
STANDARD TYPE	Primary (P)	
LOT NUMBER	00004155-002	
REPORT NUMBER	CDXA-RSS-7493-01	
SAMPLE NUMBER	CDXA-17-002827	
DATE OF SAMPLE	03/01/2017	
DATE OF RE-EVALUATION	06/01/2021	
DATE OF REPORT	06/25/2021	

CHEMICAL NAMES	3-[[1E]-2-[(1R,4aS,5R,6R,8aR)-decahydro-6-hydroxy-5-(hydroxymethyl)-5,8a-dimethyl-2-methylene-1-naphthaleny]ethenyl]-2(5H)-Furanone
CHEMICAL FORMULA	C ₂₀ H ₂₈ O ₄
MOLECULAR WEIGHT (MW)	332.43
CHEMICAL FAMILY	Diterpenes
CAS NUMBER	[42895-58-9]
EC#(EINECS)	NA
RTECS	NA

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	99.7%
HPLC	0.700.10.2.METH22	≥ 90%	99.7%
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-10.0-000115	NA	EtOAc < 0.1%
Water	0.700.12.37	NA	ND
Appearance	NA	NA	White powder

*Testing performed at an ISO 17025 accredited subcontracted laboratory.

ADJUSTED PURITY: 99.7% IS BASED ON (100 - 0.0 SOLVENTS - 0.0 WATER) X 99.7% HPLC

STORAGE CONDITIONS

STORAGE	Room Temperature in a dry place.
EXPIRATION DATE	06/2026 under the above conditions.

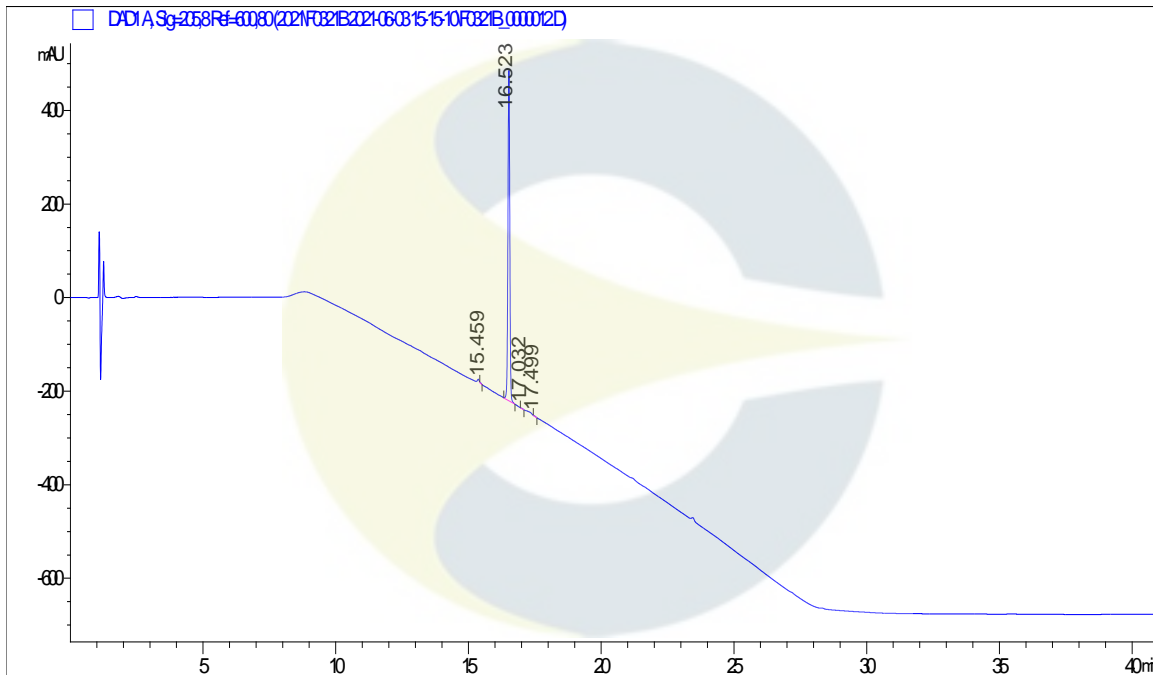
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ANALYTICAL CONDITIONS

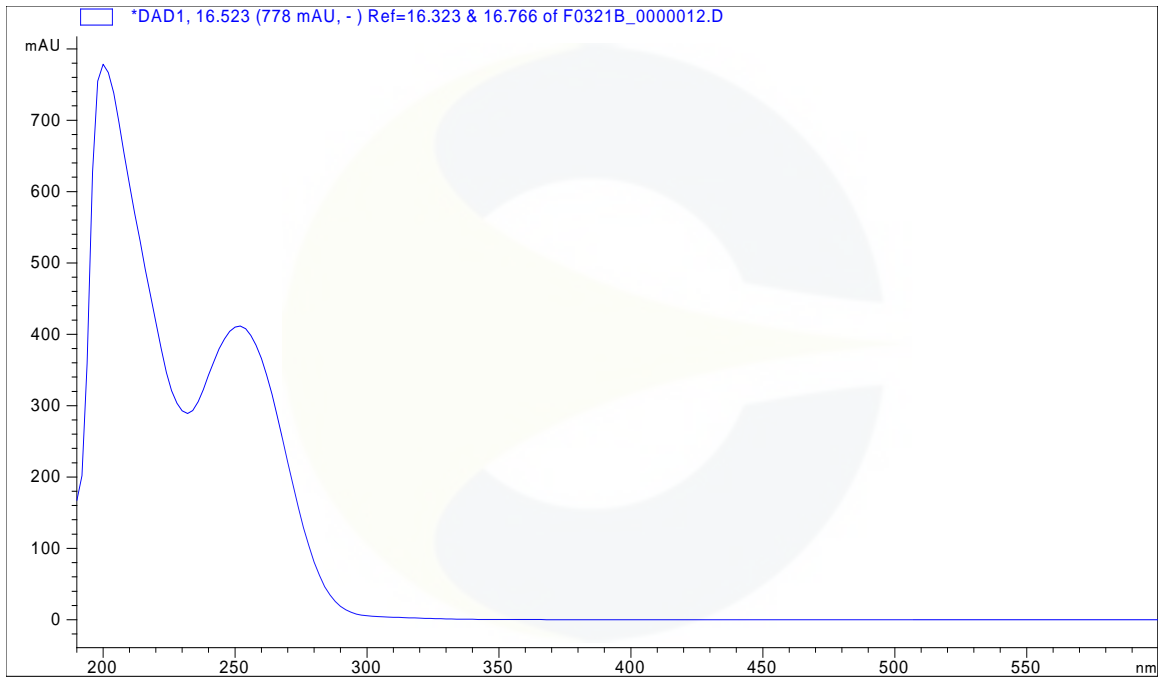
INSTRUMENT	AGILENT 1260 HPLC UV-VIS (DAD); AGILENT 6510 QTOF
COLUMN	Phenomenex Luna C18(2) 150 x 2.00 mm, 5 µm particle size
MOBILE PHASE	A - 0.1% Trifluoroacetic acid in Ultrapure water, B - Acetonitrile; Isocratic 5% B for 5 minutes, then increasing to 95% B over 20 minutes. Hold at 95% B for 15 minutes.
COLUMN TEMP.	60 °C
FLOW RATE	0.4 mL/minute
INJECTION VOL.	0.4 µL
INJECTION CONC.	1.1 mg/mL in Methanol
DETECTION	205 ± 4 nm

HPLC CHROMATOGRAM OF 14-DEOXY-11,12-DIDEHYDROANDROGRAPHOLIDE (CDXA-17-002827)


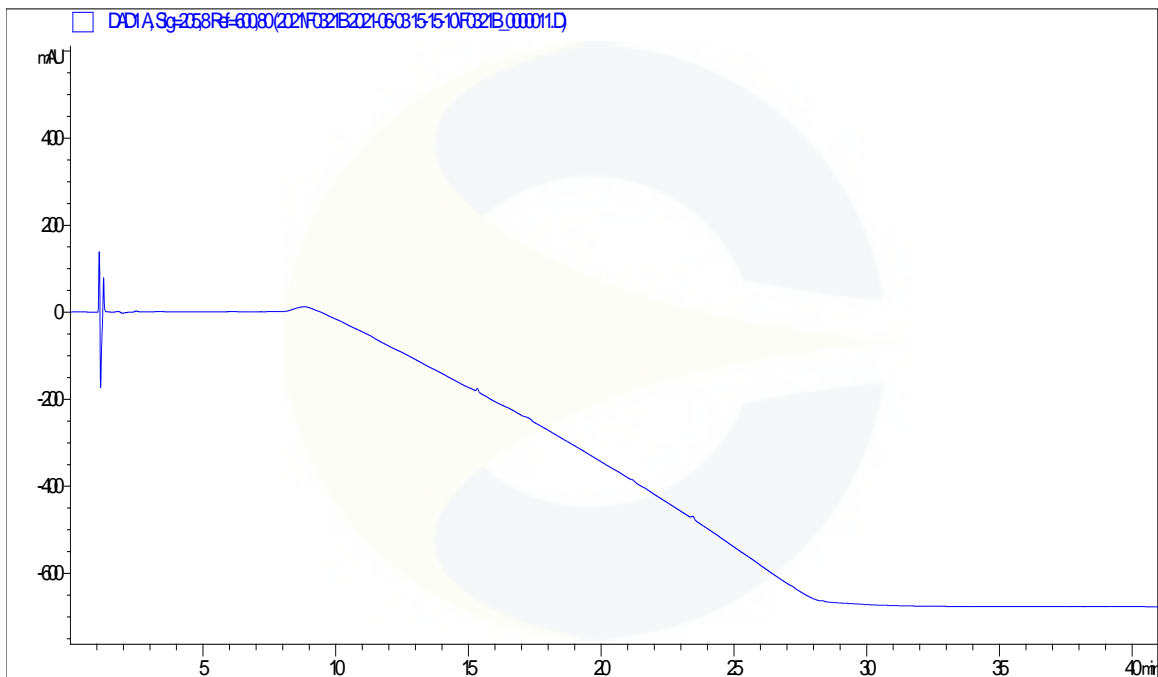
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UV SPECTRUM AT RT = 16.5 MINUTES

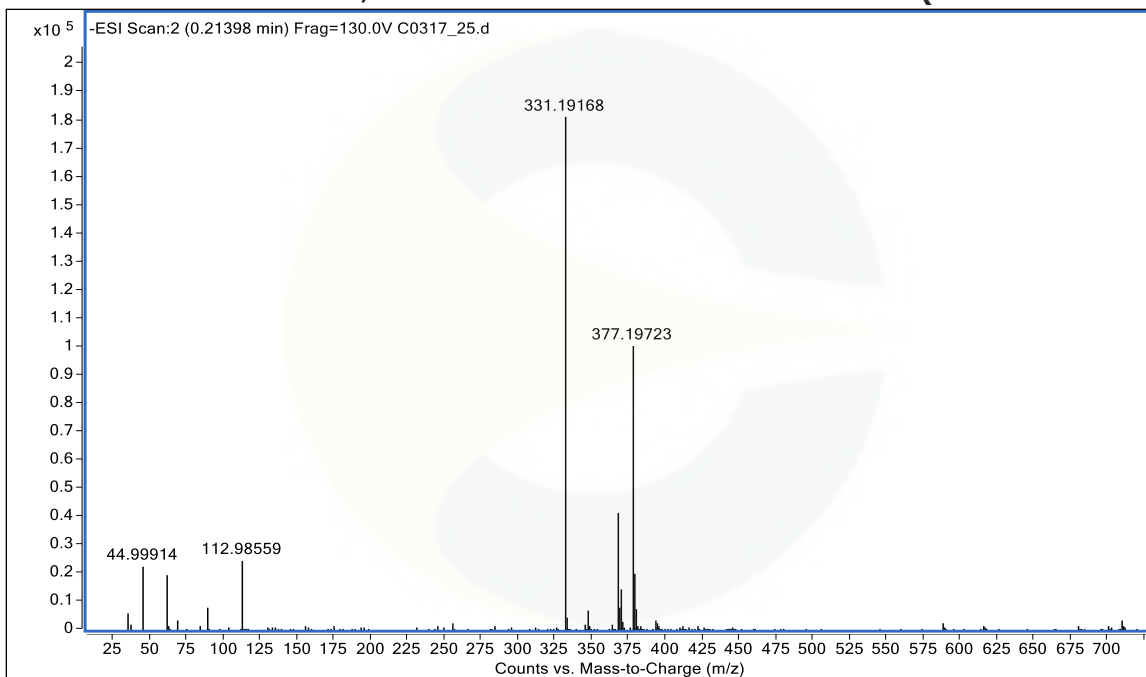


HPLC CHROMATOGRAM OF DILUENT BLANK

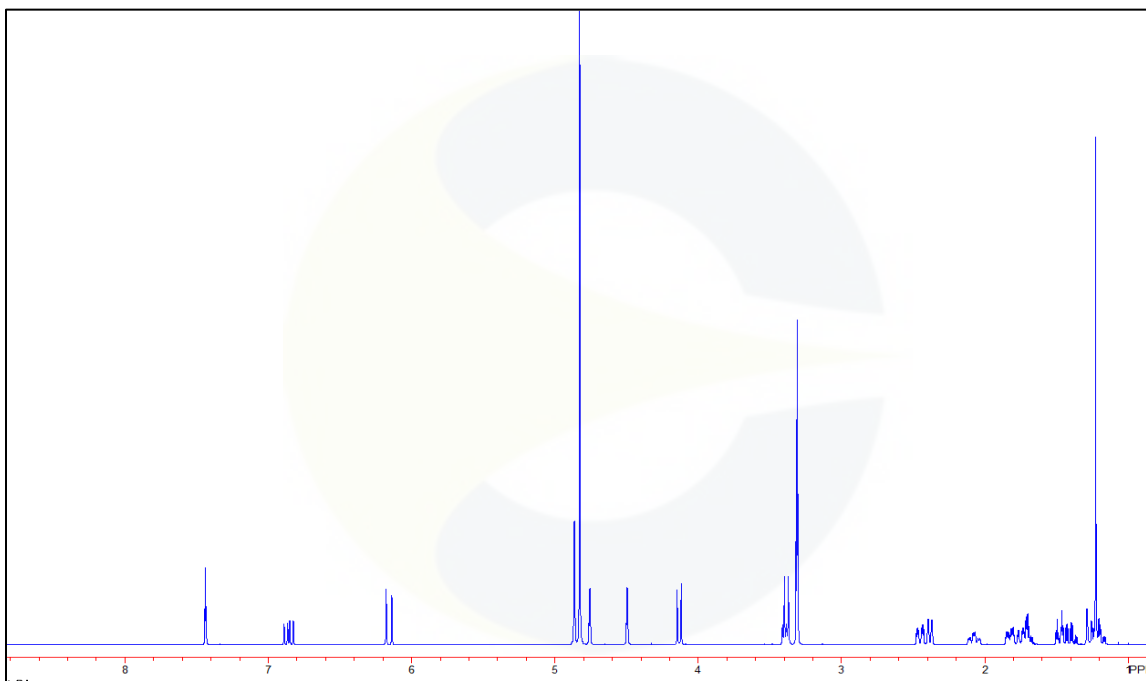


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MASS SPECTRUM OF 14-DEOXY-11,12-DIDEHYDROANDROGRAPHOLIDE (CDXA-17-002827)



¹H-NMR SPECTRUM OF 14-DEOXY-11,12-DIDEHYDROANDROGRAPHOLIDE (CDXA-17-002827) IN CD₃OD

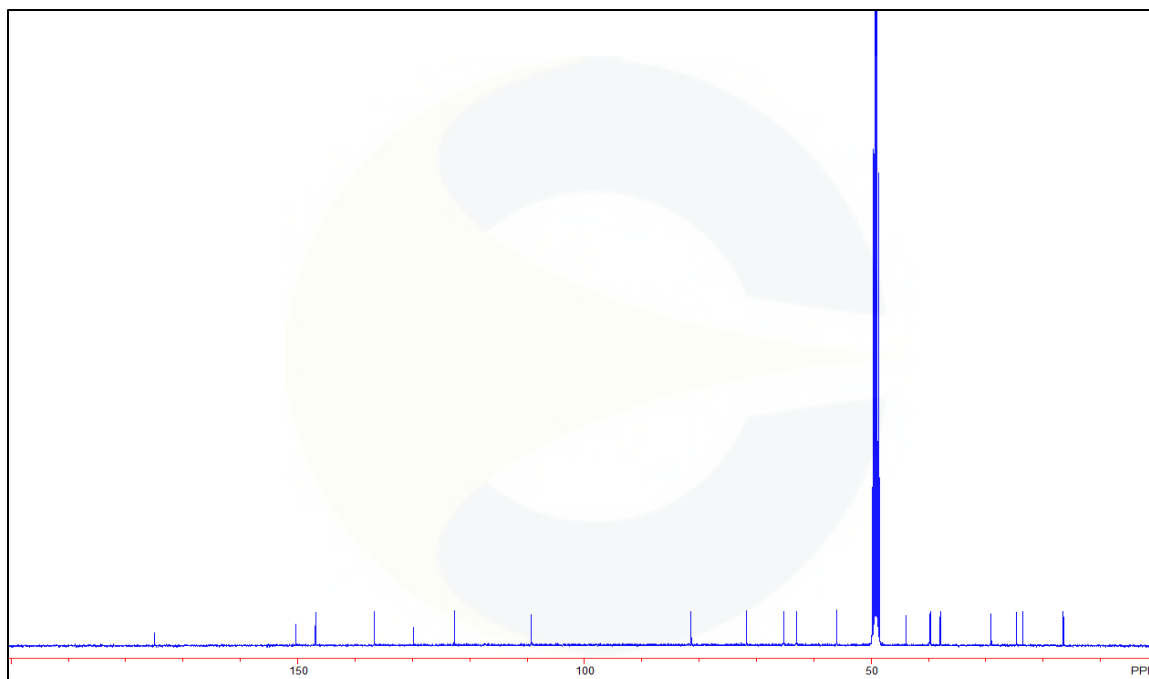


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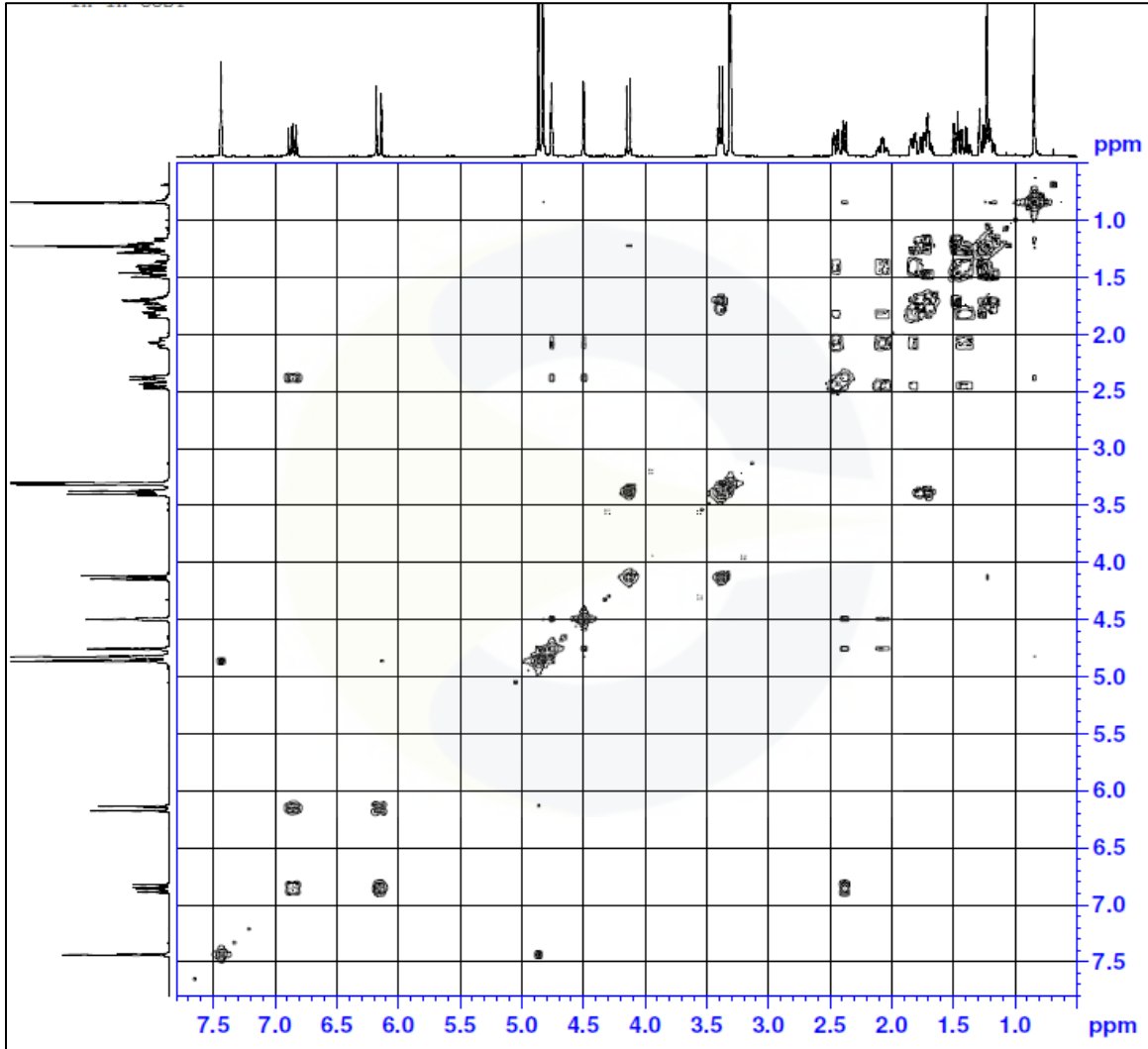
¹³C-NMR SPECTRUM OF 14-DEOXY-11,12-DIDEHYDROANDROGRAPHOLIDE (CDXA-17-002827) IN CD₃OD



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COSY-NMR SPECTRUM OF 14-DEOXY-11,12-DIDEHYDROANDROGRAPHOLIDE (CDXA-17-002827) IN CD₃OD

REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	04/10/2017	New report
01	06/25/2021	Passed re-evaluation by HPLC, KF. Updated expiration date, analytical conditions, chromatograms, and results. Removed melting point.

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