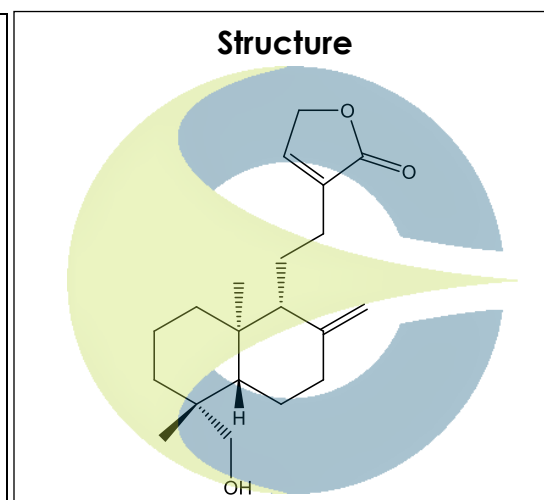


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PRODUCT NAME	Andrograpanin
PART NUMBER	00001754
STANDARD TYPE	Primary (P)
LOT NUMBER	00001754-T13
REPORT NUMBER	CDXA-RSS-5757-02
SAMPLE NUMBER	CDXA-13-5690
DATE OF SAMPLE	08/19/2013
DATE OF RE-EVALUATION	07/25/2018 (1 st); 06/23/2022 (2 nd)
DATE OF REPORT	07/15/2022



CHEMICAL NAMES	3,14-Dideoxyandrographolide
CHEMICAL FORMULA	C ₂₀ H ₃₀ O ₃
MOLECULAR WEIGHT (MW)	318.45
CHEMICAL FAMILY	Diterpenes
CAS NUMBER	[82209-74-3]
EC#(EINECS)	NA
RTECS	NA

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	95.2%
HPLC	0.700.10.2.METH22	≥ 90%	99.9%
NMR	99.1-CD-1.0-000122	Conforms to structure	Conforms to structure
Mass Spectrum	Direct Infusion, ESI(+)	Conforms	Conforms
Residual Solvent*	99.1-CD-6.0-000115	NA	MeOH – 3.4%; DCM – 0.3%; Unknown – 0.3%
Water	0.700.12.37	NA	0.7%
Appearance	NA	NA	White powder

*Testing performed at an ISO 17025 accredited subcontracted laboratory.

ADJUSTED PURITY: 95.2% IS BASED ON (100 - 4.0 SOLVENTS - 0.7 WATER) X 99.9% HPLC

STORAGE CONDITIONS

STORAGE	-20 °C in a dry place.
EXPIRATION DATE	06/2027 under the above conditions.

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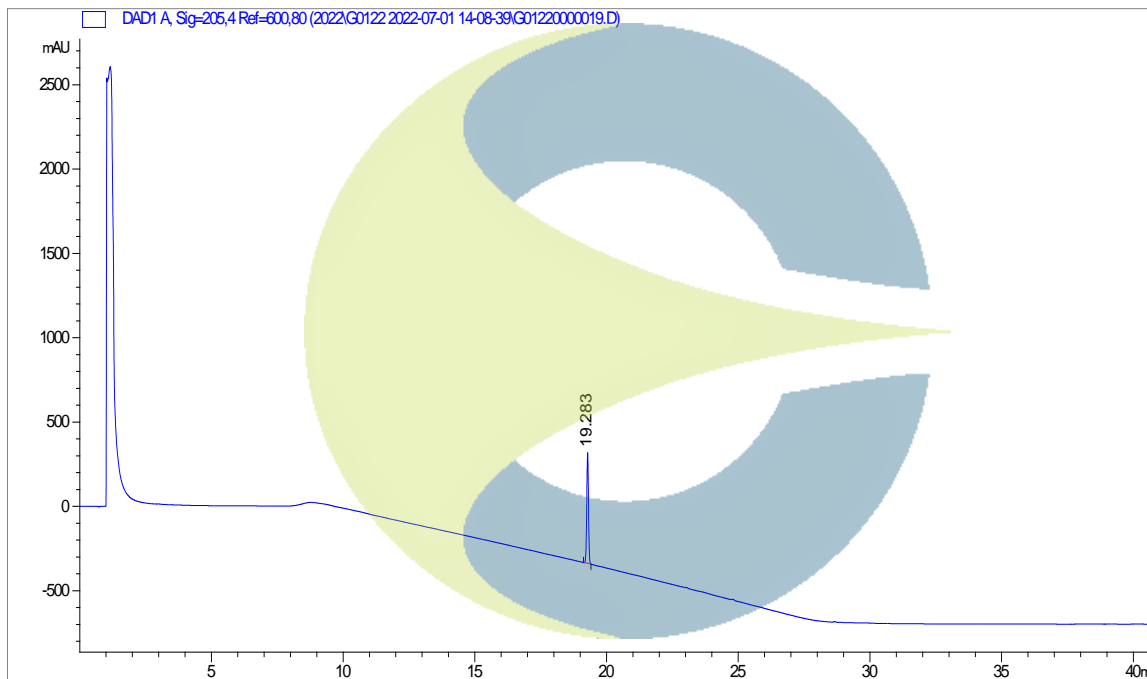
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ANALYTICAL CONDITIONS

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, then decreasing to 5% B over 1 minute.
COLUMN TEMP.	60 °C
FLOW RATE	0.4 mL/minute
INJECTION VOL.	0.5 µL
INJECTION CONC.	1.0 mg/mL in Dimethyl Sulfoxide
DETECTION	205 ± 2 nm

HPLC CHROMATOGRAM OF ANDROGRAPANIN (CDXA-13-5690)

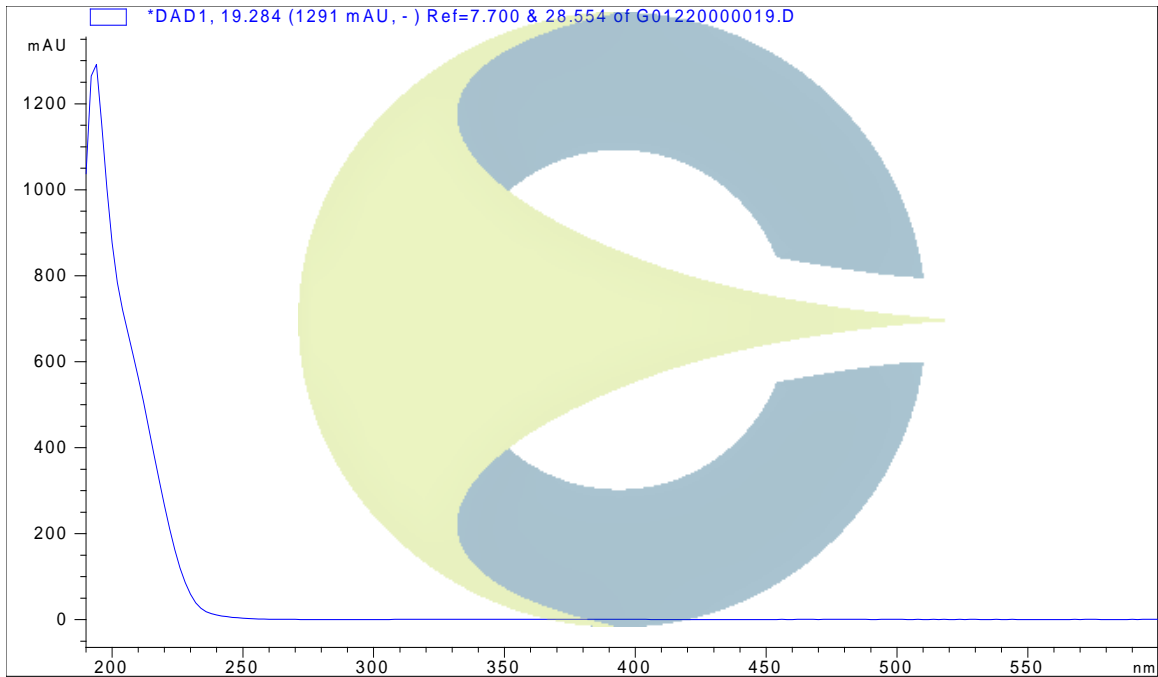


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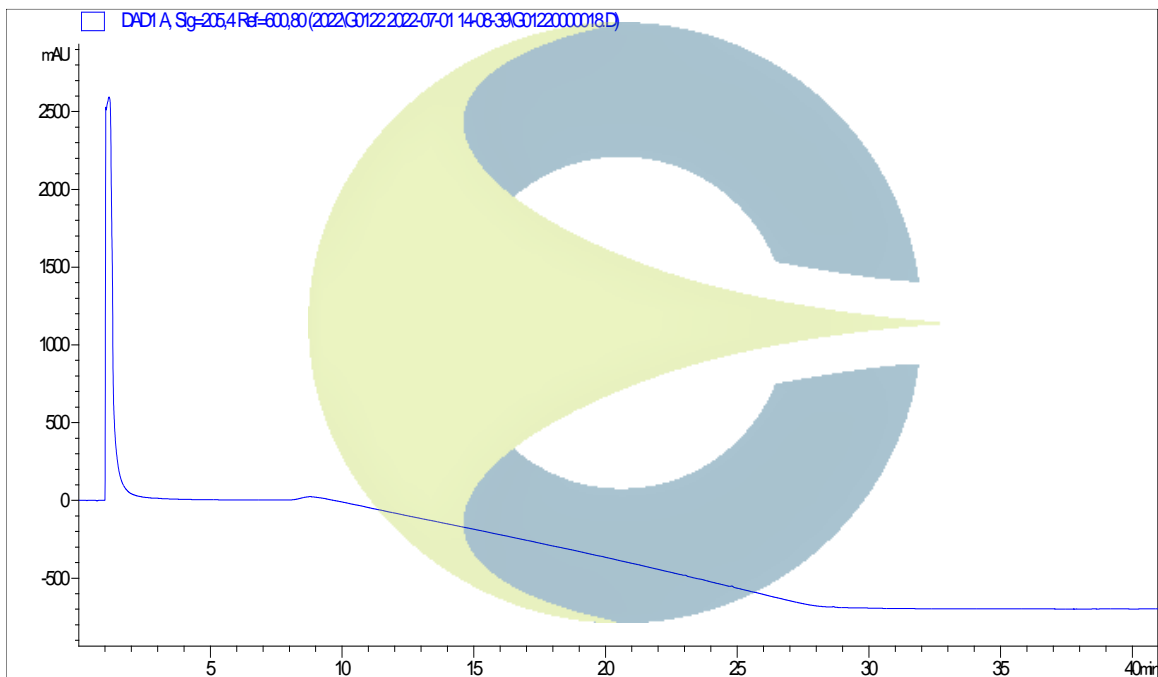
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UV SPECTRUM AT RT = 19.3 MINUTES



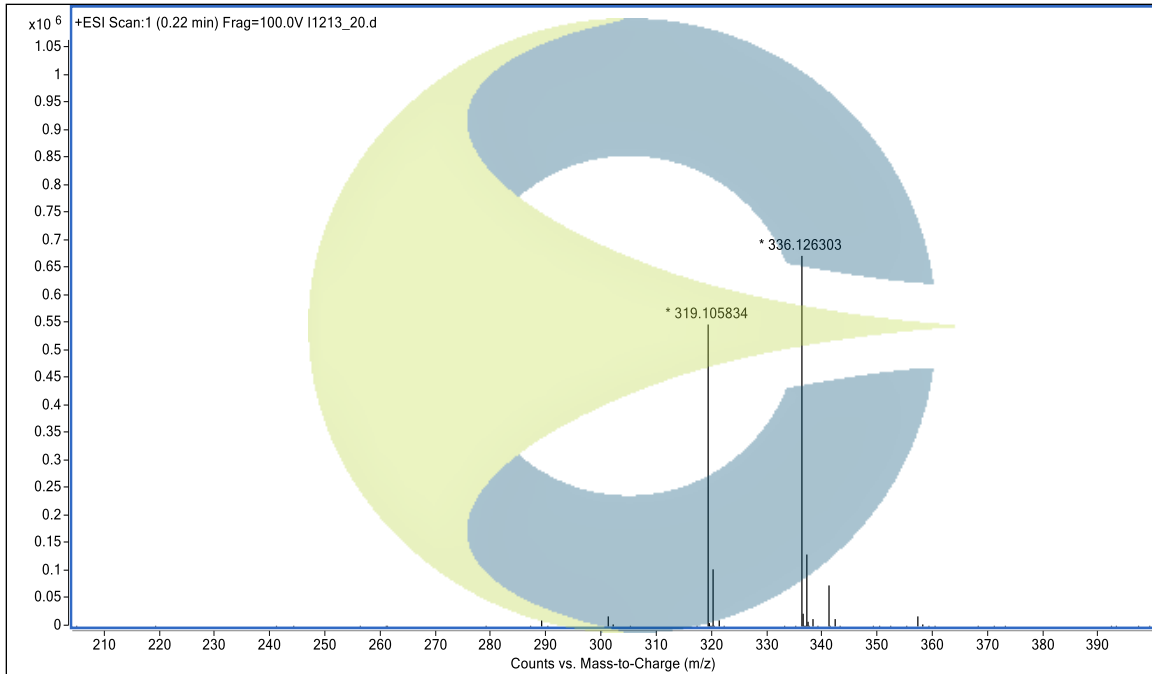
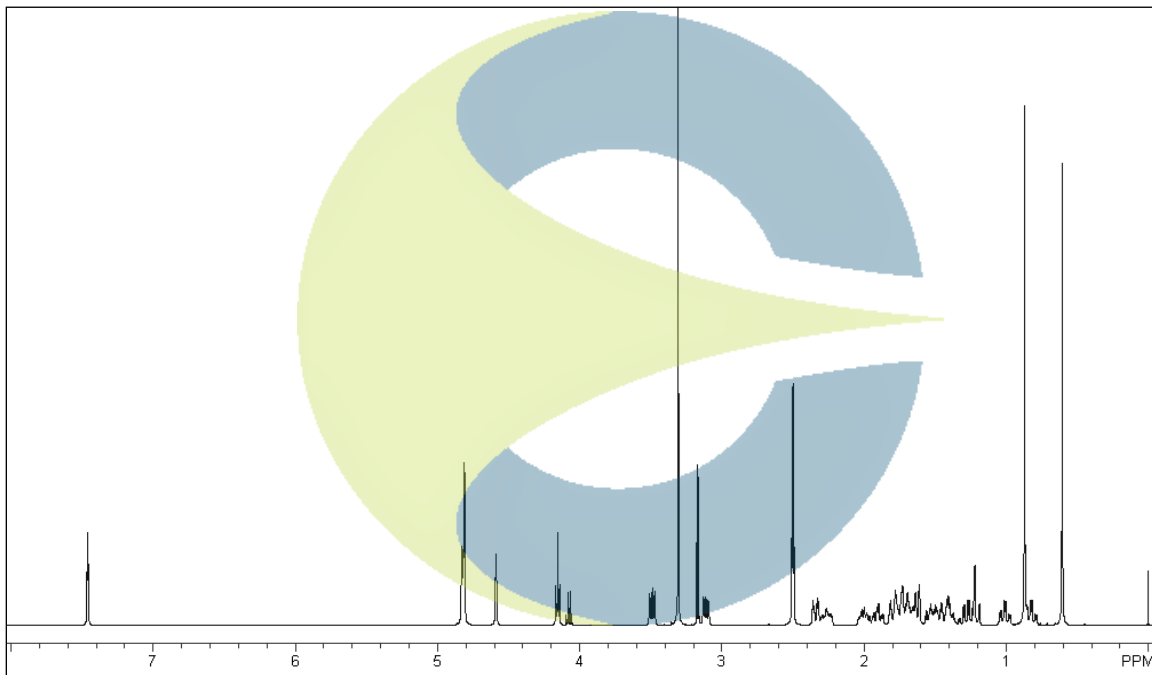
HPLC CHROMATOGRAM OF DILUENT BLANK



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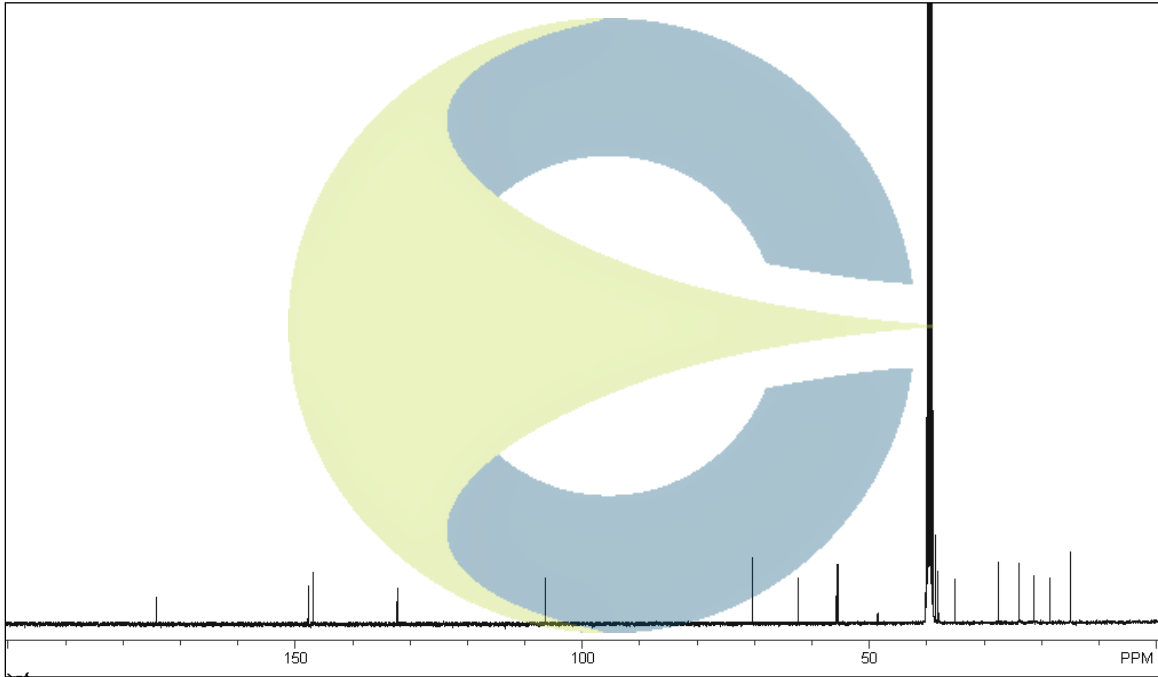
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MASS SPECTRUM OF ANDROGRAPANIN (CDXA-13-5690)**¹H-NMR SPECTRUM OF ANDROGRAPANIN (CDXA-13-5690) IN DMSO-d₆**

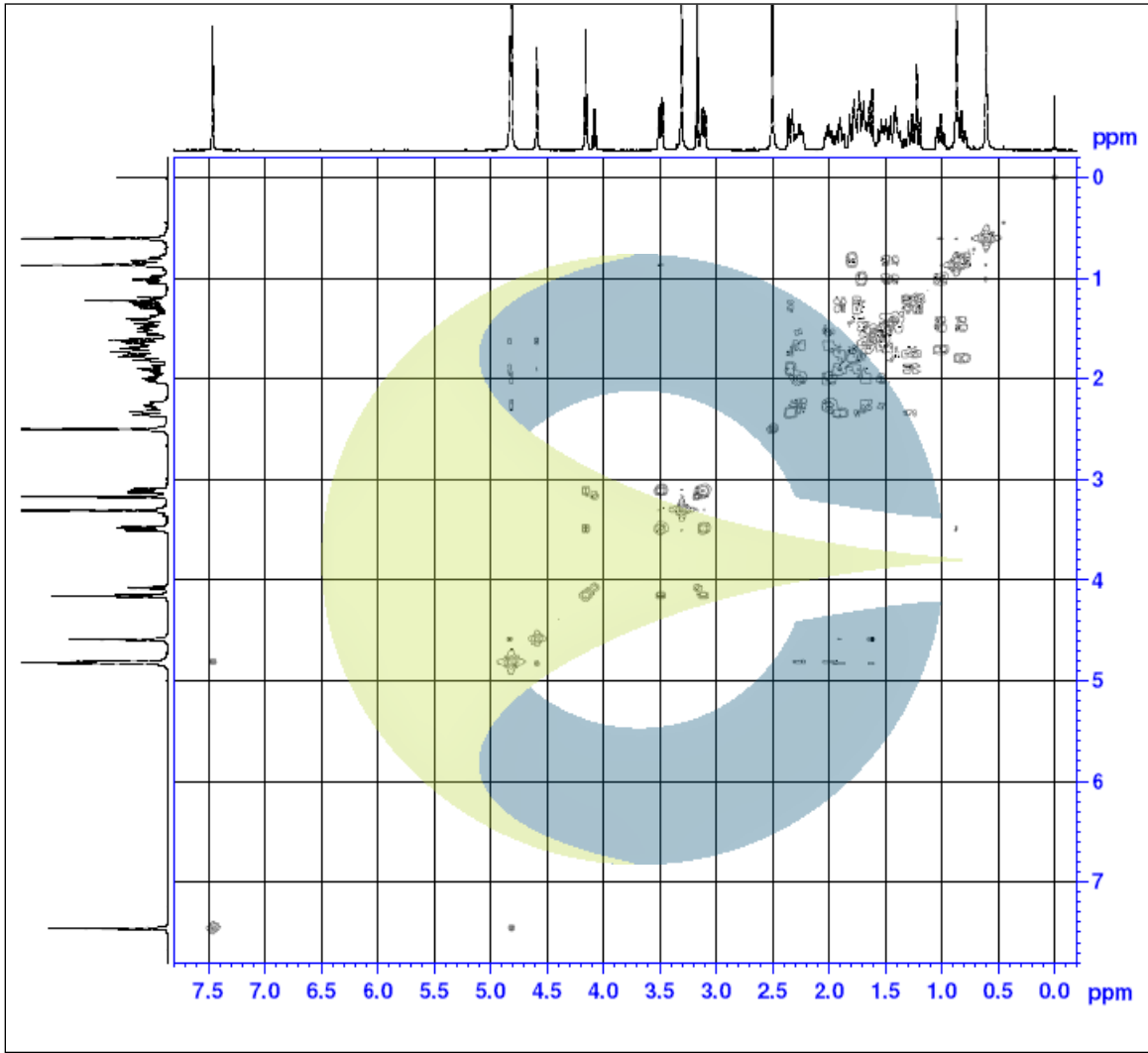
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¹³C-NMR SPECTRUM OF ANDROGRAPANIN (CDXA-13-5690) IN DMSO-d₆



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COSY-NMR SPECTRUM OF ANDROGRAPANIN (CDXA-13-5690) IN DMSO-d₆



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REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	09/17/2013	New report
01	08/21/2018	Passed re-evaluation by HPLC. Updated expiration date, chemical structure format, analytical conditions, chromatograms and results. Removed melting point.
02	07/15/2022	Passed second re-evaluation by HPLC, KF. Updated expiration date, analytical conditions, chromatograms and results.

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