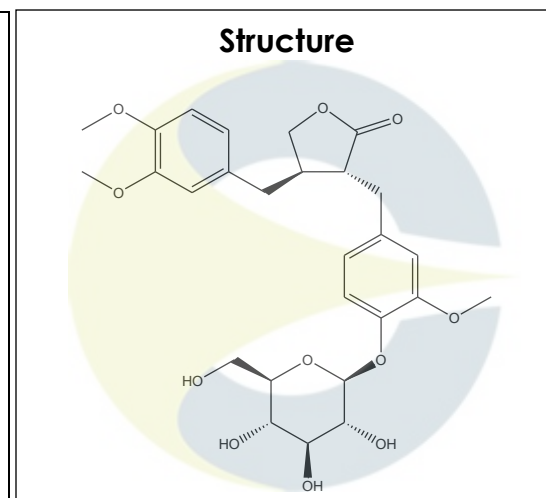


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PRODUCT NAME	Arctiin
PART NUMBER	00001977
STANDARD TYPE	Primary (P)
LOT NUMBER	00001977-221
REPORT NUMBER	CDXA-RSS-5449-02
SAMPLE NUMBER	CDXA-13-1542
DATE OF SAMPLE	03/01/2013
DATE OF RE-EVALUATION	10/02/2018 (1 st); 08/09/2022 (2 nd)
DATE OF REPORT	09/08/2022



CHEMICAL NAMES	(3R,4R)-; 4-[(3,4-dimethoxyphenyl)methyl]-3-[[4-(β-D-glucopyranosyloxy)-3-methoxyphenyl]methyl]dihydro-2(3H)-Furanone; Arctigenin-4-glucoside
CHEMICAL FORMULA	C ₂₇ H ₃₄ O ₁₁
MOLECULAR WEIGHT (MW)	534.55
CHEMICAL FAMILY	Lignans
CAS NUMBER	[20362-31-6]
EC#(EINECS)	NA
RTECS	LY9243000

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	95.1%
HPLC	0.700.10.2.METH22	≥ 90%	99.6%
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	ND
Water	0.700.12.37	NA	4.5%
Appearance	NA	NA	Off White powder

*Testing performed at an ISO 17025 accredited subcontracted laboratory.

ADJUSTED PURITY: 95.1% IS BASED ON (100 - 0.0 SOLVENTS - 4.5 WATER) X 99.6% HPLC

STORAGE CONDITIONS

STORAGE	+4 °C in a dry place.
EXPIRATION DATE	08/2027 under the above conditions.

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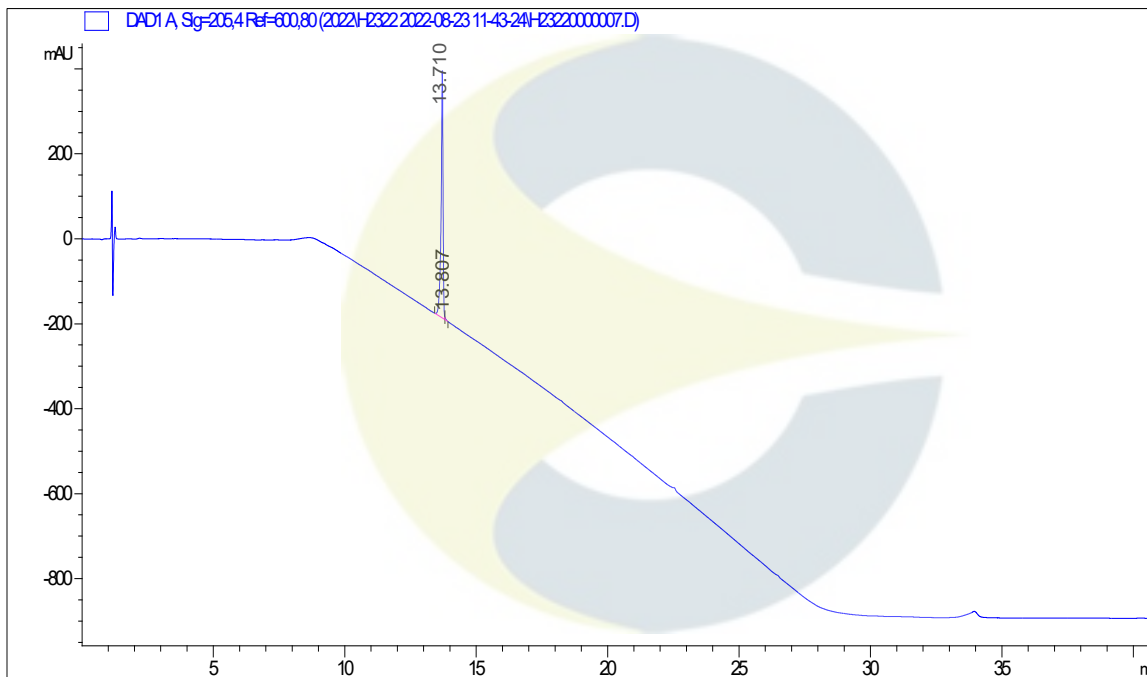
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ANALYTICAL CONDITIONS

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.	0.2 µL
INJECTION CONC.	1.0 mg/mL in Methanol
DETECTION	205 ± 2 nm

HPLC CHROMATOGRAM OF ARCTIIN (CDXA-13-1542)

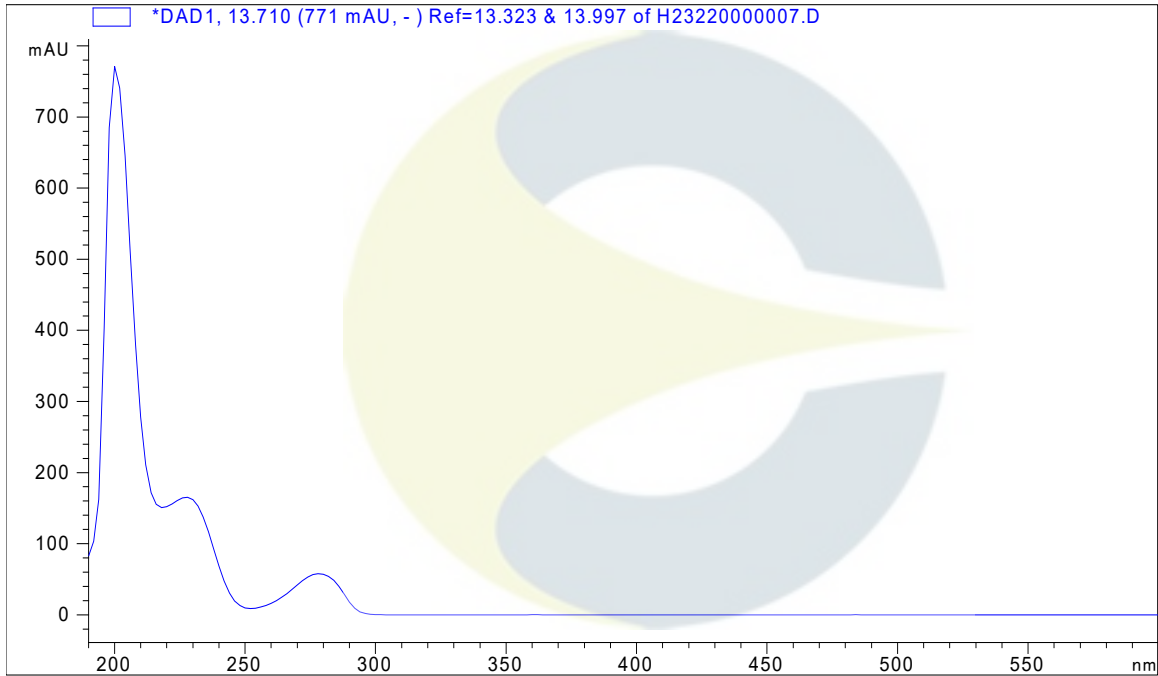


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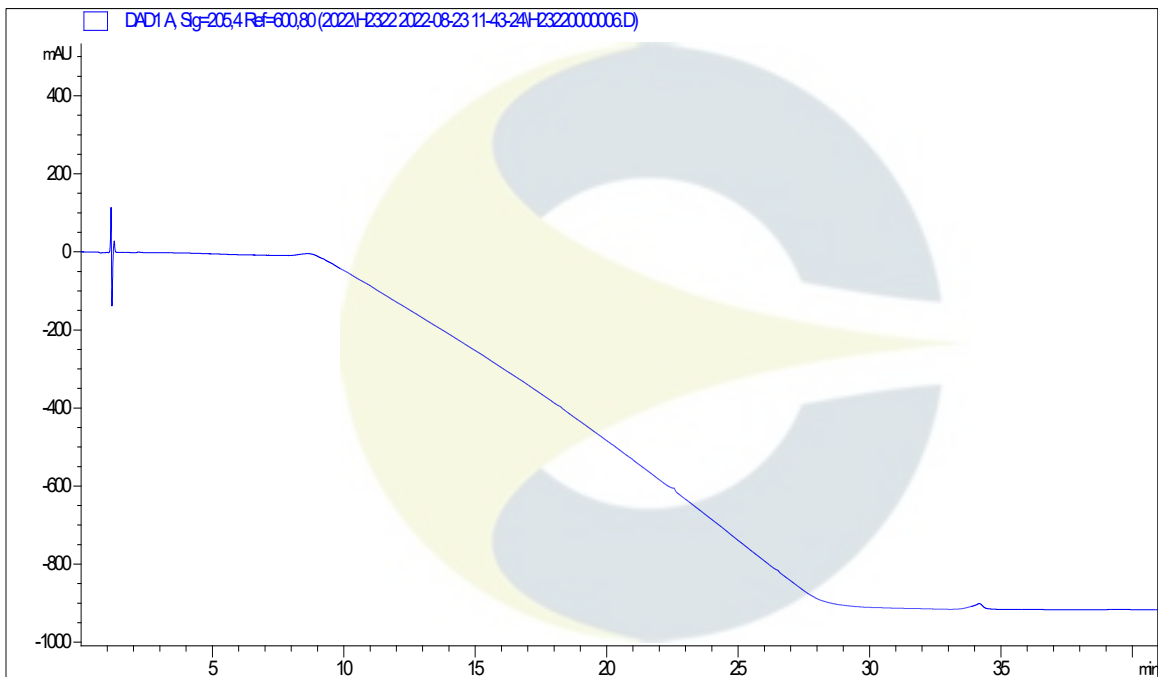
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UV SPECTRUM AT RT = 13.7 MINUTES



HPLC CHROMATOGRAM OF DILUENT BLANK

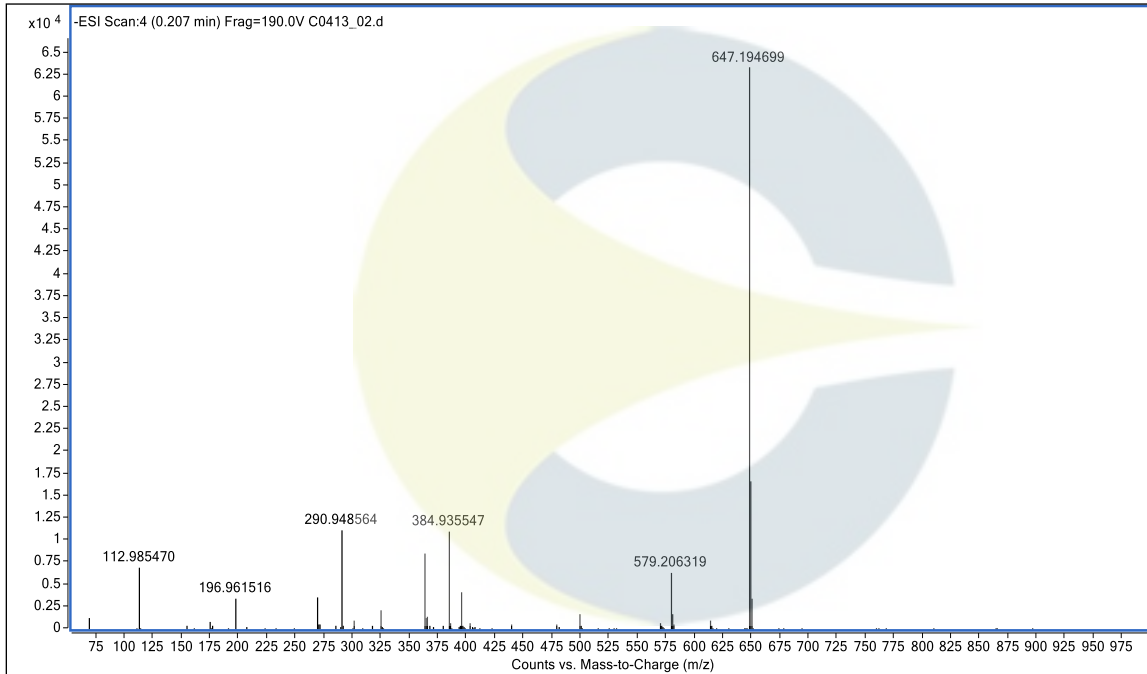


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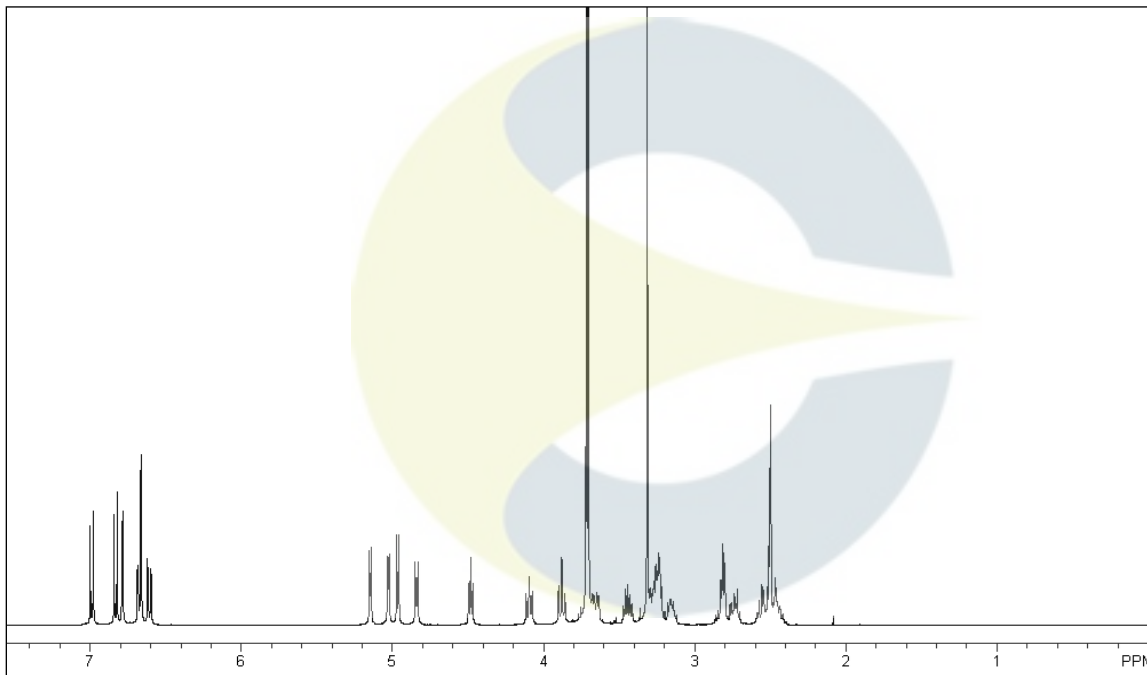
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MASS SPECTRUM OF ARCTIIN (CDXA-13-1542)



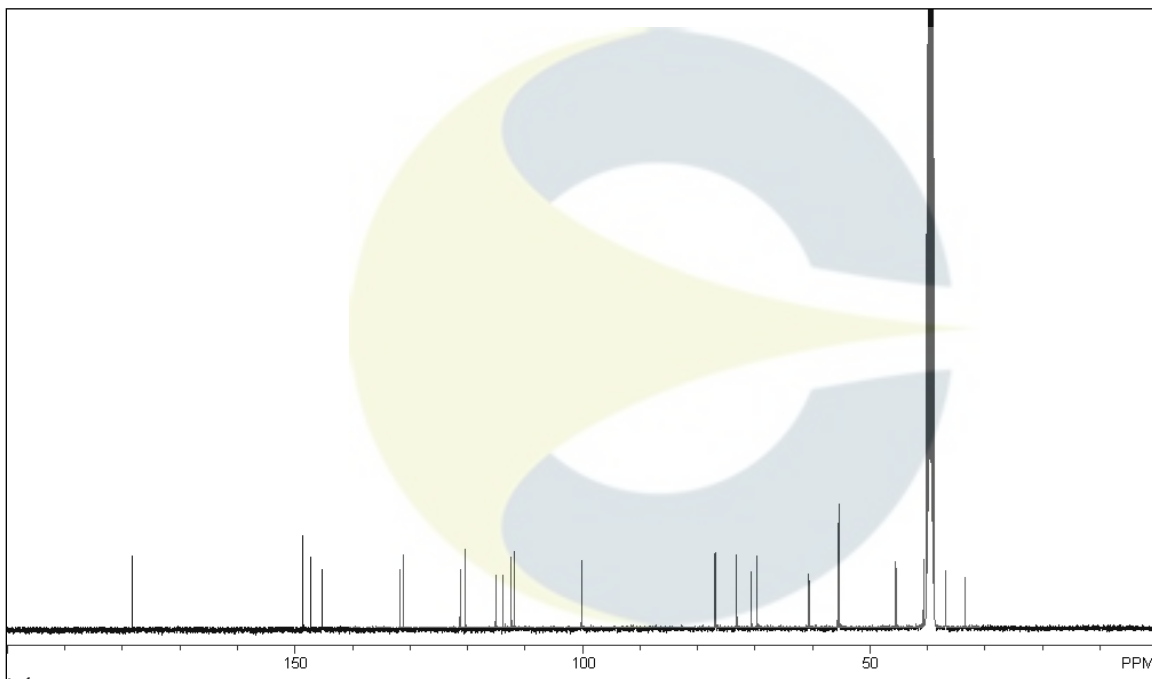
¹H-NMR SPECTRUM OF ARCTIIN (CDXA-13-1542) IN DMSO-d₆



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¹³C-NMR SPECTRUM OF ARCTIIN (CDXA-13-1542) IN DMSO-d₆

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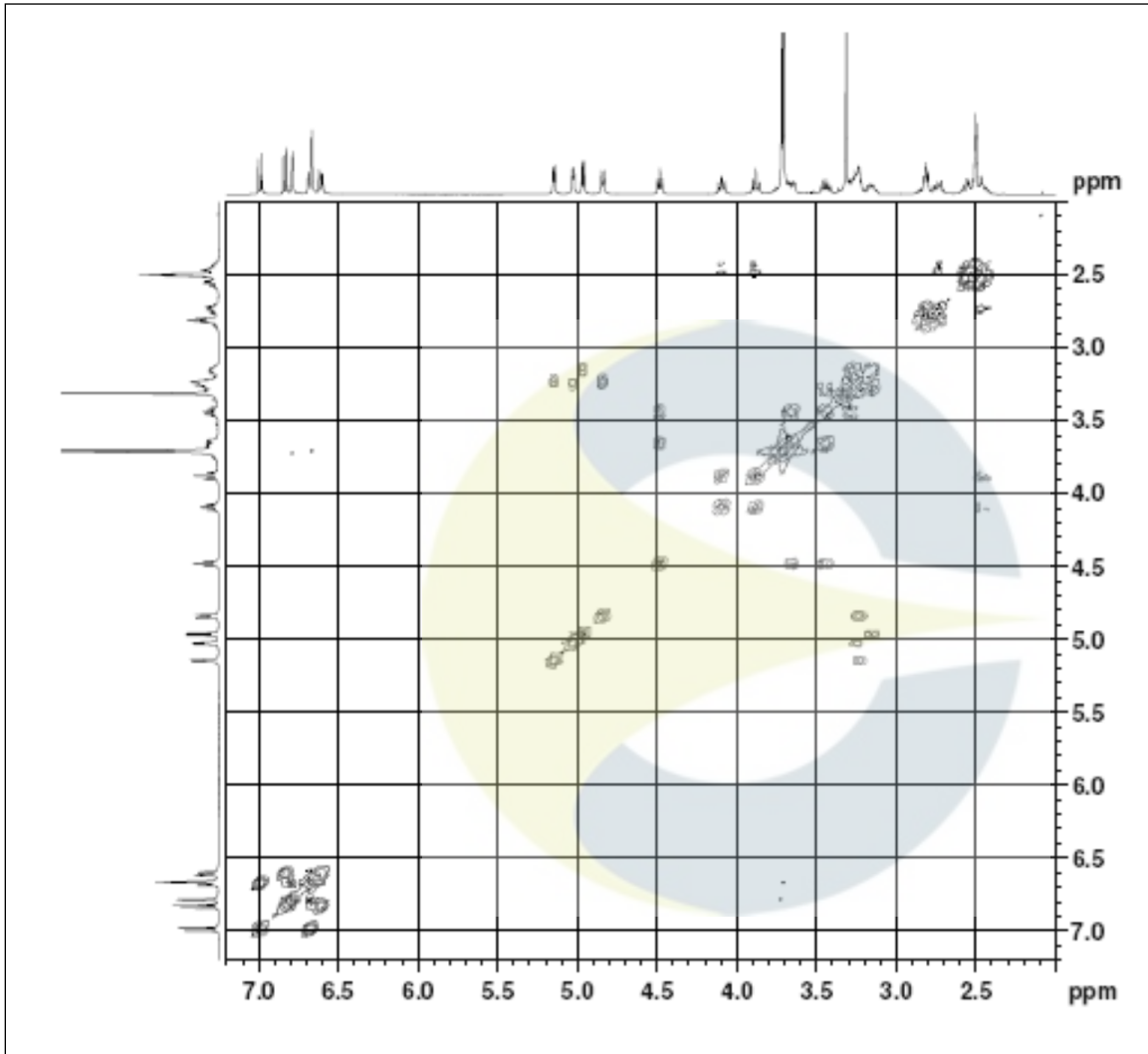
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COSY-NMR SPECTRUM OF ARCTIIN (CDXA-13-1542) IN DMSO-d₆



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REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	03/12/2013	New report
01	10/29/2018	Passed reevaluation by HPLC, KF. Updated expiration date, chemical names, analytical conditions, chromatograms and results. Removed melting point, added RTECS number.
02	09/08/2022	Passed second re-evaluation by HPLC, KF. Updated expiration date, analytical conditions, chromatograms and results

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