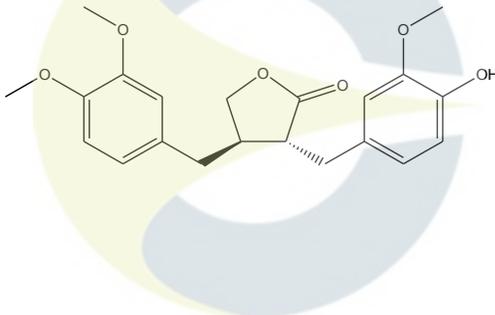


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PRODUCT NAME	Arctigenin	<div style="text-align: center;"> Structure  </div>
PART NUMBER	00001978	
STANDARD TYPE	Primary (P)	
LOT NUMBER	00001978-114	
REPORT NUMBER	CDXA-RSS-6012-02	
SAMPLE NUMBER	CDXA-14-0885	
DATE OF SAMPLE	01/31/2014	
DATE OF RE-EVALUATION	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]dihydro-3-[(4-hydroxy-3-methoxyphenyl)methyl]-2(3H)-furanone
CHEMICAL FORMULA	C ₂₁ H ₂₄ O ₆
MOLECULAR WEIGHT (MW)	372.41
CHEMICAL FAMILY	Lignans
CAS NUMBER	[7770-78-7]
EC#(EINECS)	NA
RTECS	LY9247000

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	99.5%
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-7.0-000115	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: 99.5% IS BASED ON (100 - 0.1 SOLVENTS - 0.0 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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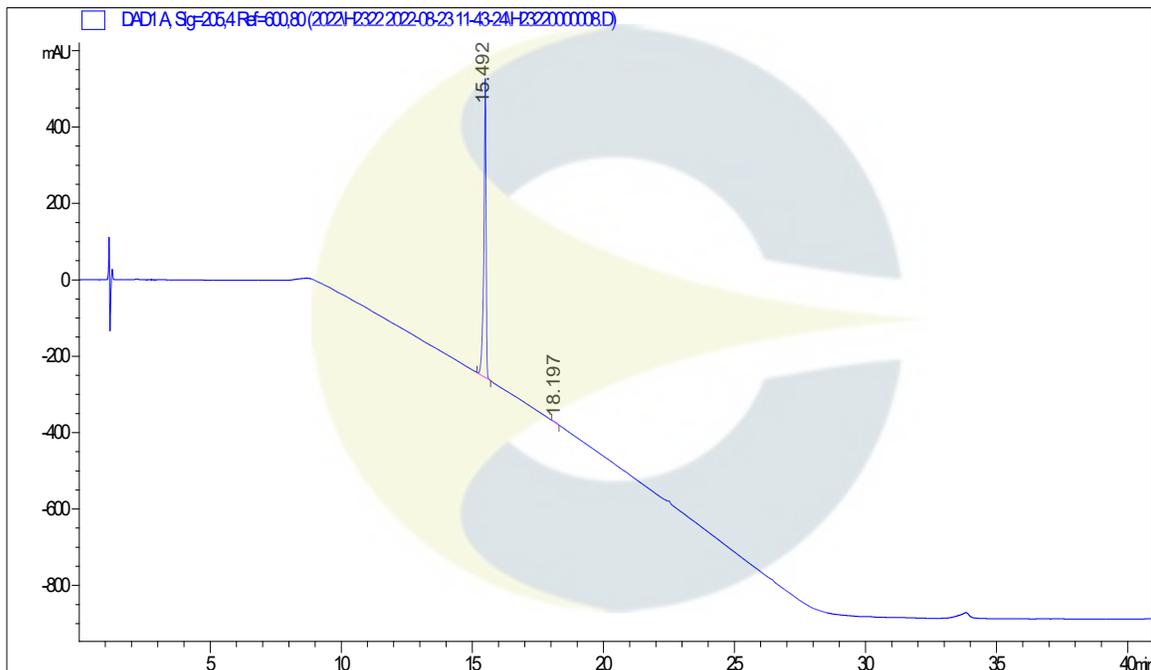
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ANALYTICAL CONDITIONS

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

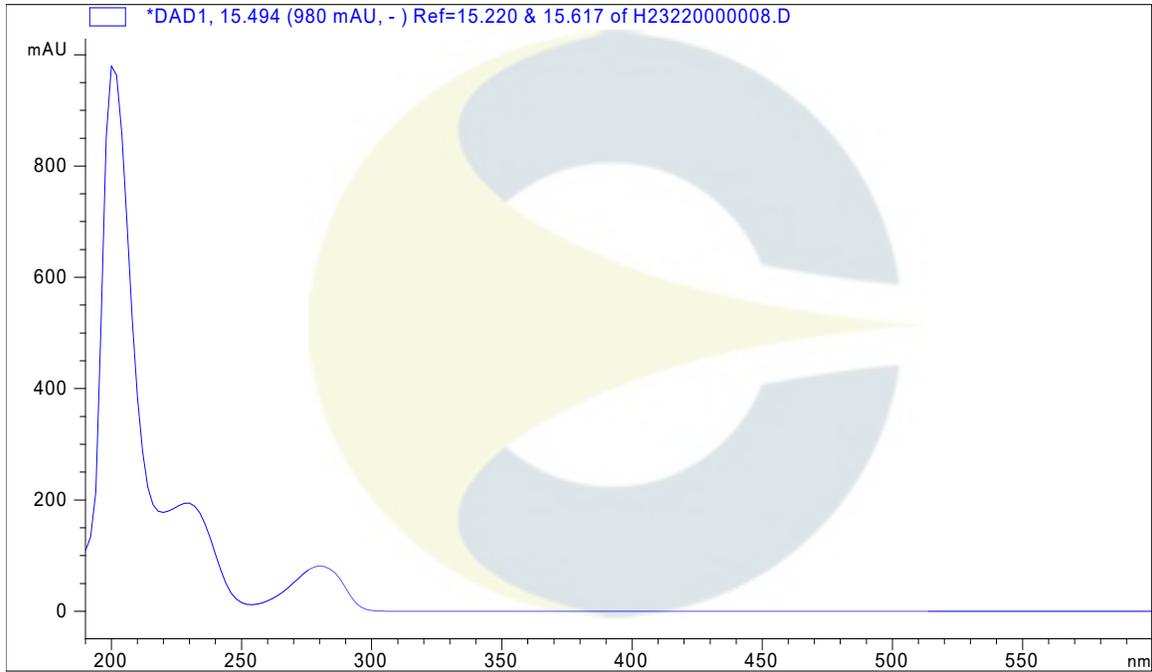
HPLC CHROMATOGRAM OF ARCTIGENIN (CDXA-14-0885)



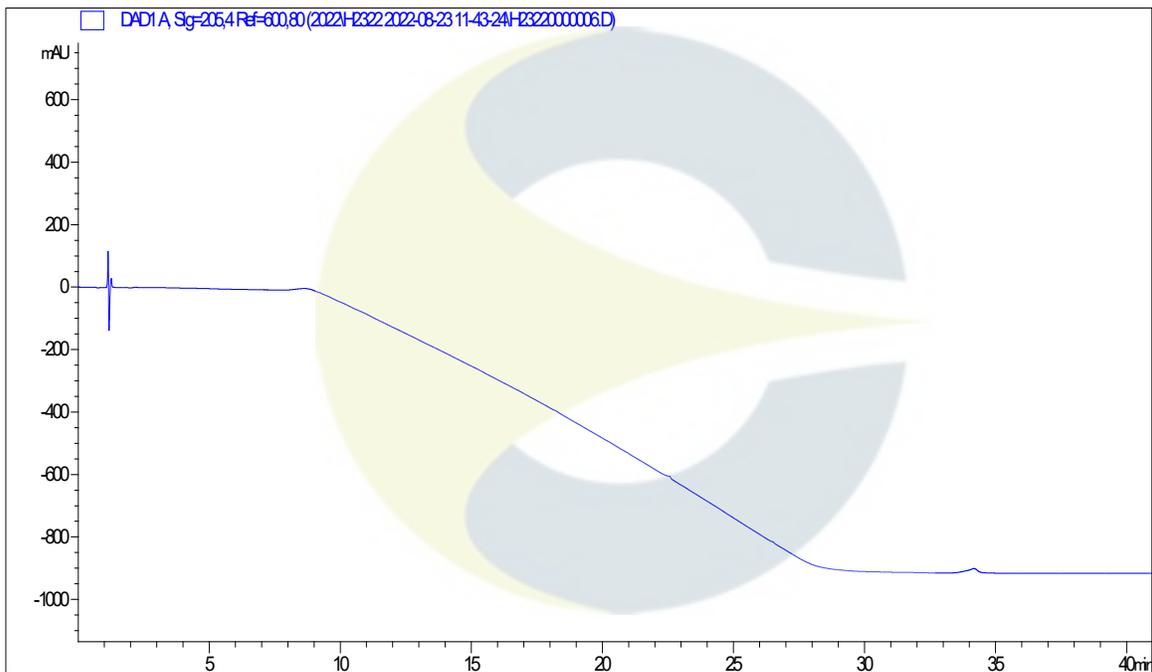
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UV SPECTRUM AT RT = 15.5 MINUTES



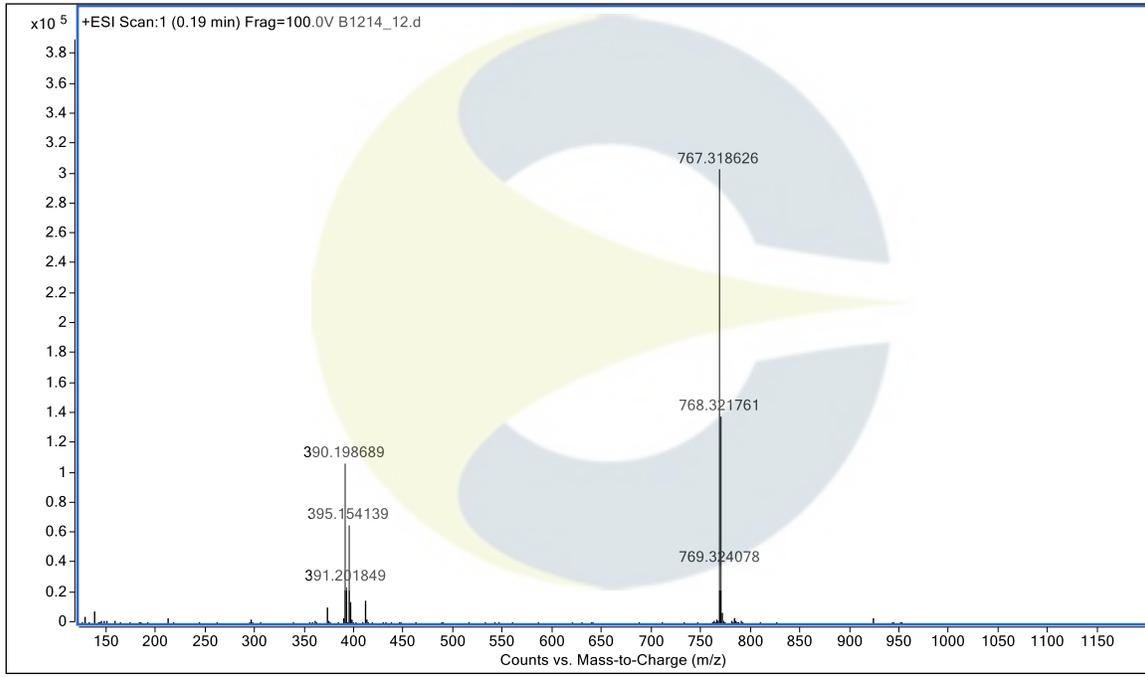
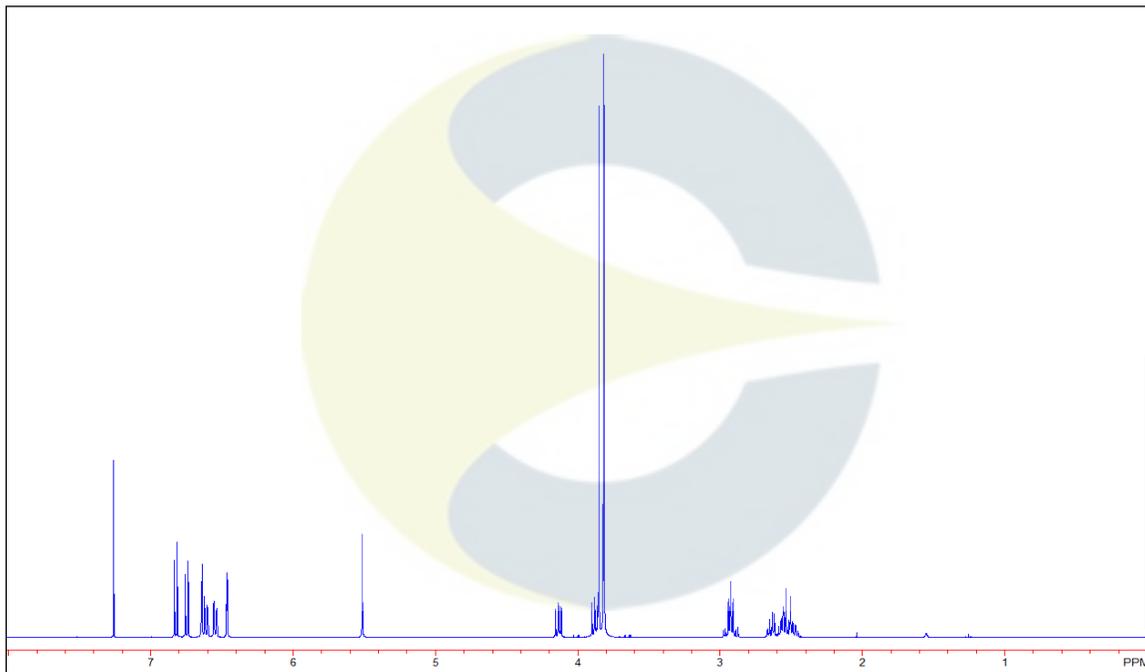
HPLC CHROMATOGRAM OF DILUENT BLANK



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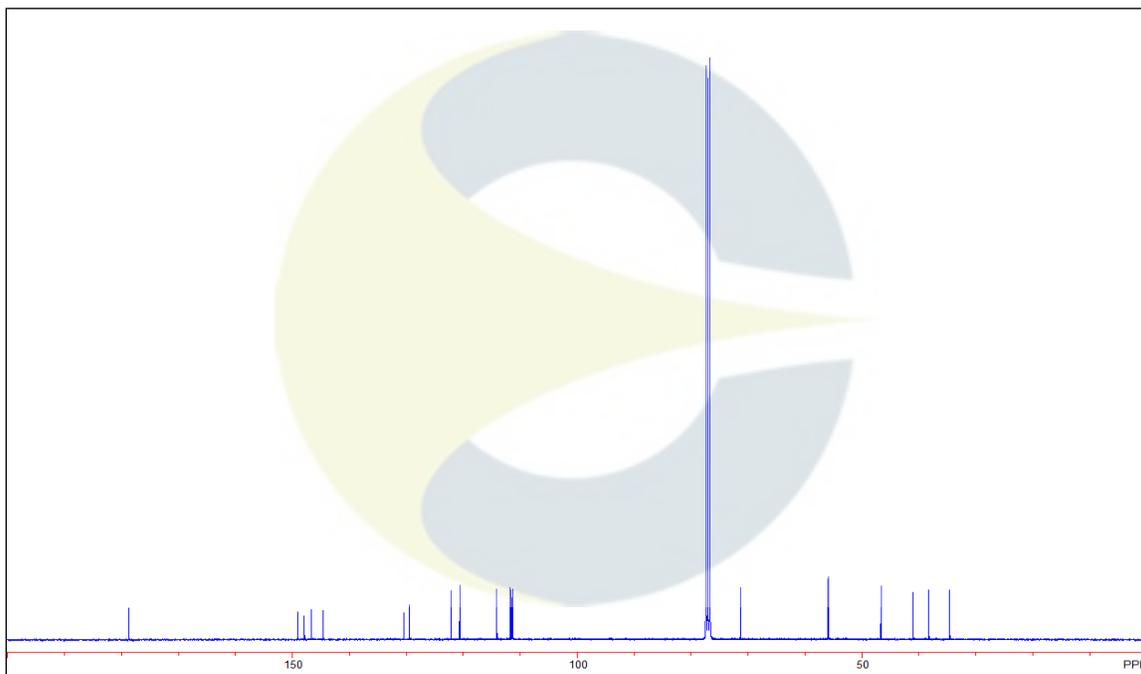
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MASS SPECTRUM OF ARCTIGENIN (CDXA-14-0885)**¹H-NMR SPECTRUM OF ARCTIGENIN (CDXA-14-0885) IN CDCl₃**

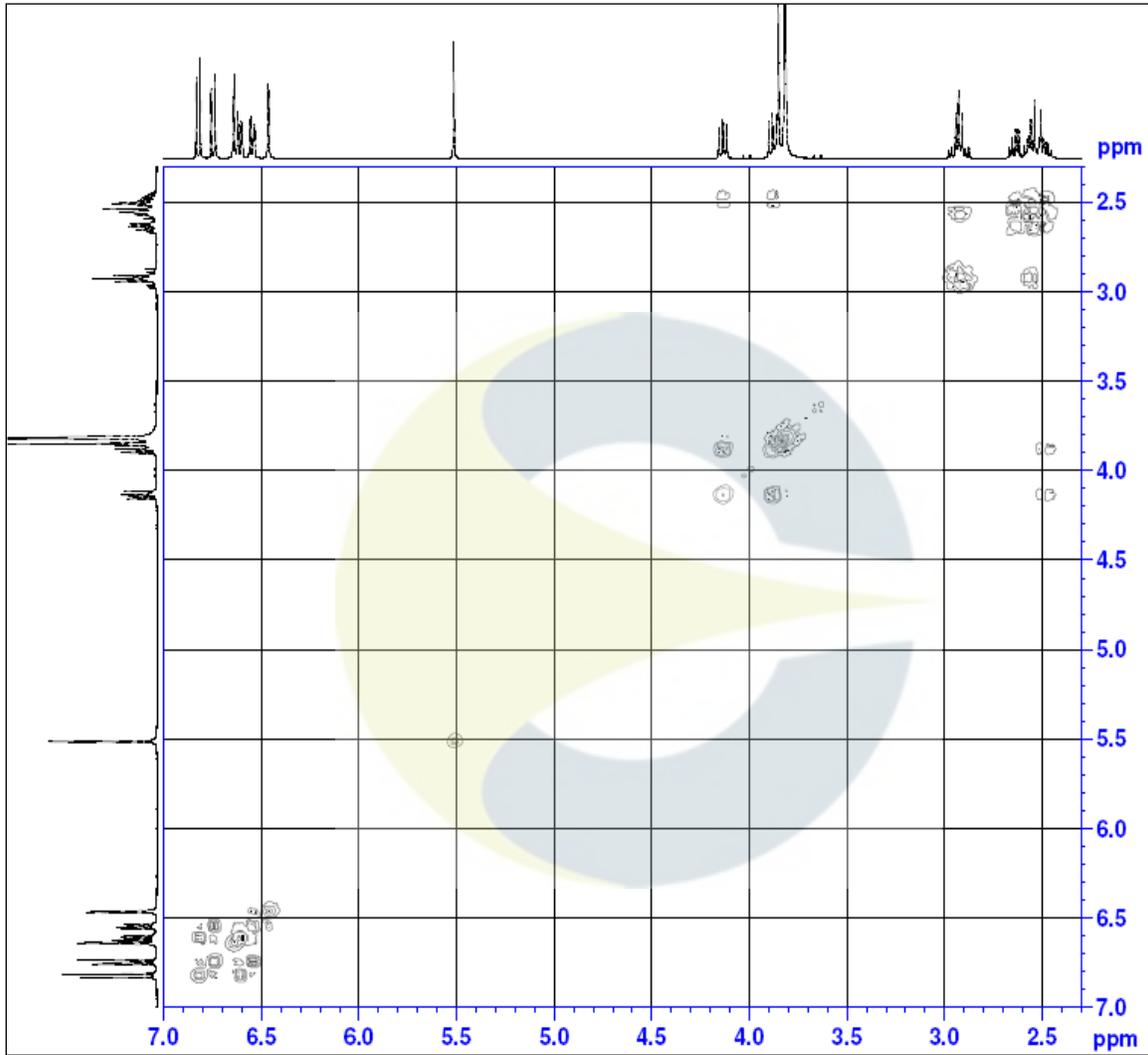
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¹³C-NMR SPECTRUM OF ARCTIGENIN (CDXA-14-0885) IN CDCl₃



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COSY-NMR SPECTRUM OF ARCTIGENIN (CDXA-14-0885) IN CDCl₃



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REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	02/17/2014	New report
01	10/29/2018	Passed reevaluation by HPLC, KF. Updated expiration date, 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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