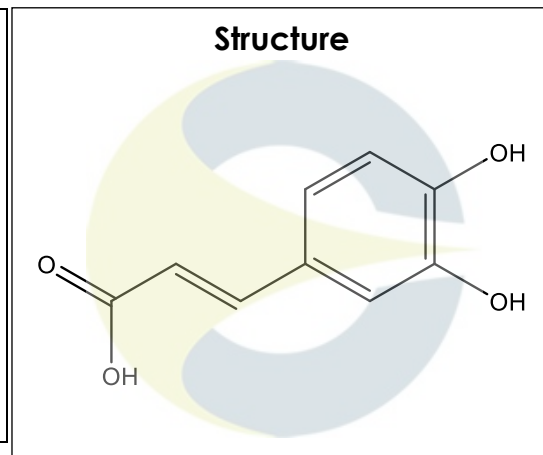


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PRODUCT NAME	Caffeic Acid
PART NUMBER	00003024
STANDARD TYPE	Primary (P)
LOT NUMBER	00003024-O3L
REPORT NUMBER	CDXA-RSS-10001-00
SAMPLE NUMBER	CDXP-22-01038
DATE OF SAMPLE	11/04/2022
DATE OF REPORT	12/02/2022



CHEMICAL NAMES	3,4-Dihydroxybenzeneacrylic acid; 3-(3,4-Dihydroxyphenyl)-2-propenoic acid; 4-(2'-Carboxyvinyl)-1,2-dihydroxybenzene; 3,4-Dihydroxycinnamic acid
CHEMICAL FORMULA	C ₉ H ₈ O ₄
MOLECULAR WEIGHT (MW)	180.16
CHEMICAL FAMILY	Phenolic Acids
CAS NUMBER	[331-39-5]
EC#(EINECS)	206-361-2
RTECS	GD8950000

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	99.5%
HPLC	0.700.10.2.METH22	≥ 90%	99.8%
NMR	0.700.12.4	Conforms to structure	Conforms to structure
Mass Spectrum	0.700.12.27	Conforms	Conforms
Residual Solvent*	USP <467>	NA	Pyridine - 2630 ppm
Water	0.700.12.37	NA	ND
Appearance	NA	NA	Beige powder

*Testing performed at an ISO 17025 accredited subcontracted laboratory.

ADJUSTED PURITY: 99.5% IS BASED ON (100 - 0.3 SOLVENTS - 0.0 WATER) X 99.8% HPLC

STORAGE CONDITIONS

STORAGE Room Temperature in a dry place.

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EXPIRATION DATE 11/2027 under the above conditions.

ANALYTICAL CONDITIONS

INSTRUMENT AGILENT 1260 HPLC UV-VIS (DAD); AB-SCIEX 6600 TRIPLE TOF

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

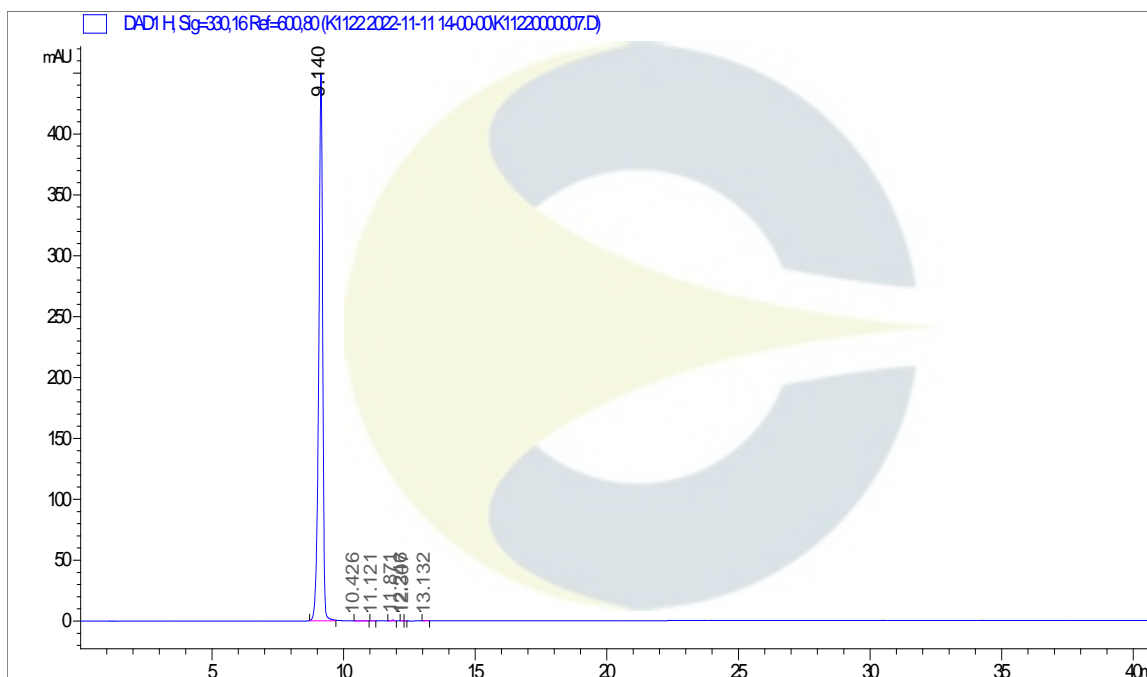
FLOW RATE 0.4 mL/minute

INJECTION VOL. 0.4 µL

INJECTION CONC. 1.0 mg/mL in Methanol

DETECTION 330 ± 8 nm

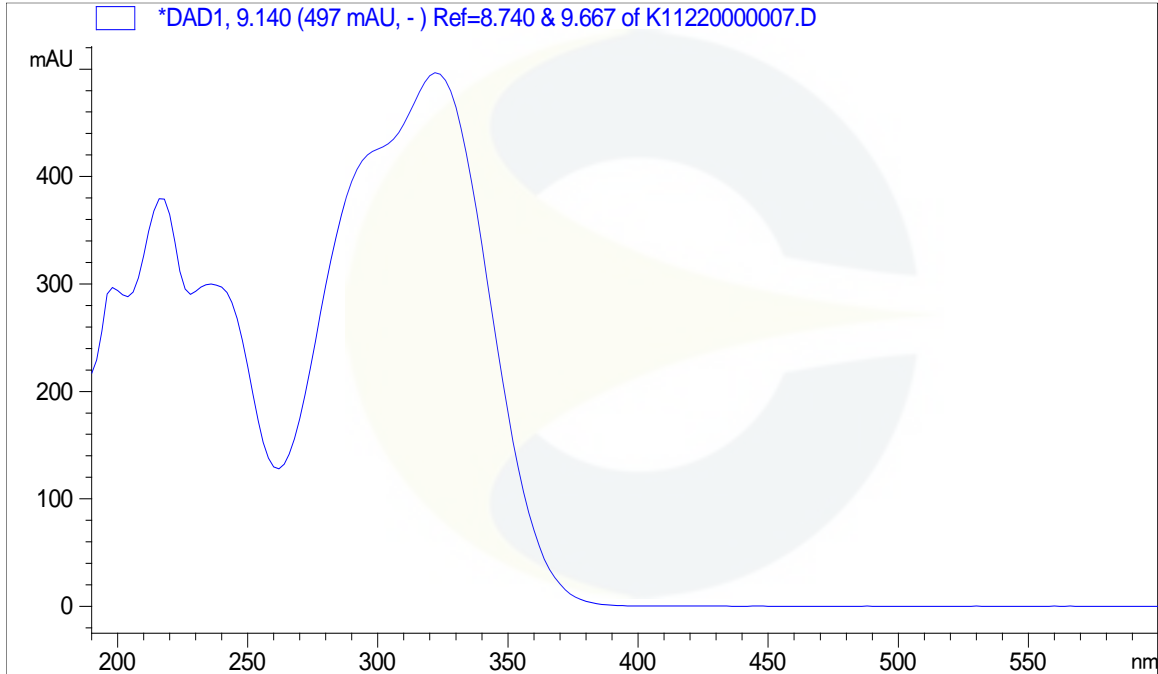
HPLC CHROMATOGRAM OF CAFFEIC ACID (CDXP-22-01038)



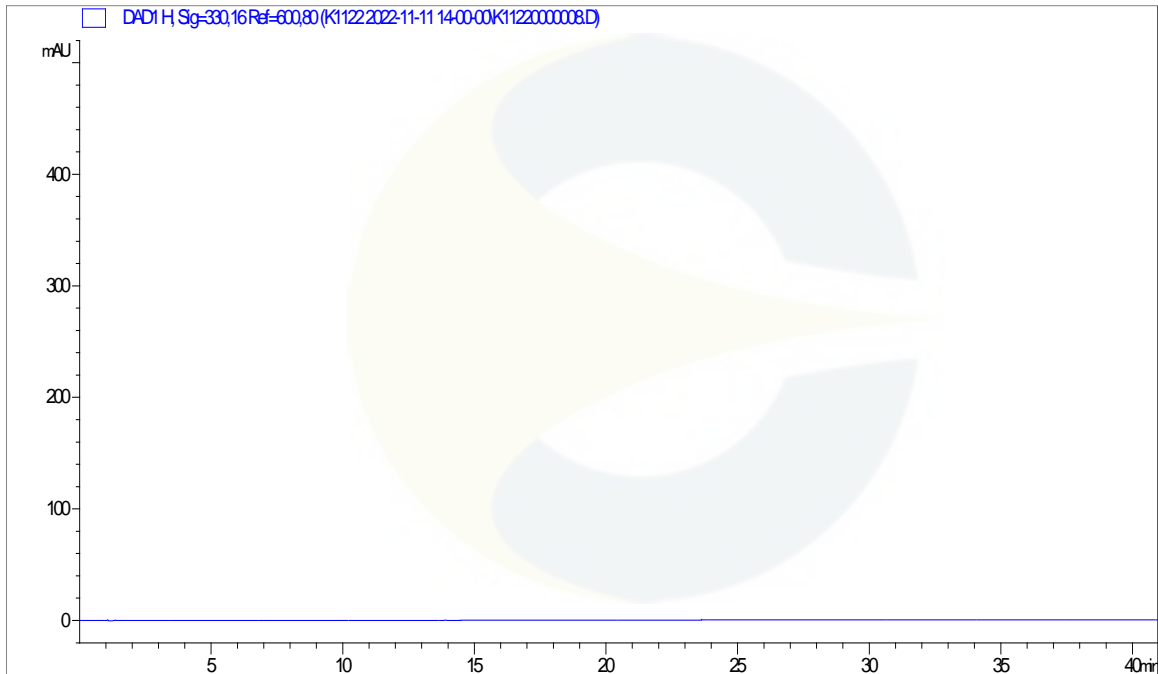
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UV SPECTRUM AT RT = 9.1 MINUTES



HPLC CHROMATOGRAM OF DILUENT BLANK

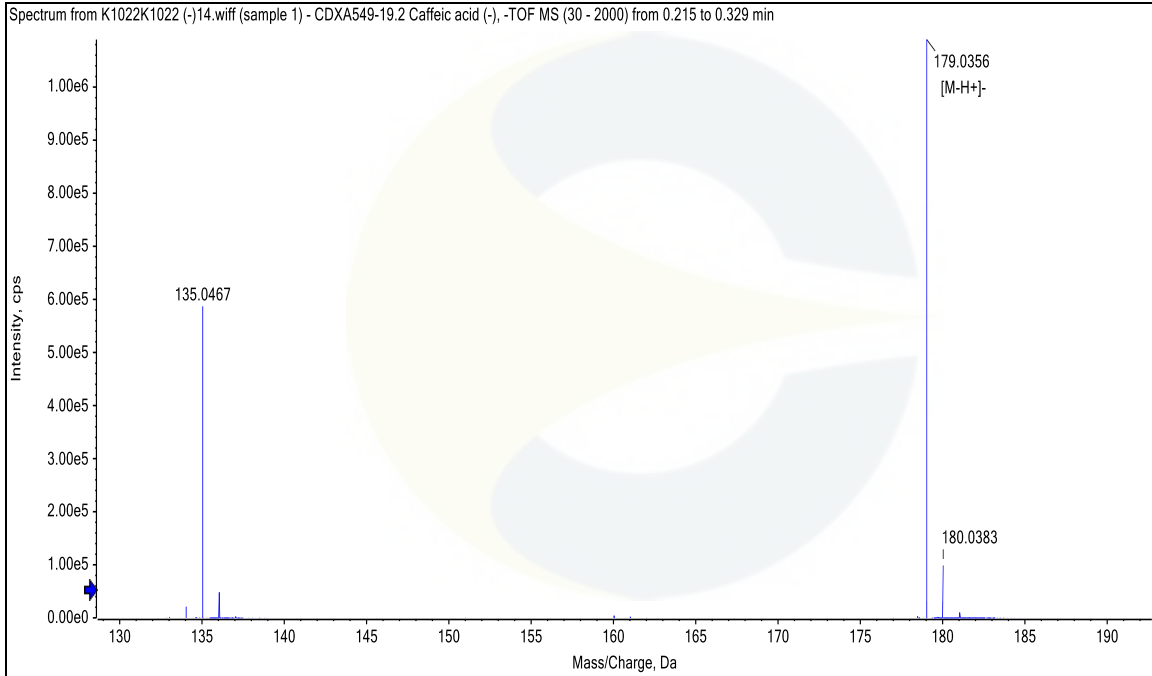


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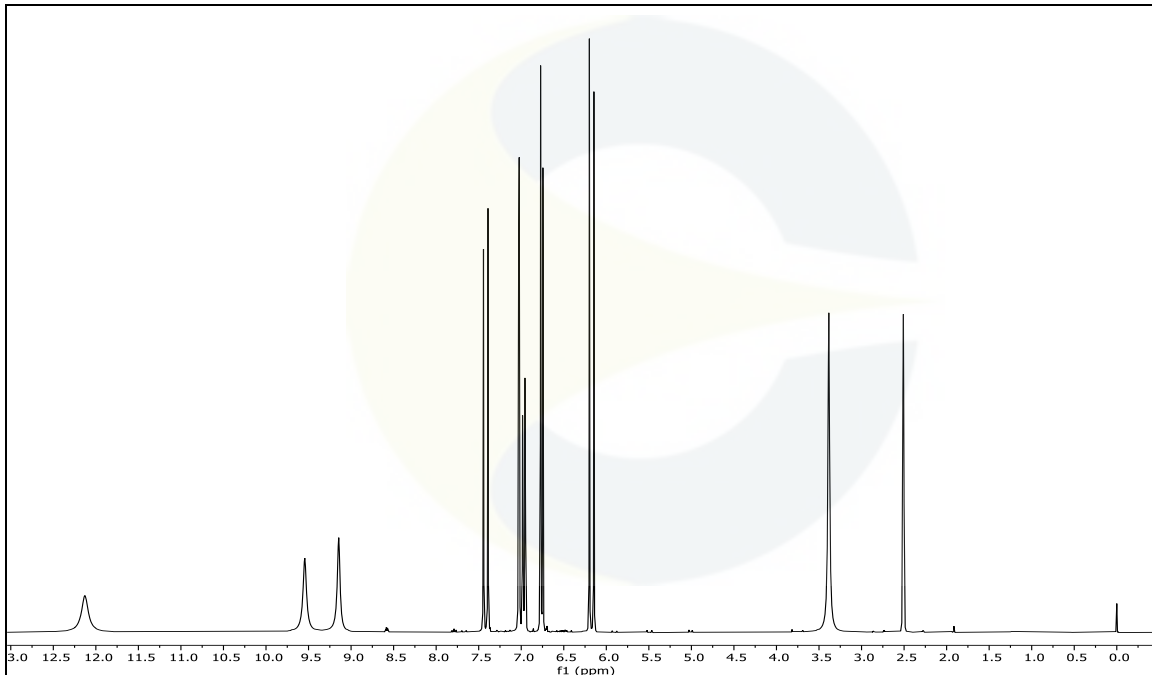
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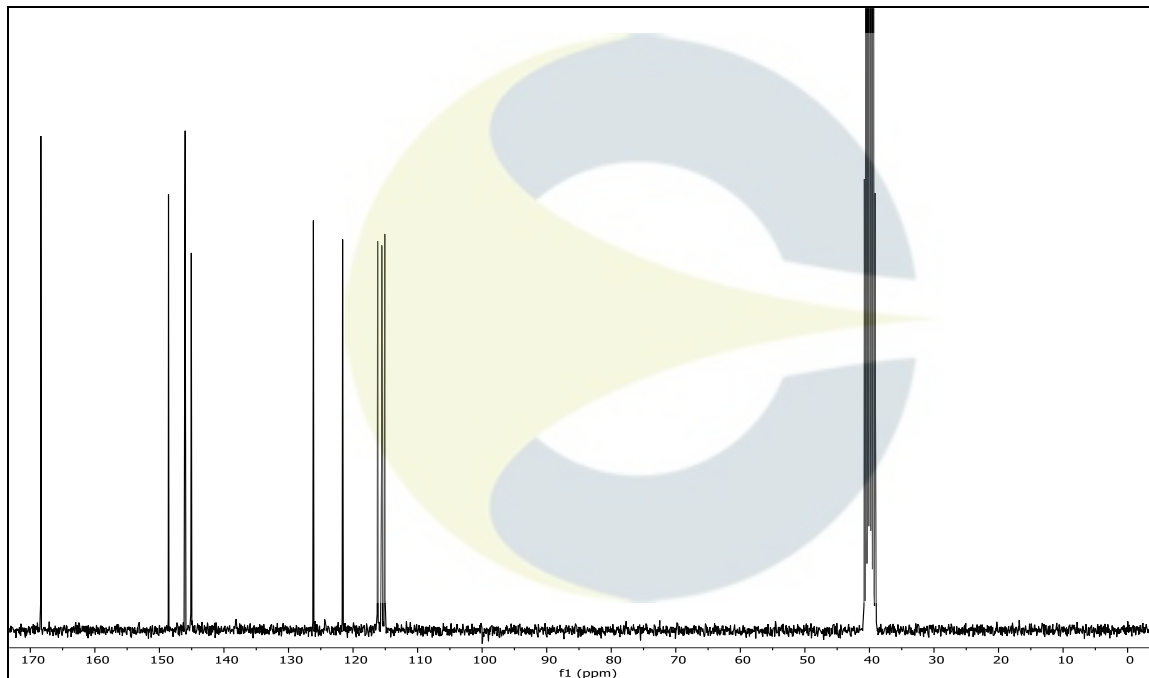
MASS SPECTRUM OF CAFFEIC ACID (CDXP-22-01038)



¹H-NMR SPECTRUM OF CAFFEIC ACID (CDXP-22-01038) IN DMSO-d₆ + TMS

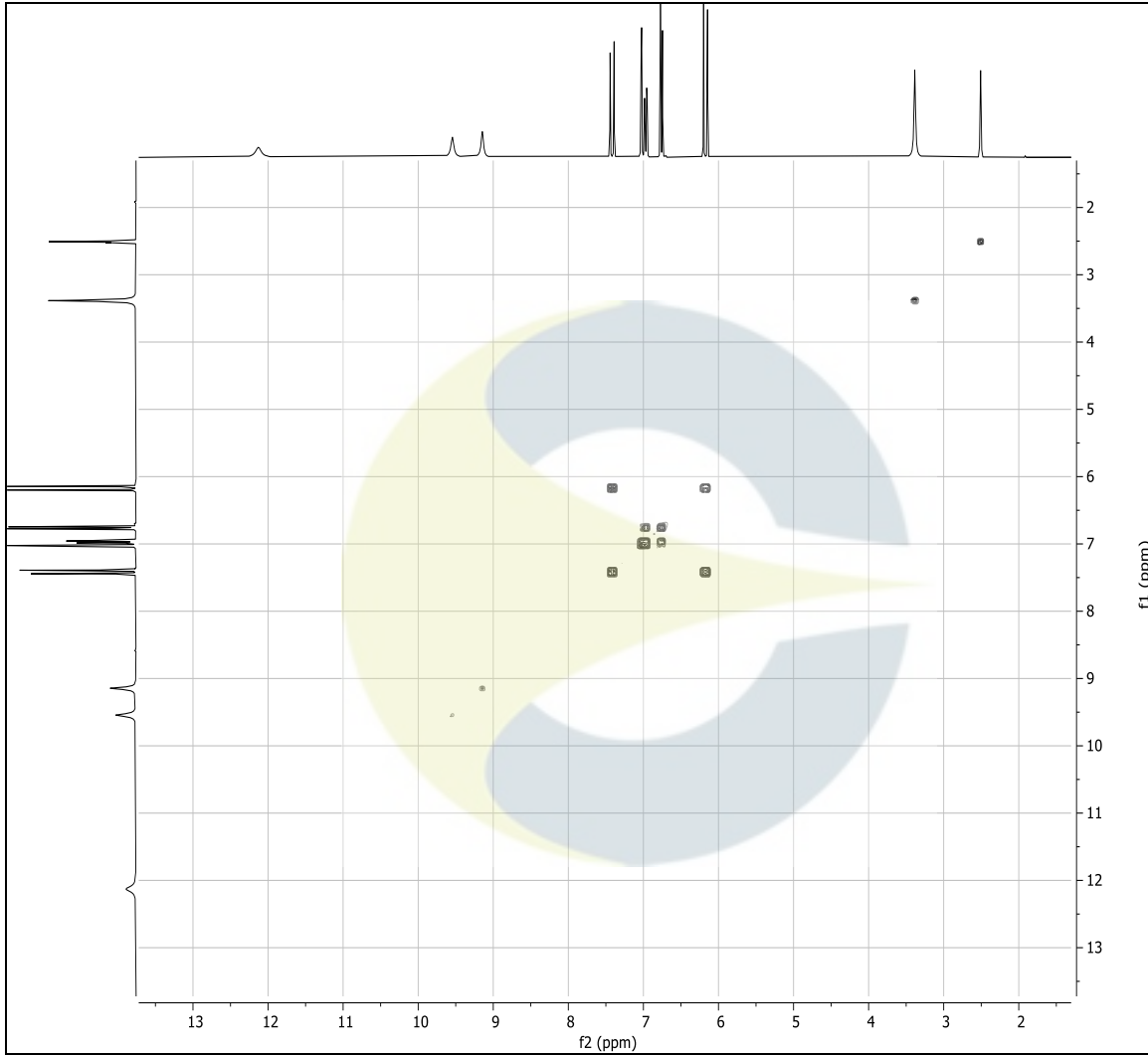


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¹³C-NMR SPECTRUM CAFFEIC ACID (CDXP-22-01038) IN DMSO-*d*₆ + TMS

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COSY-NMR SPECTRUM OF CAFFEIC ACID (CDXP-22-01038) IN DMSO-d₆ + TMS



REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	12/02/2022	New report

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