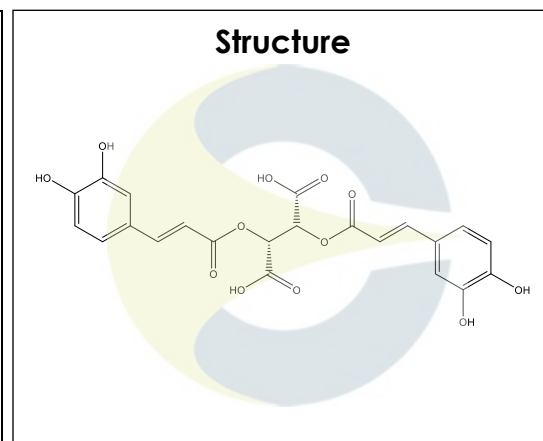


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PRODUCT NAME	Cichoric acid
PART NUMBER	00003640
STANDARD TYPE	Primary (P)
LOT NUMBER	00003640-225
REPORT NUMBER	CDXA-RSS-8911-00
SAMPLE NUMBER	CDXP-20-00220
DATE OF SAMPLE	04/07/2020
DATE OF REPORT	05/14/2020



CHEMICAL NAMES	(2R,3R)-2,3-Bis((3-(3,4-dihydroxyphenyl)-1-oxo-2-propen-1-yl)oxy)butanedioic acid; Dicafeoyltartaric Acid
CHEMICAL FORMULA	C ₂₂ H ₁₈ O ₁₂
MOLECULAR WEIGHT (MW)	474.37
CHEMICAL FAMILY	Phenolic acids
CAS NUMBER	[6537-80-0]
EC#(EINECS)	636-229-3
RTECS	EJ9852070

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	NA	92.5%
HPLC	0.700.10.2.METH22	NA	97.0%
NMR	0.700.12.4	Conforms to structure	Conforms to structure
Mass Spectrum	0.700.12.27	Conforms	Conforms
Residual Solvent*	USP <467>	NA	Acetonitrile – 1.6% Acetic acid – 0.7%
Water	0.700.12.37	NA	2.3%
Appearance	NA	NA	Off white powder

*Testing performed at an ISO 17025 accredited subcontracted laboratory.
 ADJUSTED PURITY: 92.5% IS BASED ON (100 - 2.3 SOLVENTS - 2.3 WATER) X 97.0% HPLC

STORAGE CONDITIONS

STORAGE	-20 °C in a dry place.
EXPIRATION DATE	04/2025 under the above conditions.

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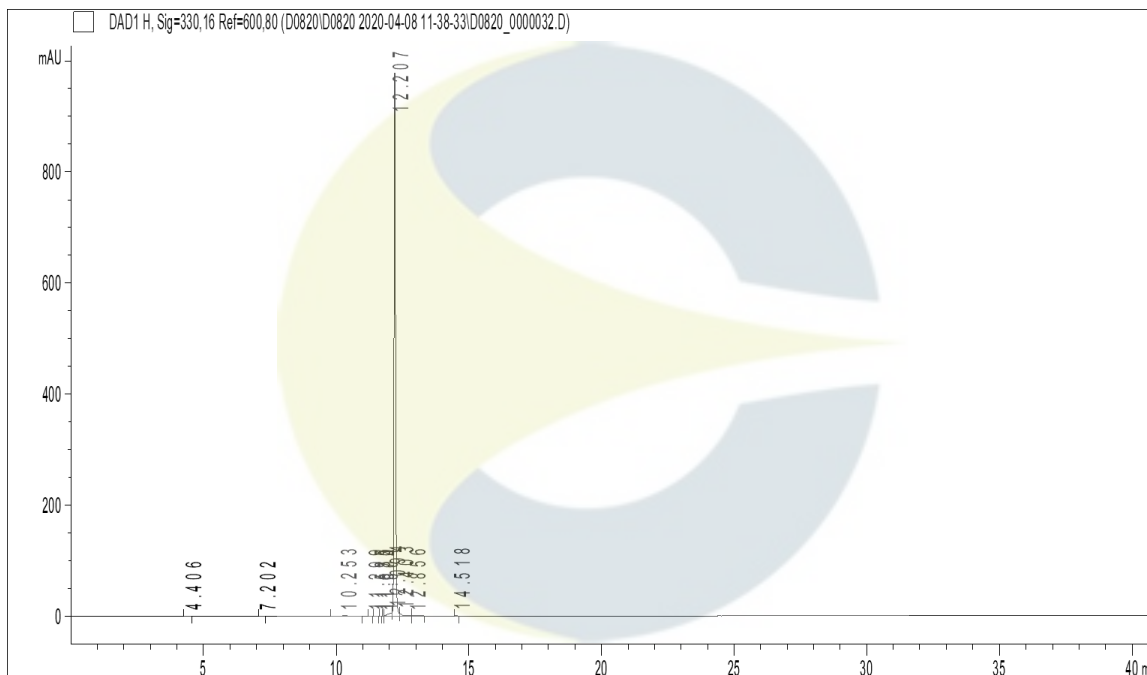
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ANALYTICAL CONDITIONS

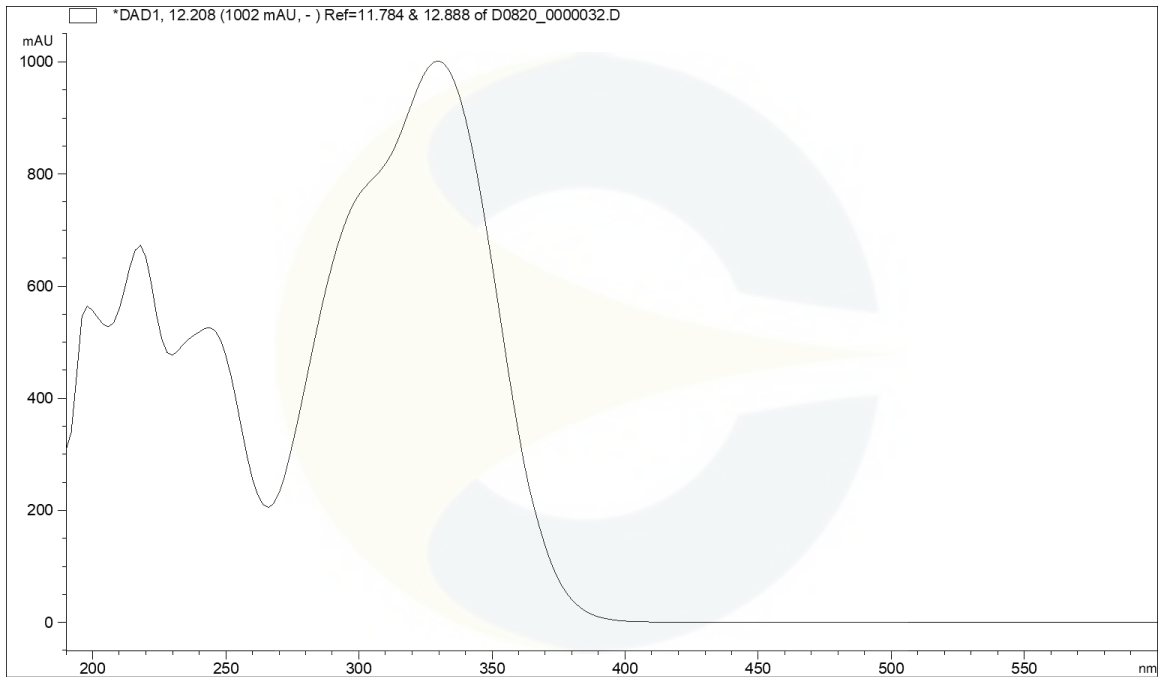
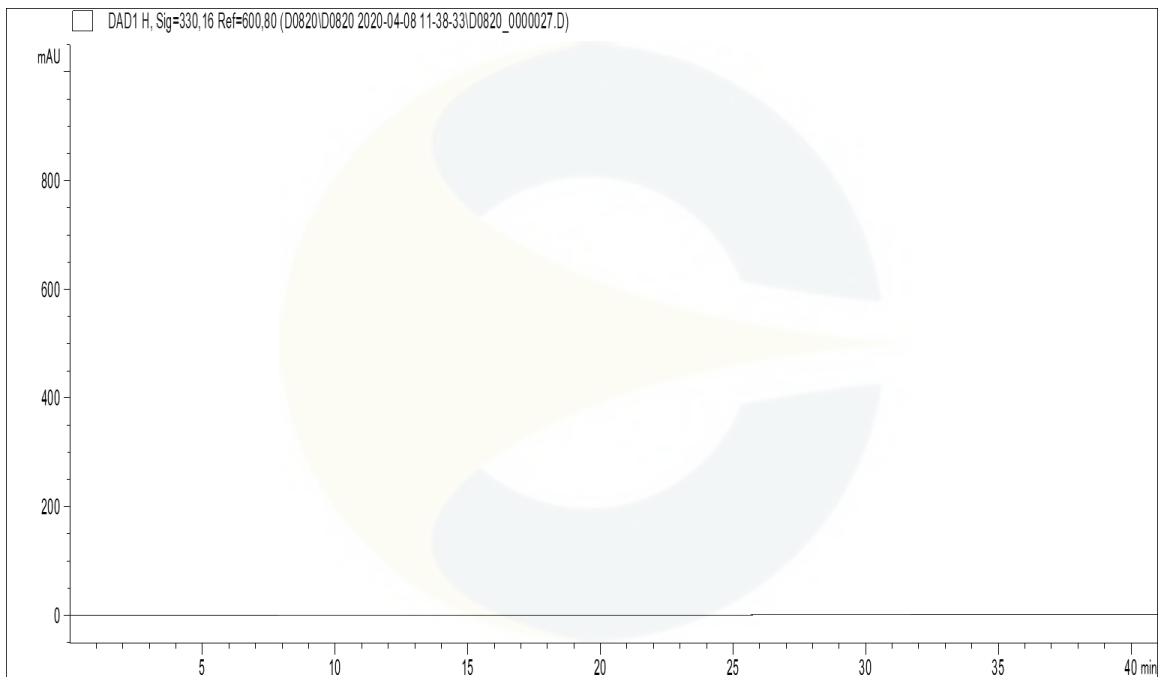
INSTRUMENT	AGILENT 1260 HPLC UV-VIS (DAD); AB-SCIEX 6600 TRIPLE TOF
COLUMN	Phenomenex Luna C18(2) 150 x 2.00 mm, 5 µm particle size
MOBILE PHASE	A - 0.1% Trifluoroacetic acid in Ultrapure water, B - Acetonitrile; Isocratic 5% B for 5 minutes, then increasing to 95% B over 20 minutes. Hold at 95% B for 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.	0.95 mg/mL in Methanol
DETECTION	330 ± 8 nm

HPLC CHROMATOGRAM OF CICHORIC ACID (CDXP-20-00220)



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UV SPECTRUM AT RT = 12.2 MINUTES

HPLC CHROMATOGRAM OF DILUENT BLANK


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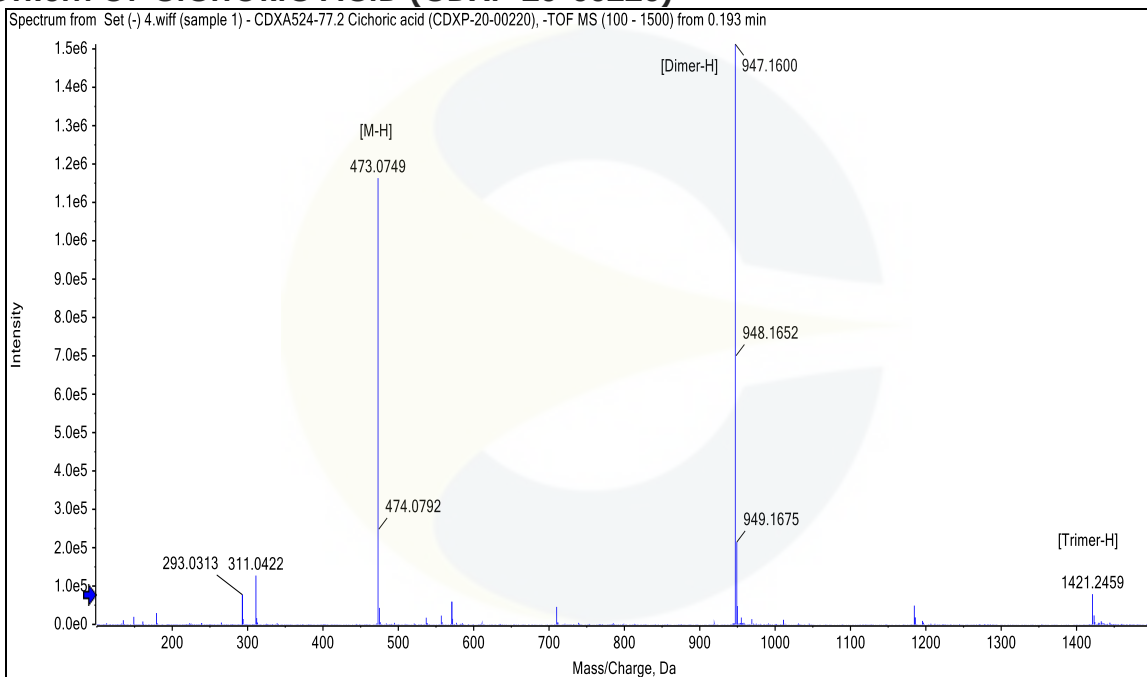
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 Email: customerservice@lifetechindia.com Website: www.lifetechindia.com

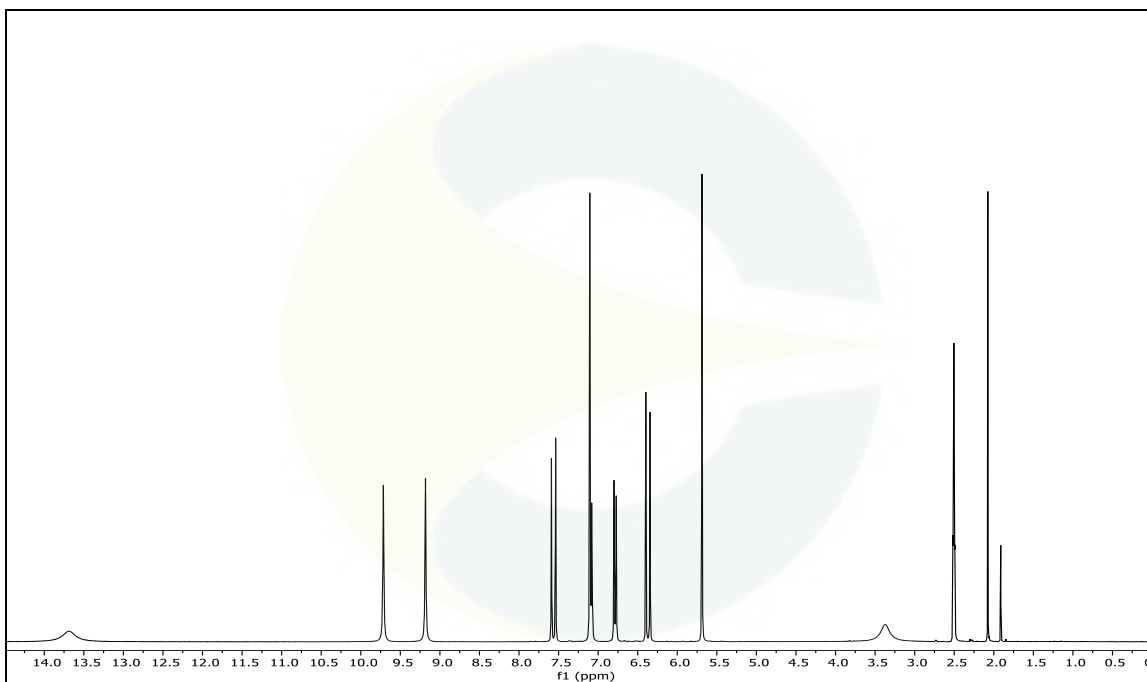
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MASS SPECTRUM OF CICHORIC ACID (CDXP-20-00220)



¹H-NMR SPECTRUM OF CICHORIC ACID (CDXP-20-00220) IN DMSO-d₆ + TMS

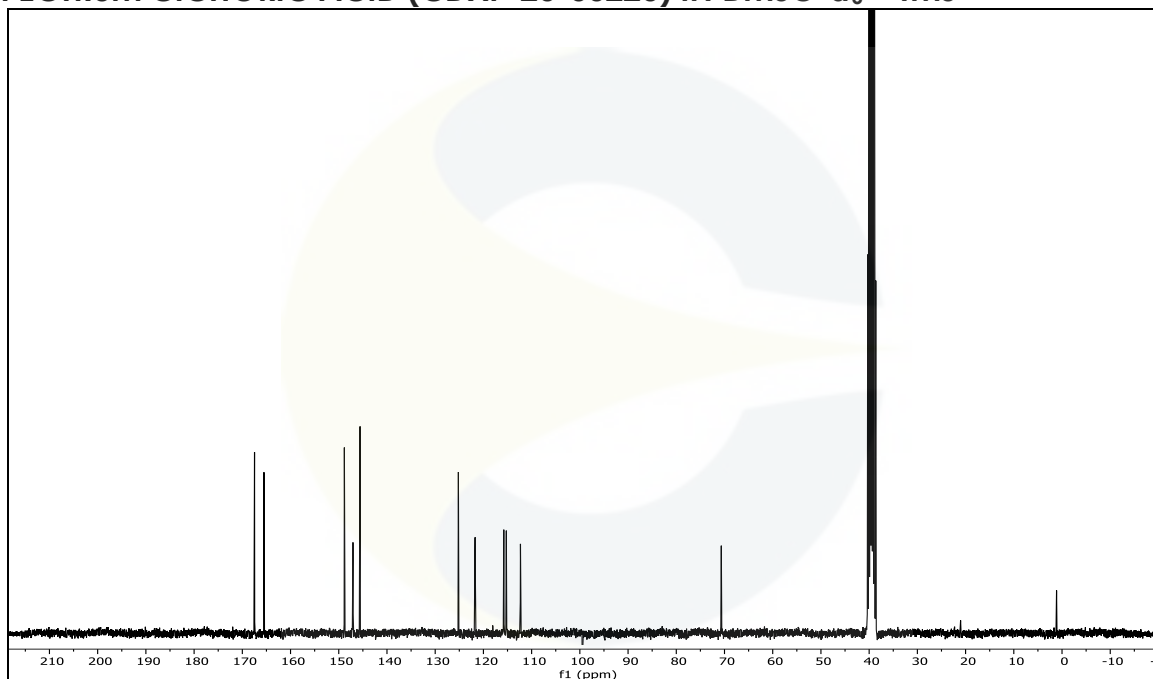


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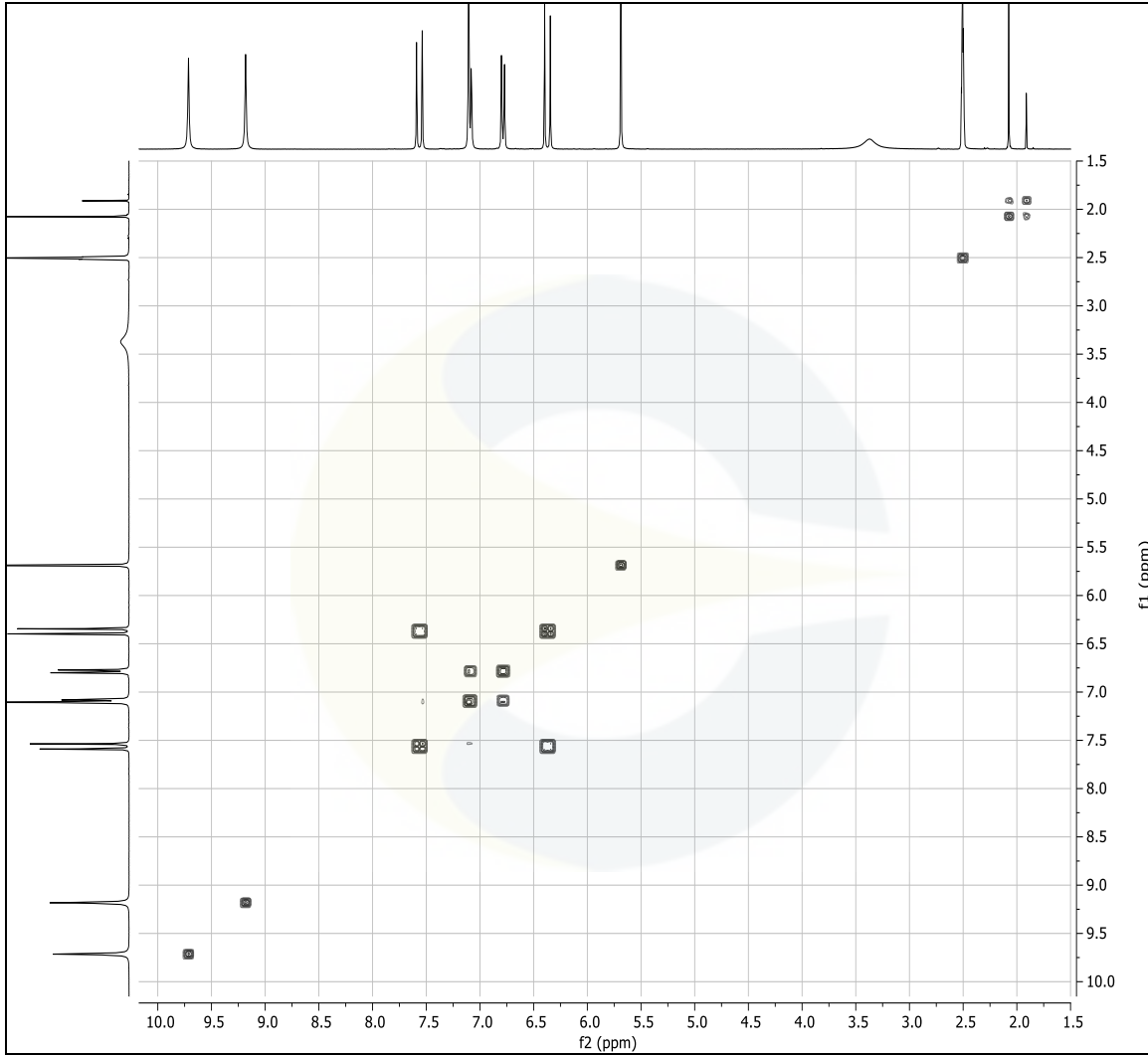
¹³C-NMR SPECTRUM CICHORIC ACID (CDXP-20-00220) IN DMSO-*d*₆ + TMS



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COSY-NMR SPECTRUM OF CICHORIC ACID (CDXP-20-00220) IN DMSO-d₆ + TMS

REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	05/14/2020	New report

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