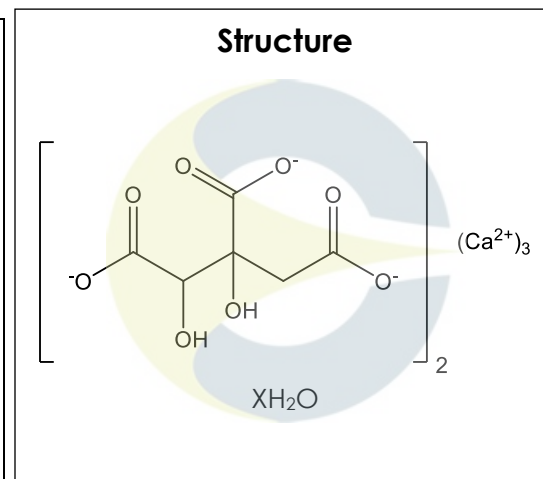


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PRODUCT NAME	(-)-Hydroxycitric acid calcium salt hydrate
PART NUMBER	00008386
STANDARD TYPE	Primary (P)
LOT NUMBER	00008386-A002
REPORT NUMBER	CDXA-RSS-9047-00
SAMPLE NUMBER	CDXP-20-00406
DATE OF SAMPLE	06/10/2020
DATE OF REPORT	07/28/2020



CHEMICAL NAMES	3-C-Carboxy-2-deoxy-D-erythro-pentonic acid calcium salt (2:3) hydrate
CHEMICAL FORMULA	(C ₆ H ₅ O ₈) ₂ Ca ₃
MOLECULAR WEIGHT (MW)	530.43
CHEMICAL FAMILY	Organic acids
CAS NUMBER	N/A
EC#(EINECS)	N/A
RTECS	N/A

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	NA	85.9%
HPLC	See below	NA	94.3%
NMR	0.700.12.4	Conforms to structure	Conforms to structure
Mass Spectrum	0.700.12.27	Conforms	Conforms
Residual Solvent*	USP <467>	NA	ND
Water	0.700.12.37	NA	8.9%†
Appearance	NA	NA	Off white powder

*Testing performed at an ISO 17025 accredited subcontracted laboratory.

†Water result includes the bonded water of the hydrate form.

ADJUSTED PURITY: 85.9% IS BASED ON (100 - 0.0 SOLVENTS - 8.9 WATER) X 94.3% HPLC

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STORAGE CONDITIONS

STORAGE Room Temperature in a dry place.

EXPIRATION DATE 06/2025 under the above conditions.

ANALYTICAL CONDITIONS

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

COLUMN Phenomenex Synergi Hydro-RP 250 x 4.6 mm, 4 µm particle size

MOBILE PHASE A - 0.1% Phosphoric acid in Milli-Q water, B - Acetonitrile;
Isocratic 0% B for 5 minutes, then increasing to 90% B over 1 minute. Hold at 90% B for 5 minutes, then decreasing to 0% B over 2 minutes. 7 minute post time.

COLUMN TEMP. 22 °C

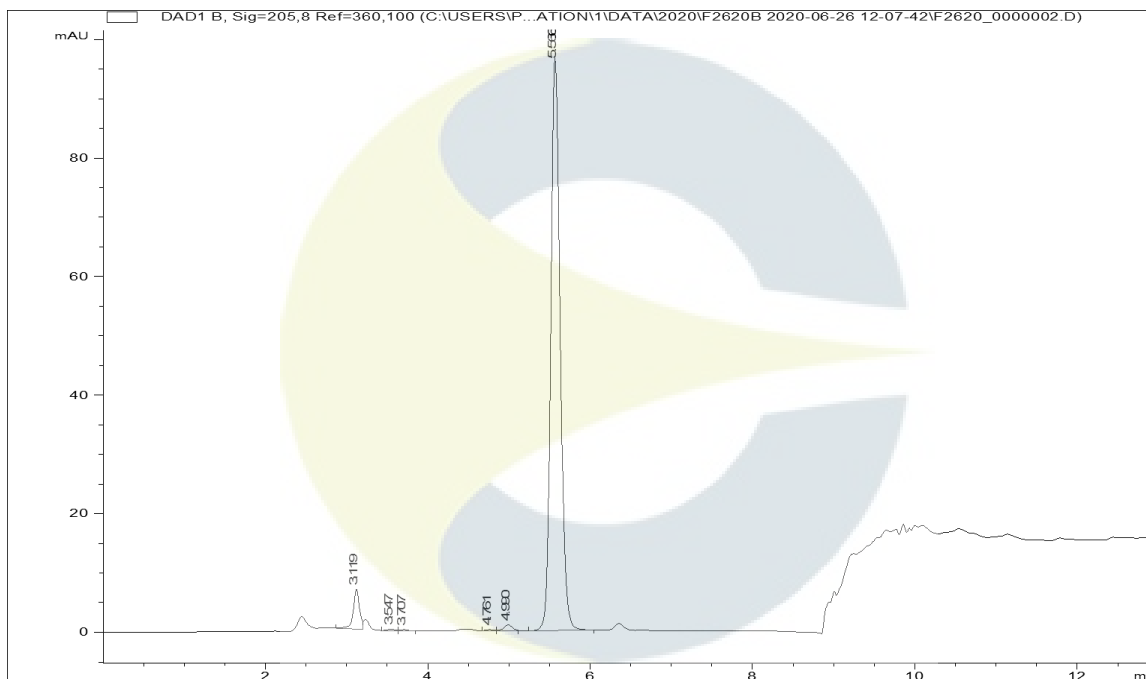
FLOW RATE 1.0 mL/minute

INJECTION VOL. 10 µL

INJECTION CONC. 1.3 mg/mL in 0.1% Phosphoric acid in Milli-Q water

DETECTION 205 ± 4 nm

HPLC CHROMATOGRAM OF (-)-HYDROXYCITRIC ACID CALCIUM SALT HYDRATE (CDXP-20-00406)

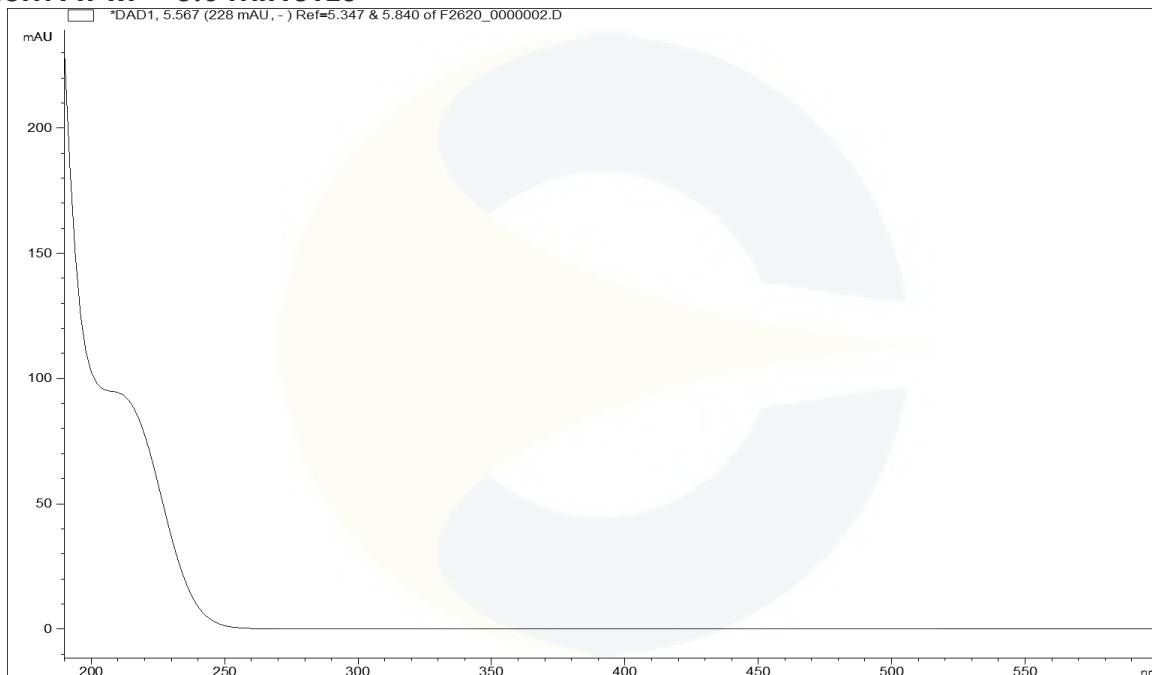


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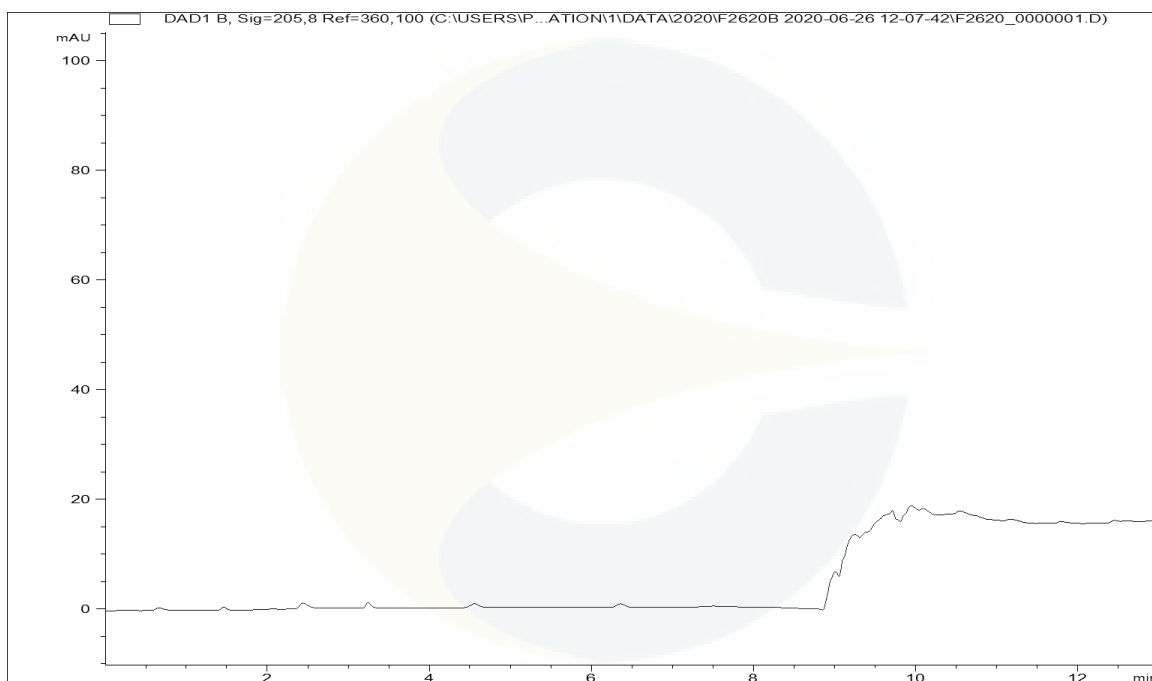
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UV SPECTRUM AT RT = 5.6 MINUTES



HPLC CHROMATOGRAM OF DILUENT BLANK

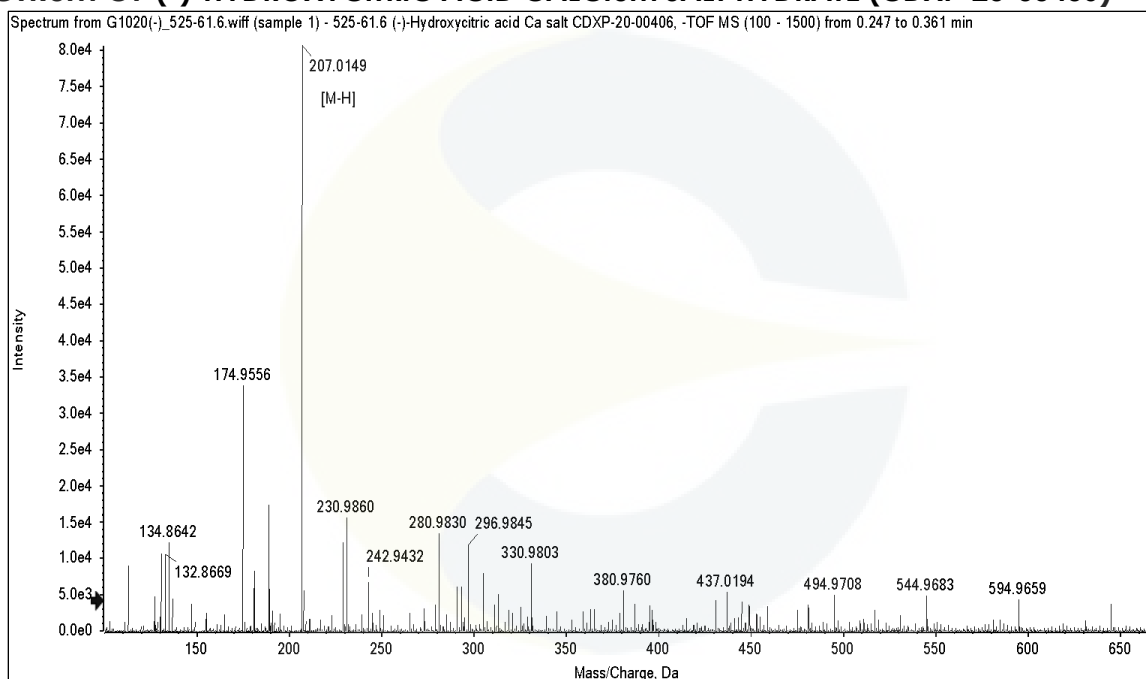


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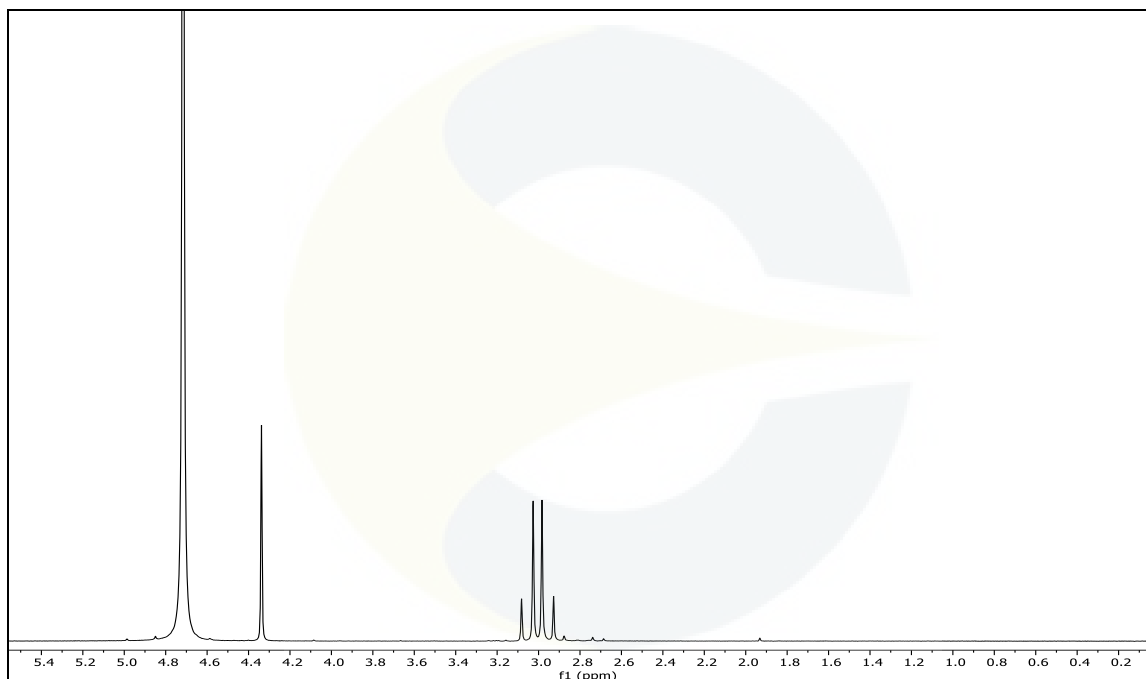
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MASS SPECTRUM OF (-)-HYDROXYCITRIC ACID CALCIUM SALT HYDRATE (CDXP-20-00406)



¹H-NMR SPECTRUM OF (-)-HYDROXYCITRIC ACID CALCIUM SALT HYDRATE (CDXP-20-00406) in D₂O + TFA-d₁

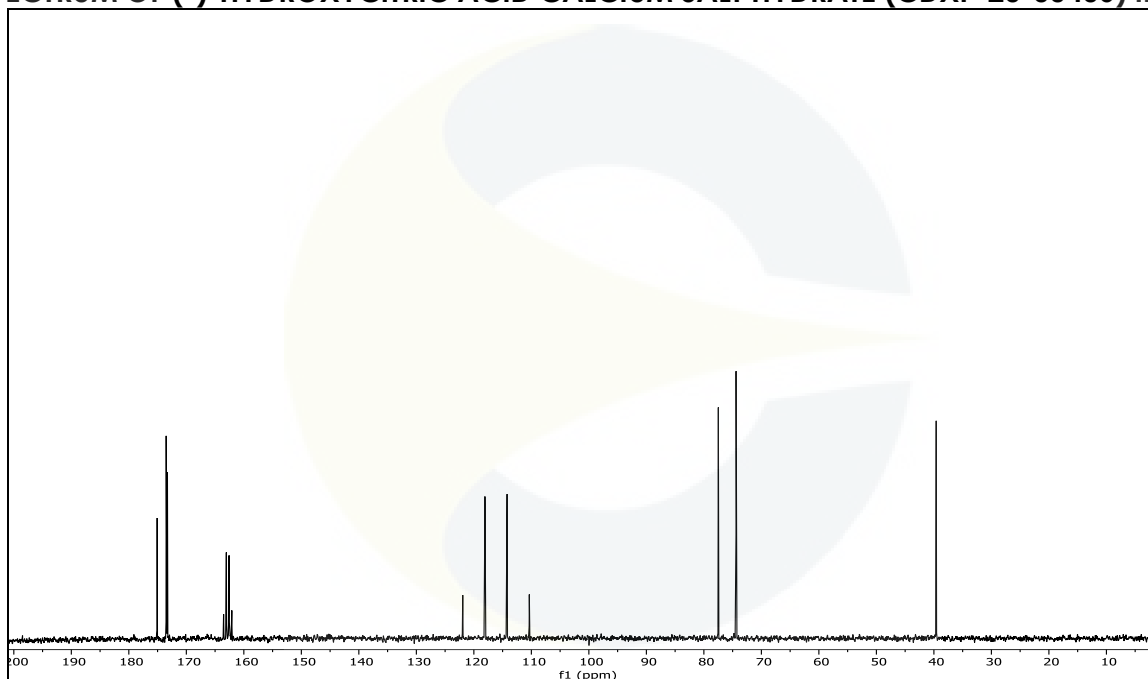


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¹³C-NMR SPECTRUM OF (-)-HYDROXYCITRIC ACID CALCIUM SALT HYDRATE (CDXP-20-00406) IN D₂O + TFA-d₁



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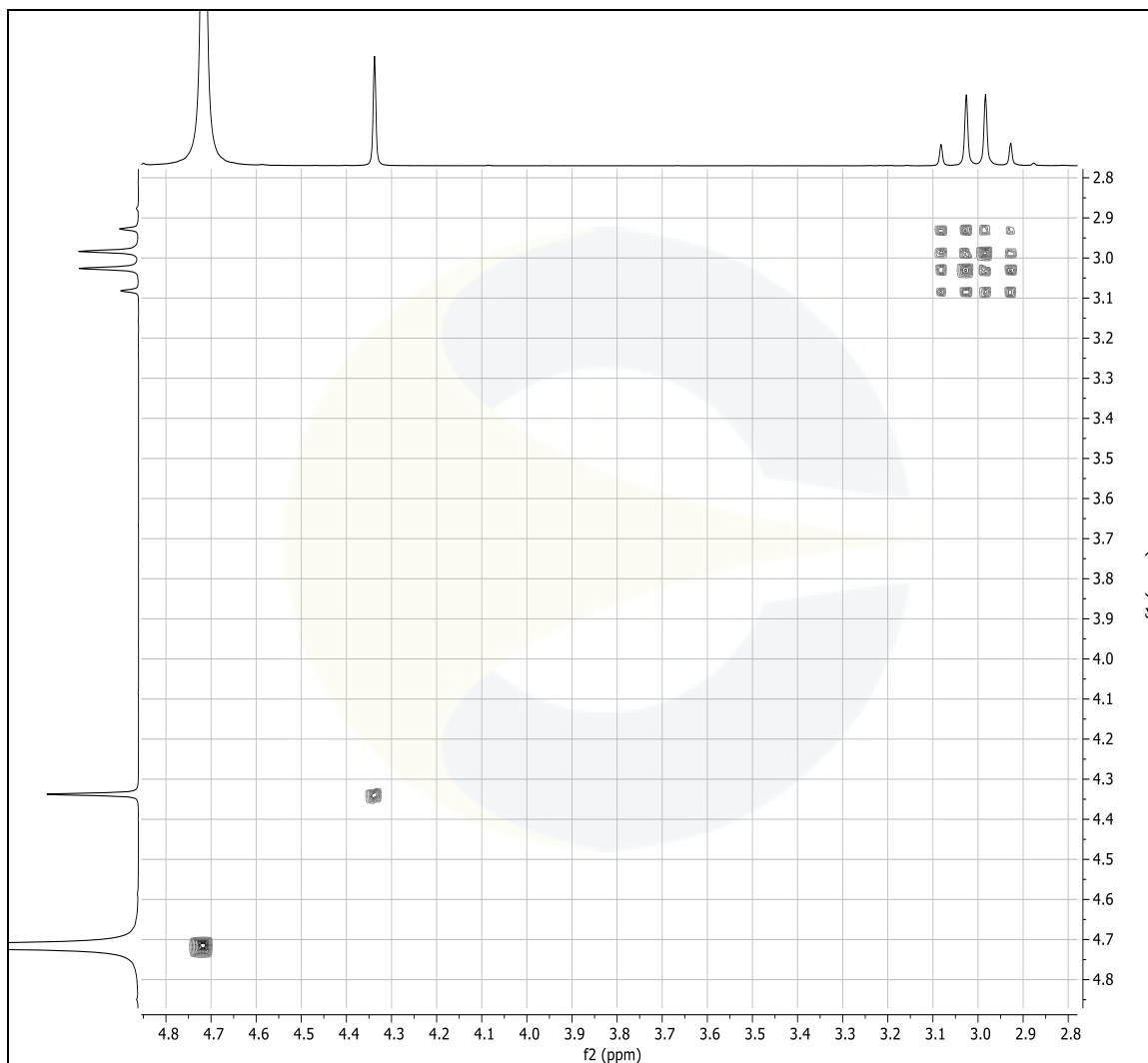
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COSY-NMR SPECTRUM OF (-)-HYDROXYCITRIC ACID CALCIUM SALT HYDRATE (CDXP-20-00406) IN D₂O + TFA-d₁



REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	07/28/2020	New report

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