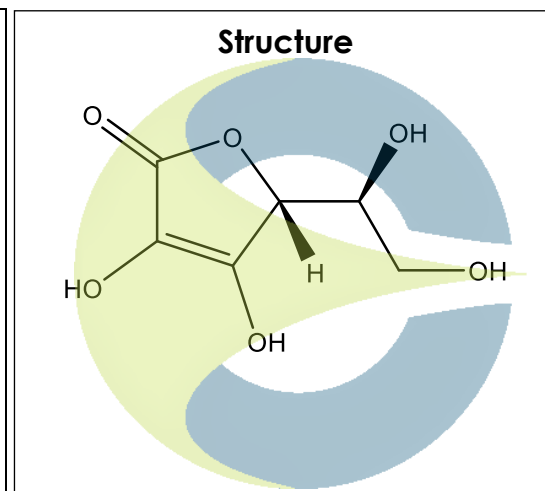


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PRODUCT NAME	L-(+)-Ascorbic acid (Vitamin C)
PART NUMBER	00111020
STANDARD TYPE	Primary (P) – Compendial Traceable
LOT NUMBER	00111020-337
REPORT NUMBER	CDXA-RSS-8141-01
SAMPLE NUMBER	CDXP-18-00705
DATE OF SAMPLE	07/03/2018
DATE OF RE-EVALUATION	06/21/2022
DATE OF REPORT	07/18/2022



CHEMICAL NAMES	3-Oxo-L-gulofuranolactone; 3-keto-L-Gulofuranolactone; 5-(1,2-Dihydroxyethyl)-3,4-dihydroxy-2(5H)-furanone; Ascorbic acid; Cebione; Cevalin; Vitacimin; Vitacin
CHEMICAL FORMULA	C ₆ H ₈ O ₆
MOLECULAR WEIGHT (MW)	176.12
CHEMICAL FAMILY	Vitamins
CAS NUMBER	[50-81-7]
EC#(EINECS)	200-066-2
RTECS	CI7650000

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	99.4%
HPLC	0.700.10.2.METH46	≥ 90%	99.4%
NMR	99.1-04-2.0-000122	Conforms to structure	Conforms to structure
Mass Spectrum	99.1-04-3.0-000126	Conforms	Conforms
Residual Solvent*	99.1-04-3.0-000621	NA	MeOH < 0.1%
Water	0.700.12.37	NA	ND
Appearance	NA	NA	White powder

ADJUSTED PURITY: 99.4% IS BASED ON (100 - 0.0 WATER - 0.0 SOLVENTS) X 99.4% HPLC

TRACEABLE SOURCE	LOT NUMBER	SAMPLE ASSAY RESULT AGAINST COMPENDIAL SOURCE
USP	Y06390	102.8%

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STORAGE CONDITIONS

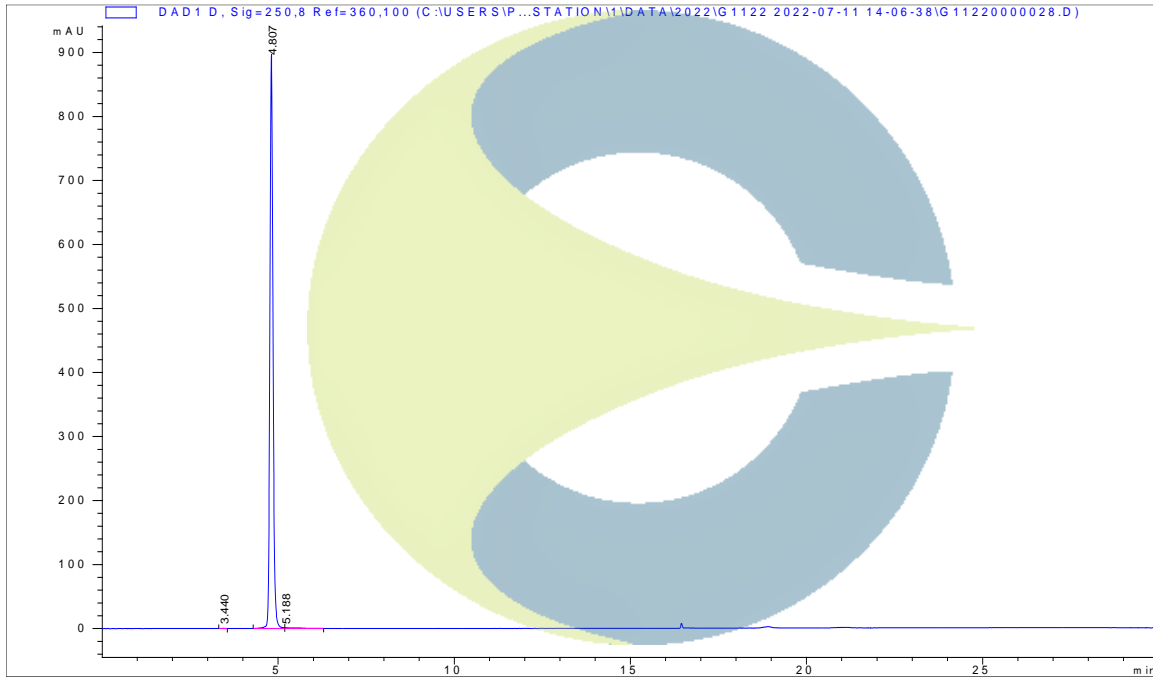
STORAGE	Room Temperature in a dry place.
EXPIRATION DATE	06/2027 under the above conditions.

ANALYTICAL CONDITIONS

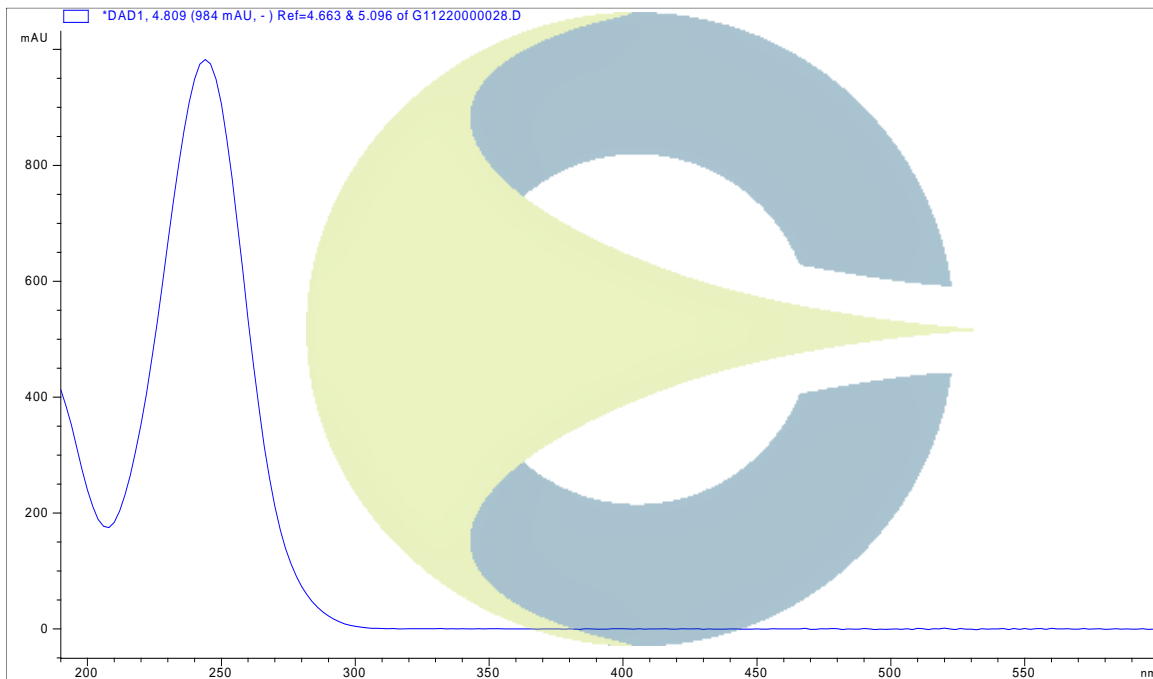
INSTRUMENT	AGILENT 1260 HPLC UV-VIS (DAD); AB-SCIEX 6600 TRIPLE TOF
COLUMN	Phenomenex Synergi Hydro-RP 250 x 4.6 mm, 4 µm particle size
MOBILE PHASE	A – 10 mM Potassium phosphate(aq.), pH 2.9; B - Acetonitrile; Isocratic 0% B for 10 minutes, increasing to 30% B over 10 minutes. Hold at 30% B for 4 minutes, then decreasing to 0% B over 5 minutes. 8 minutes post-time.
COLUMN TEMP.	22 °C
FLOW RATE	1.0 mL/minute
INJECTION VOL.	2.0 µL
INJECTION CONC.	1.0 mg/mL in Water
DETECTION	250 ± 4 nm

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HPLC CHROMATOGRAM OF L-(+)-ASCORBIC ACID (VITAMIN C) (CDXP-18-00705)



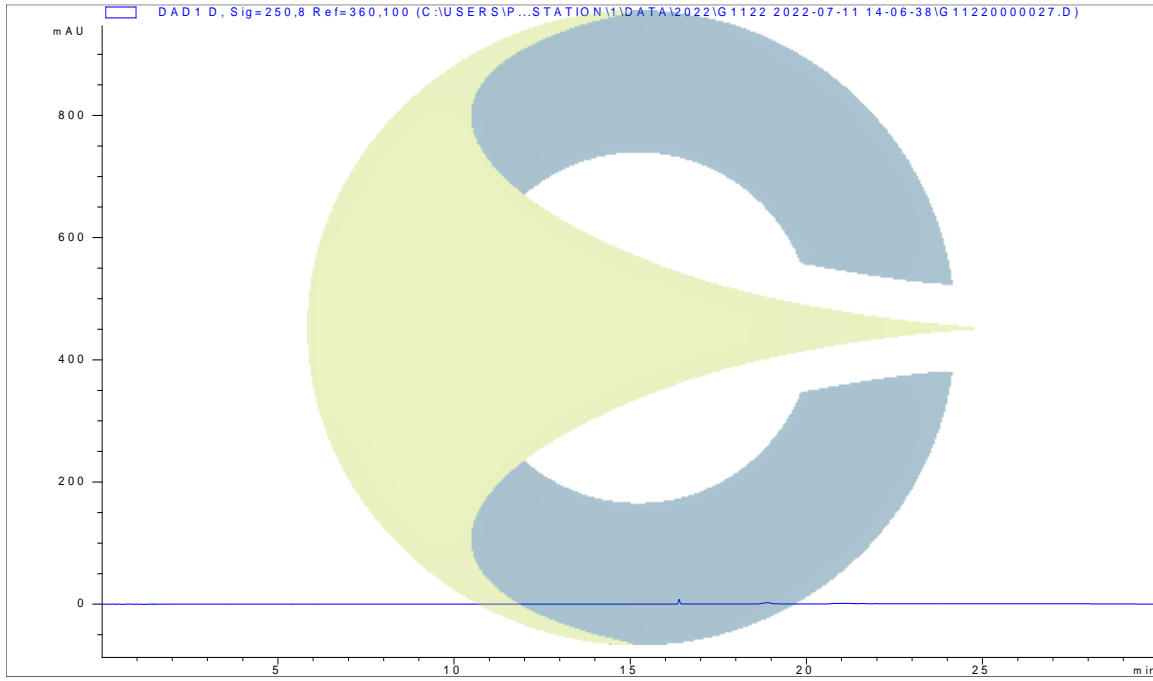
UV SPECTRUM AT RT = 4.8 MINUTES



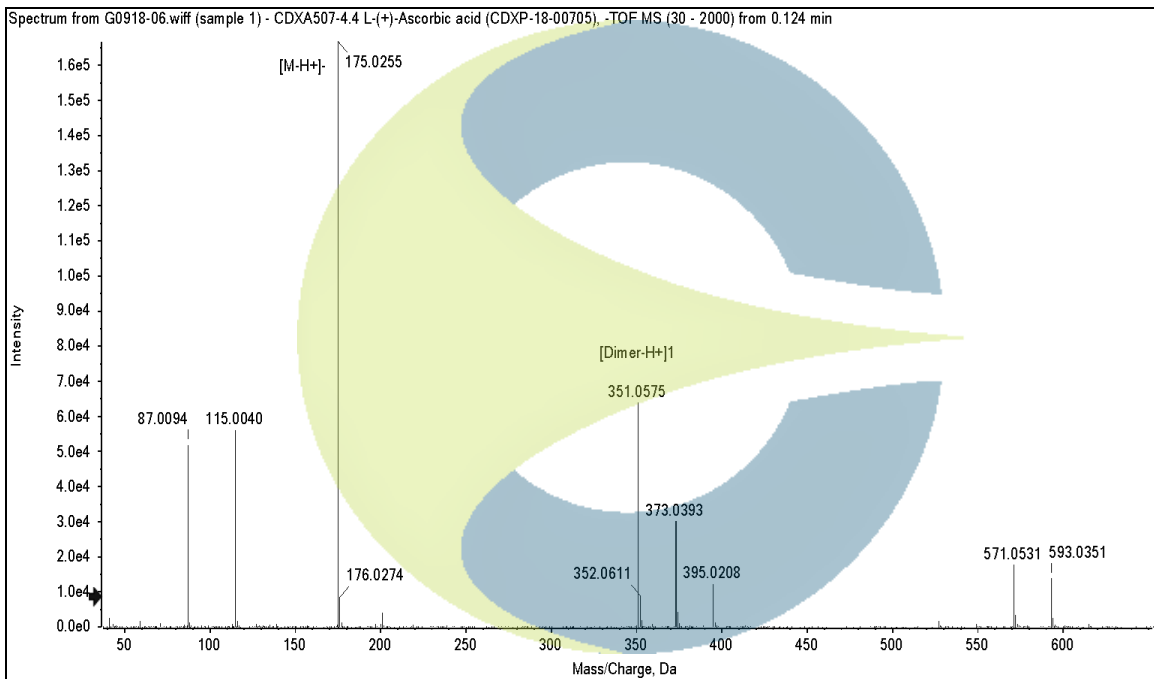
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HPLC CHROMATOGRAM OF BLANK

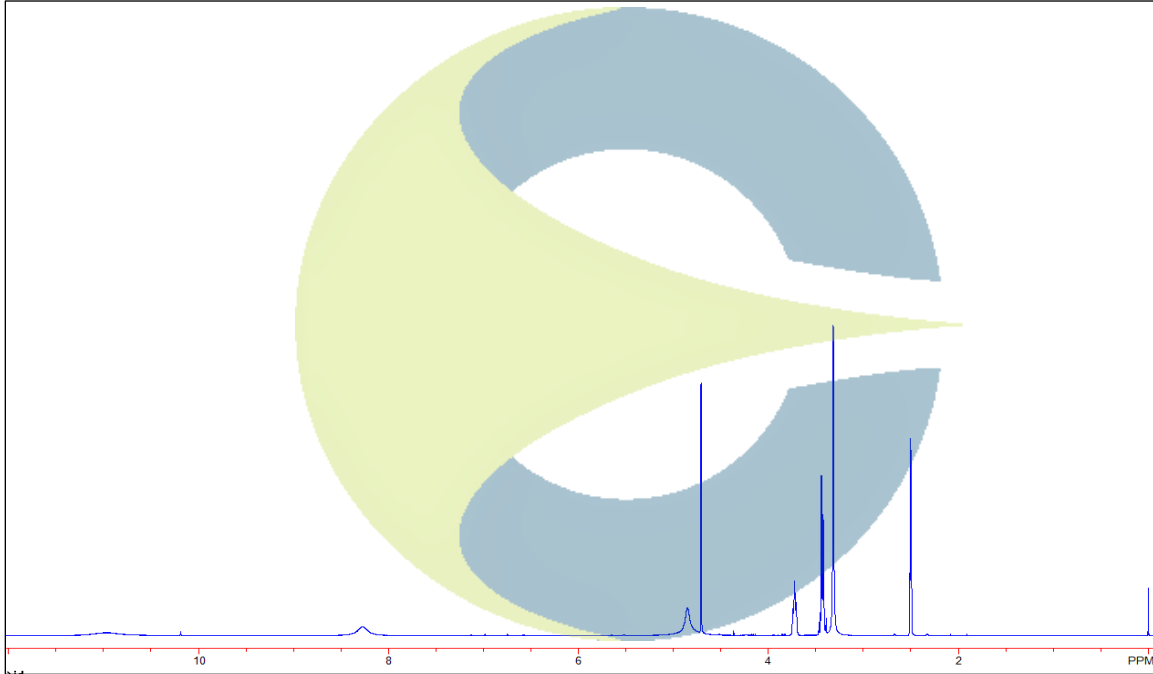


MASS SPECTRUM OF L-(+)-ASCORBIC ACID (VITAMIN C) (CDXP-18-00705)

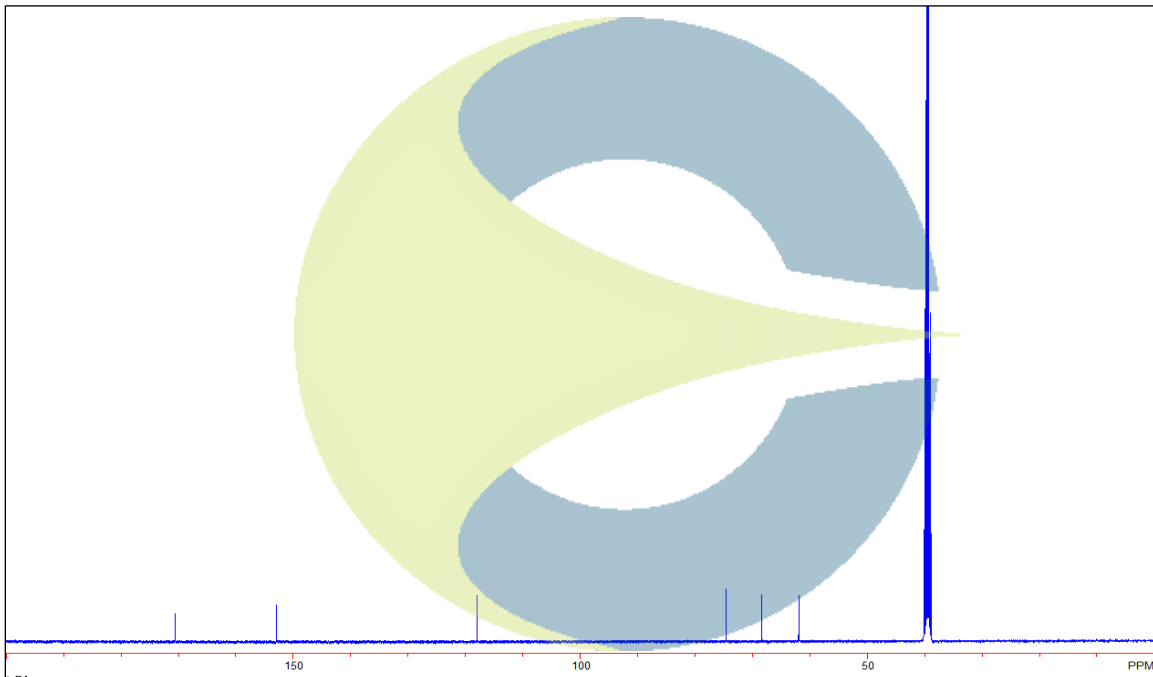


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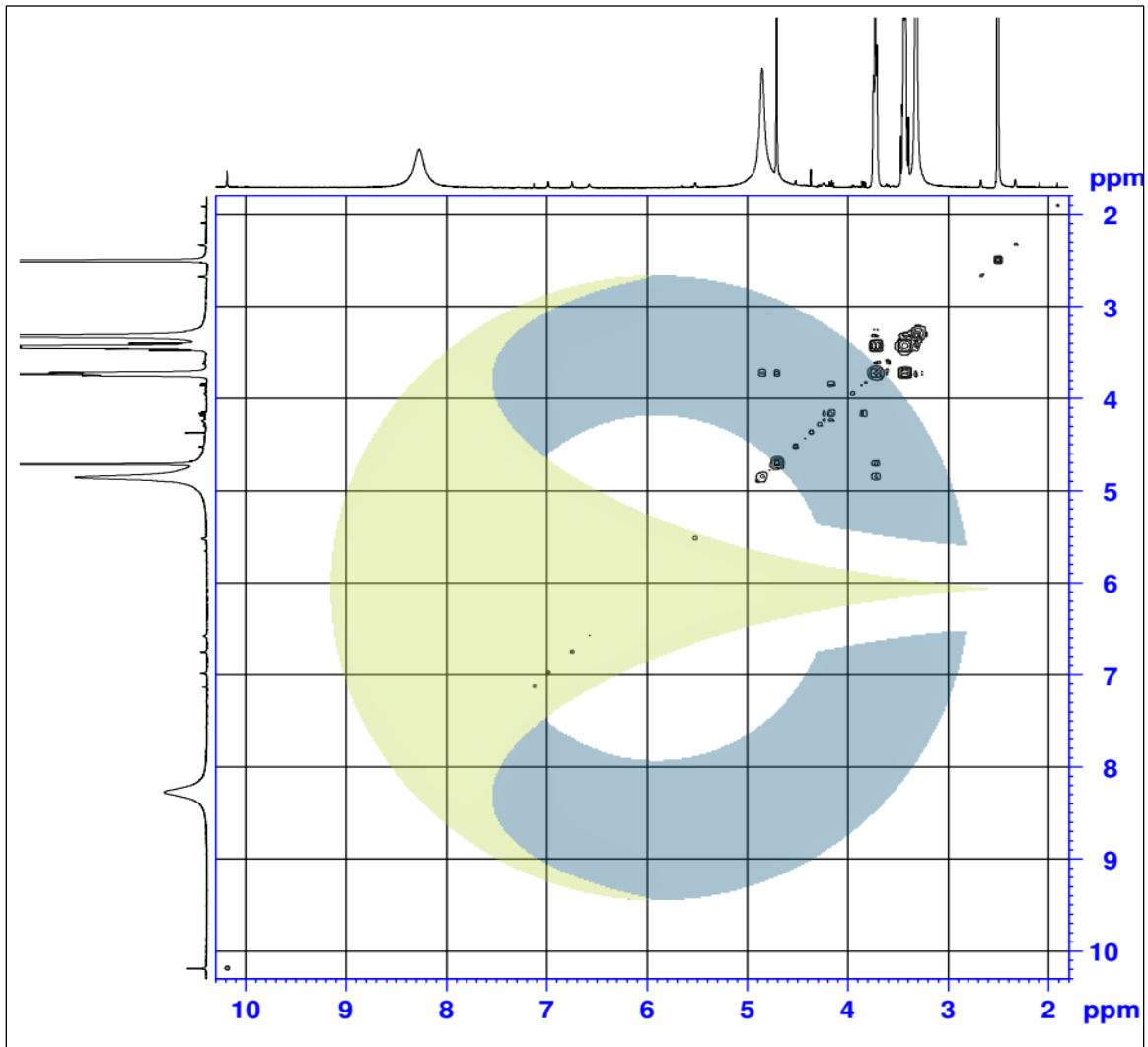
¹H-NMR SPECTRUM OF L-(+)-ASCORBIC ACID (VITAMIN C) (CDXP-18-00705) IN DMSO-d₆



¹³C-NMR SPECTRUM OF L-(+)-ASCORBIC ACID (VITAMIN C) (CDXP-18-00705) IN DMSO-d₆



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COSY-NMR SPECTRUM OF L-(+)-ASCORBIC ACID (VITAMIN C) (CDXP-18-00705) IN DMSO-d₆

REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	08/23/2018	New report
01	07/18/2022	Passed re-evaluation by HPLC and KF. Updated results, expiration date, analytical conditions, and chromatograms.

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