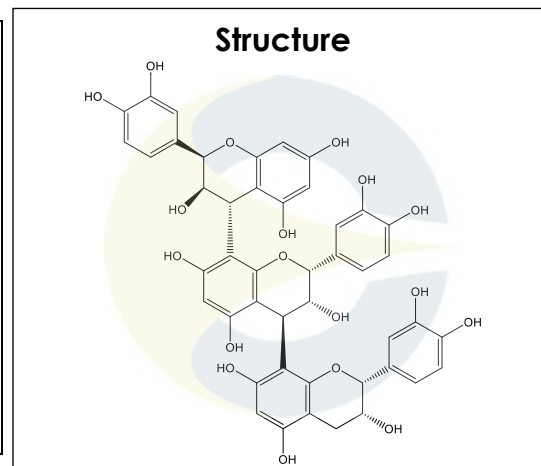


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PRODUCT NAME	Procyanidin C1
PART NUMBER	00016232
STANDARD TYPE	Primary (P)
LOT NUMBER	00016232-141
REPORT NUMBER	CDXA-RSS-9223-00
SAMPLE NUMBER	CDXP-20-00777
DATE OF SAMPLE	10/21/2020
DATE OF REPORT	12/14/2020



CHEMICAL NAMES	Cinnamtannin A ₁ ; Proanthocyanidin C ₁ ; Procyanidiol C ₁
CHEMICAL FORMULA	C ₄₅ H ₃₈ O ₁₈
MOLECULAR WEIGHT (MW)	866.77
CHEMICAL FAMILY	Anthocyanidins
CAS NUMBER	[37064-30-5]
EC#(EINECS)	N/A
RTECS	WY9070000

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	NA	83.6%
HPLC	0.700.10.2.METH22	≥ 90%	96.0%
NMR	0.700.12.4	Conforms to structure	Conforms to structure
Mass Spectrum	0.700.12.27	Conforms	Conforms
Residual Solvent*	USP <467>	NA	ACN: 559 ppm; Acetone: 1,600 ppm; EtOH: 16,900 ppm; EtOAc: 10,900 ppm; 2-Propanol: 8,510 ppm
Water	0.700.12.37	NA	9.1%
Appearance	NA	NA	Tan powder

*Testing performed at an ISO 17025 accredited subcontracted laboratory.

ADJUSTED PURITY: 83.6% IS BASED ON (100 - 3.8 SOLVENTS - 9.1 WATER) X 96.0% HPLC

STORAGE CONDITIONS

STORAGE	-20 °C in a dry place.
EXPIRATION DATE	10/2025 under the above conditions.

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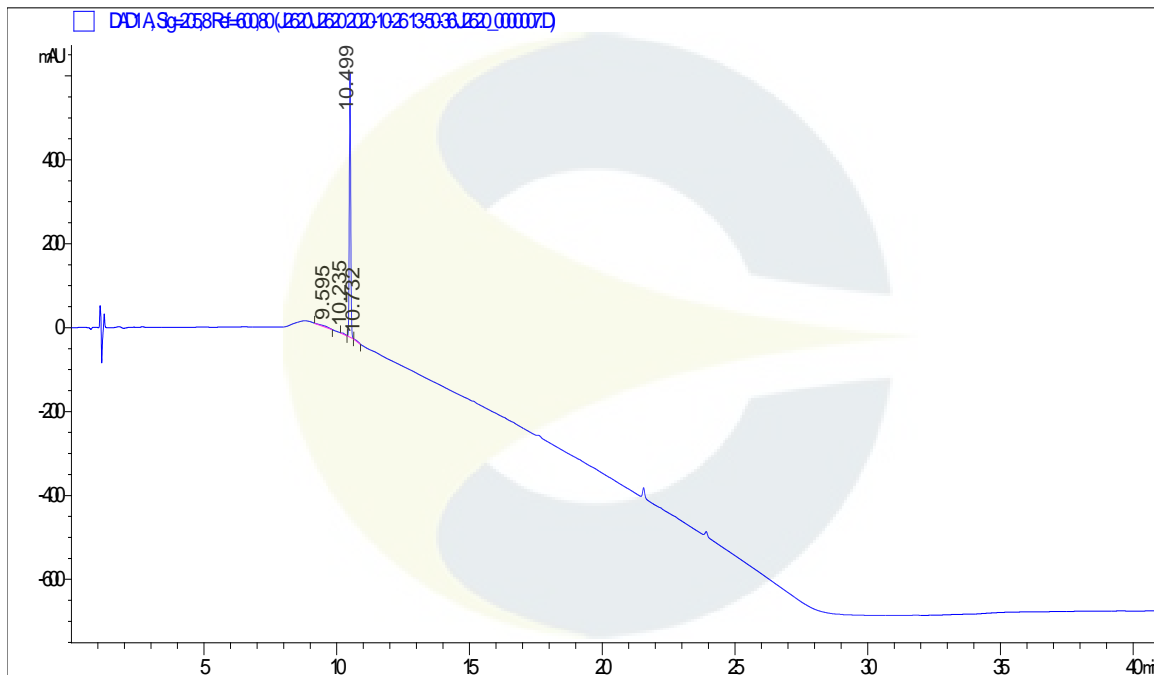
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ANALYTICAL CONDITIONS

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.	0.1 µL
INJECTION CONC.	1.3 mg/mL in Methanol
DETECTION	205 ± 4 nm

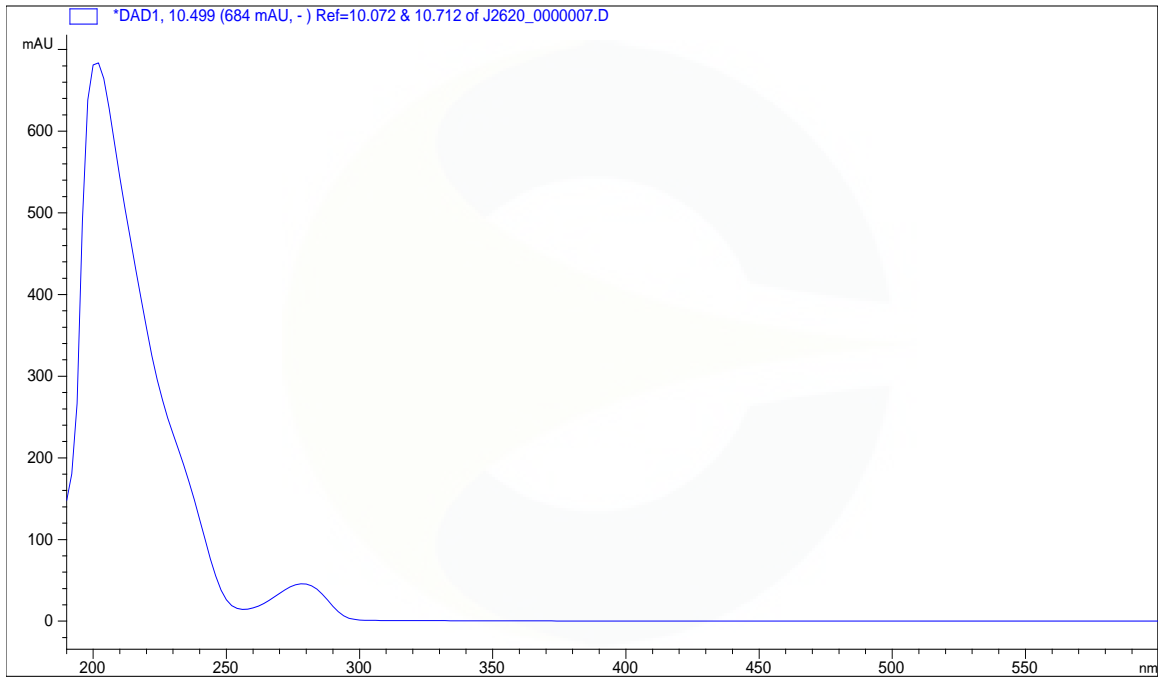
HPLC CHROMATOGRAM OF PROCYANIDIN C1 (CDXP-20-00777)



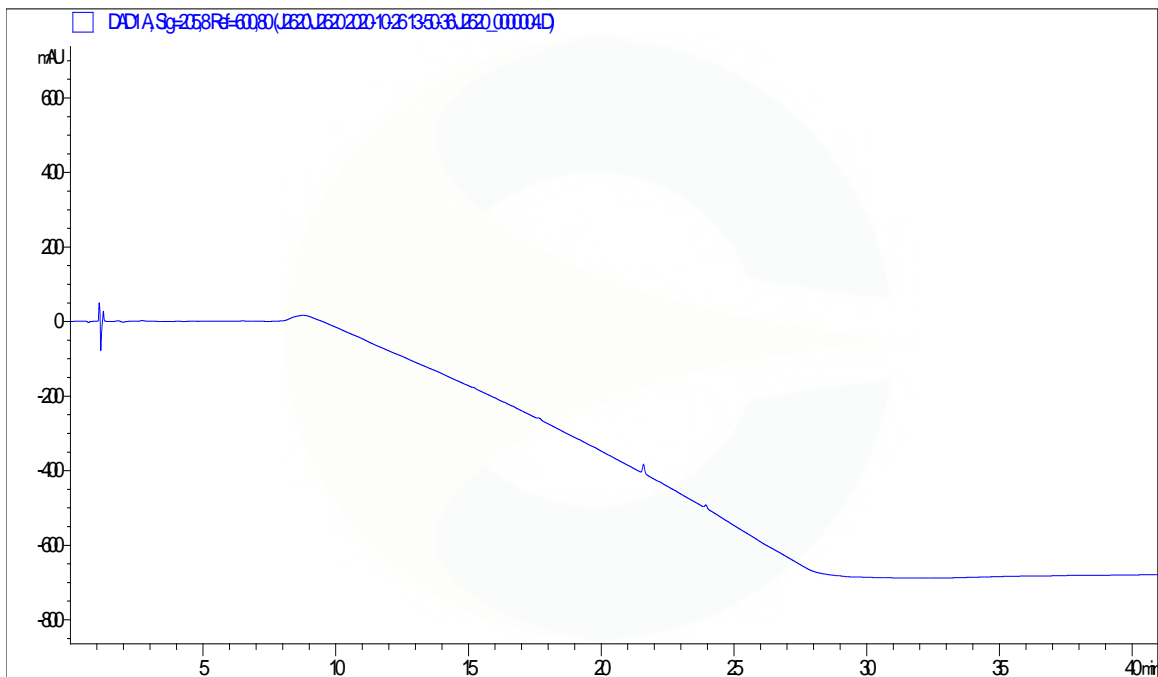
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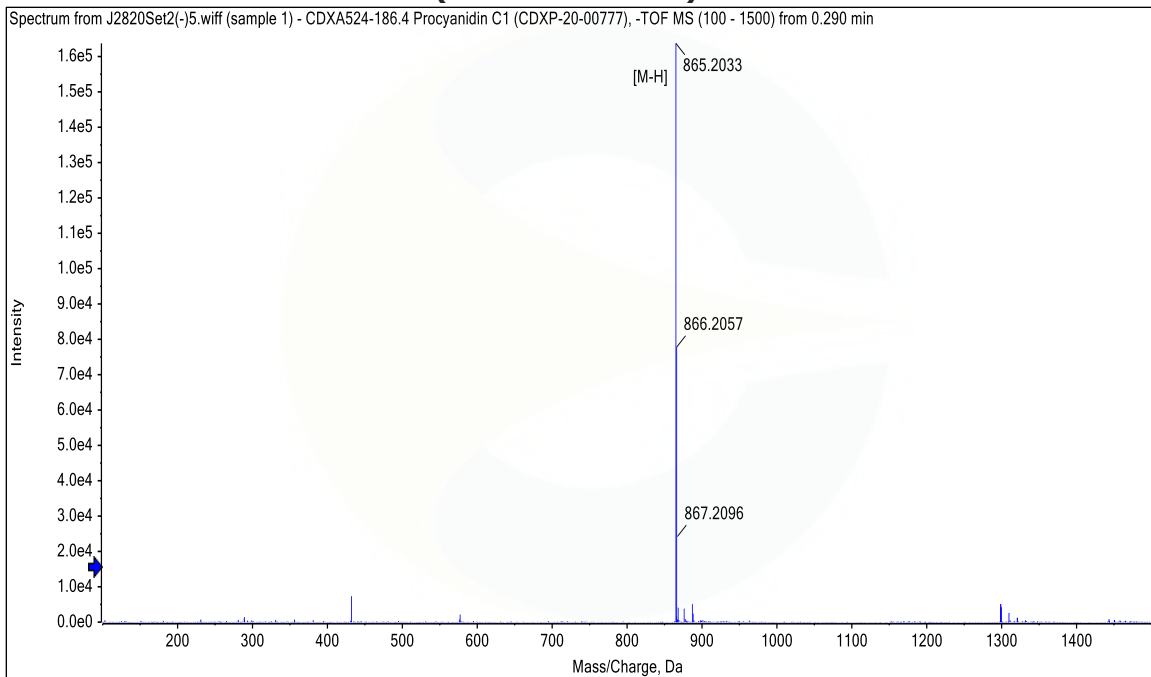
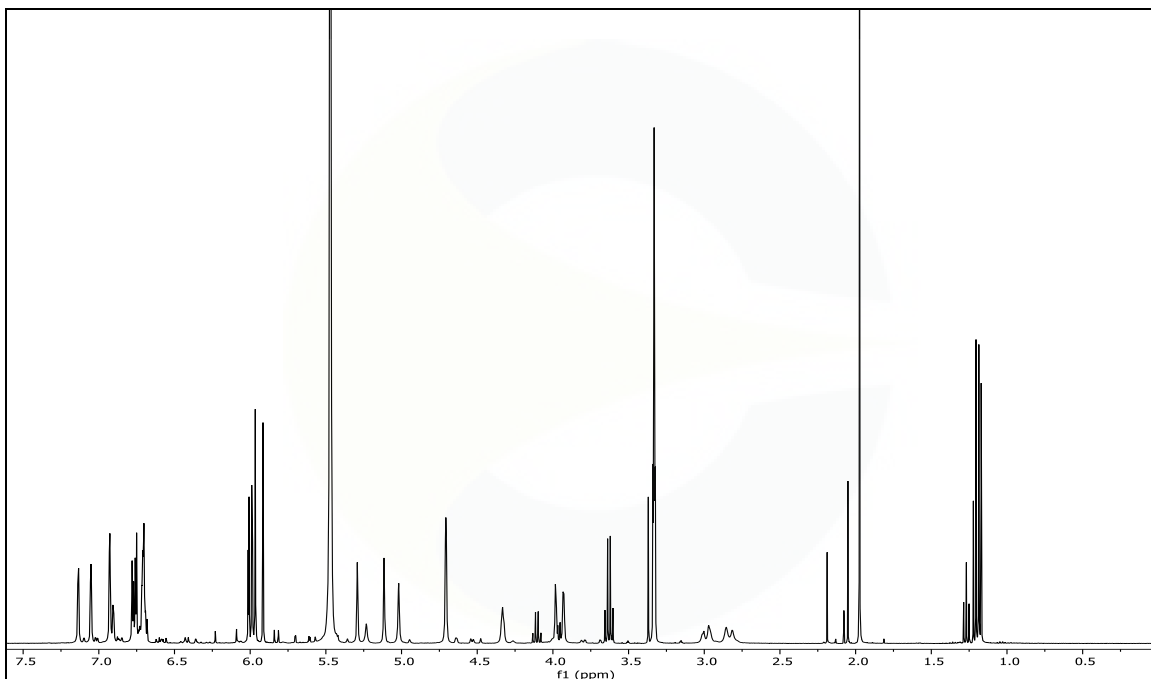
UV SPECTRUM AT 10.5 MINUTES



HPLC CHROMATOGRAM OF DILUENT BLANK

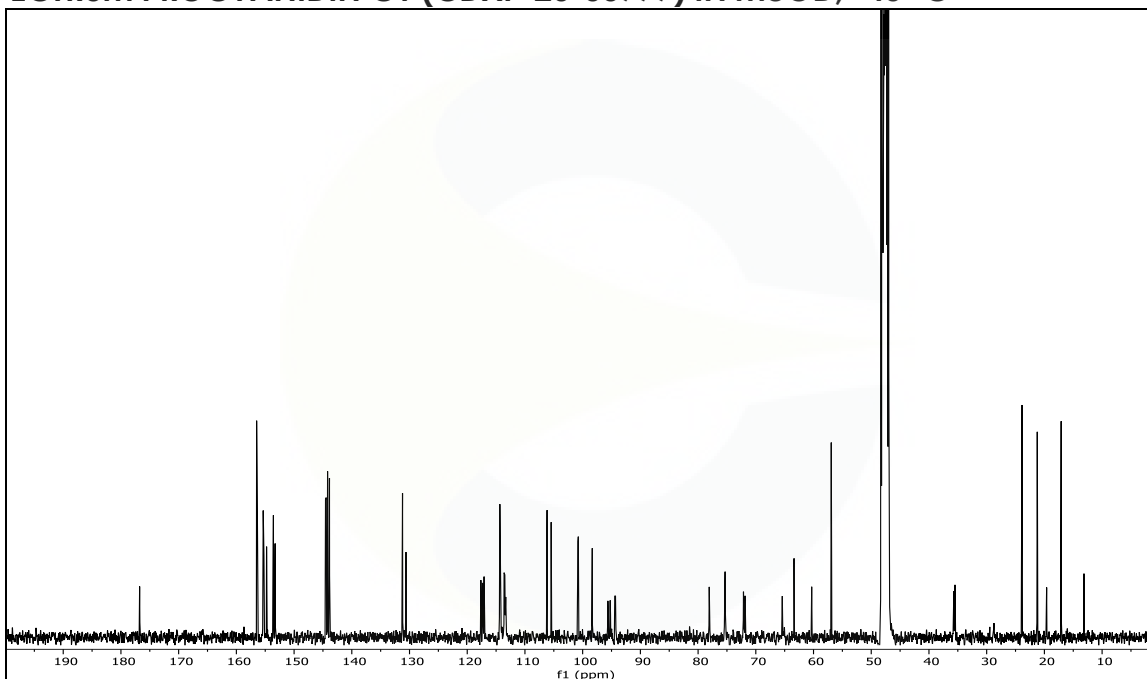


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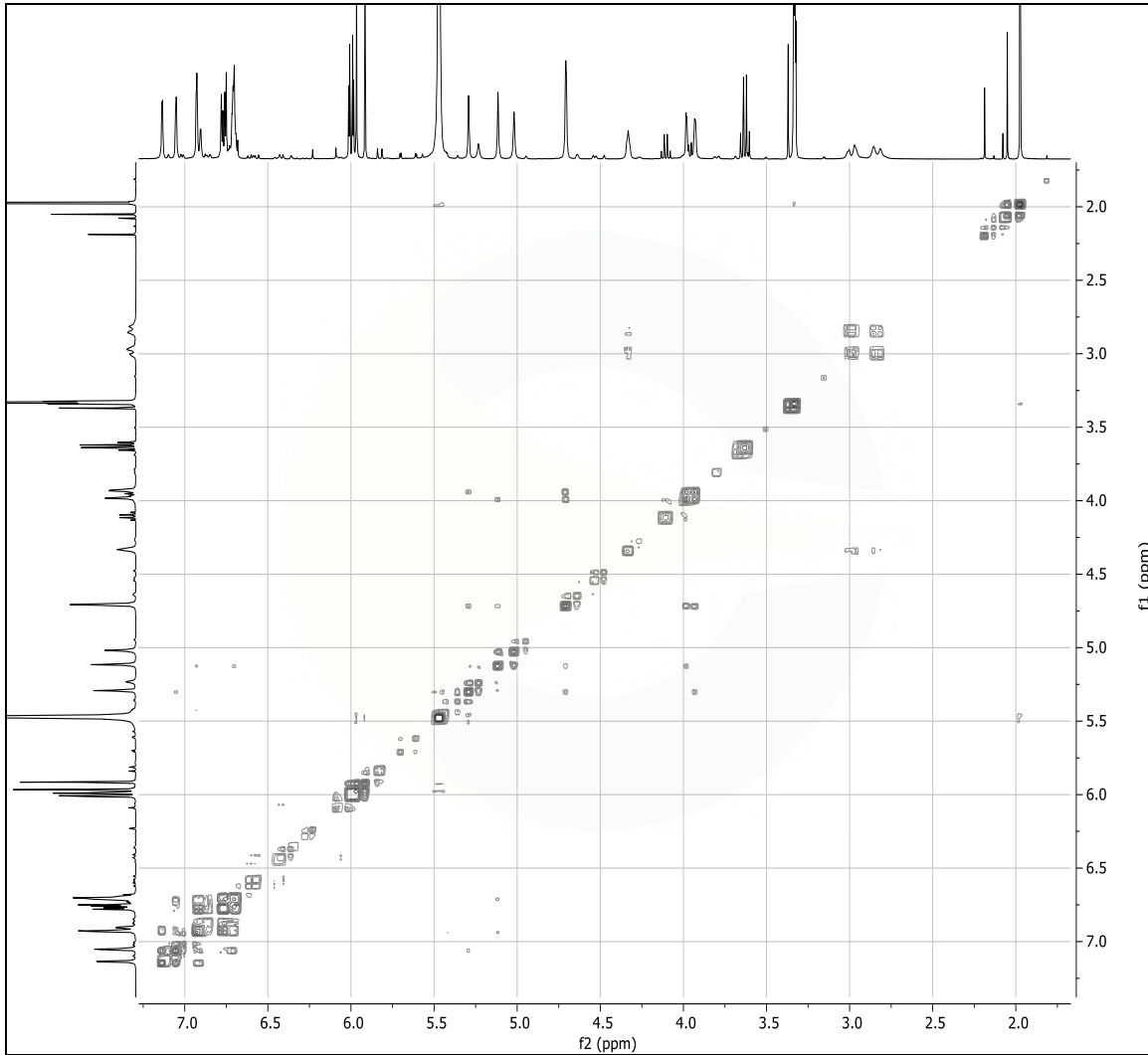
MASS SPECTRUM OF PROCYANIDIN C1 (CDXP-20-00777)**¹H-NMR SPECTRUM OF PROCYANIDIN C1 (CDXP-20-00777) IN MeOD, -40° C**

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¹³C-NMR SPECTRUM PROCYANIDIN C1 (CDXP-20-00777) IN MeOD, -40° C



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COSY-NMR SPECTRUM OF PROCYANIDIN C1 (CDXP-20-00777) IN MeOD, -40° C

REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	12/14/2020	New report

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