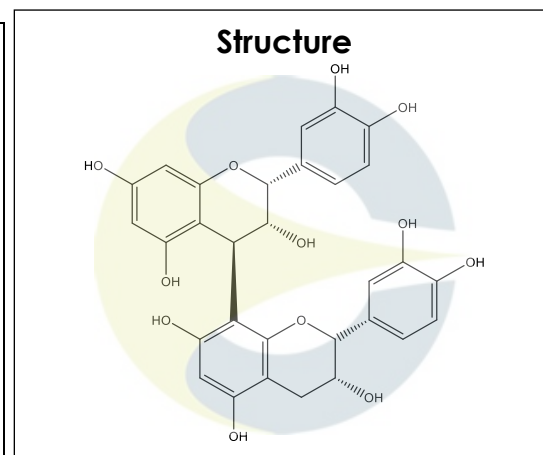


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<b>PRODUCT NAME</b>	Procyanidin B2
<b>PART NUMBER</b>	00016231
<b>STANDARD TYPE</b>	Primary (P)
<b>LOT NUMBER</b>	00016231-709
<b>REPORT NUMBER</b>	CDXA-RSS-9503-00
<b>SAMPLE NUMBER</b>	CDXP-21-00664
<b>DATE OF SAMPLE</b>	09/15/2021
<b>DATE OF REPORT</b>	10/15/2021



<b>CHEMICAL NAMES</b>	(2R,2'R,3R,3'R,4R)-2,2'-Bis(3,4-dihydroxyphenyl)-3,3',4,4'-tetrahydro- [4,8'-bi-2H-1-benzopyran]-3,3',5,5',7,7'-hexol; (+)-Procyanidin B <sub>2</sub> ; Proanthocyanidin B <sub>2</sub>
<b>CHEMICAL FORMULA</b>	C <sub>30</sub> H <sub>26</sub> O <sub>12</sub>
<b>MOLECULAR WEIGHT (MW)</b>	578.52
<b>CHEMICAL FAMILY</b>	Anthocyanidins
<b>CAS NUMBER</b>	[29106-49-8]
<b>EC#(EINECS)</b>	NA
<b>RTECS</b>	DT4325100

**ANALYTICAL RESULTS**

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	92.7%
HPLC	0.700.10.2.METH22	≥ 90%	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: 997 ppm
Water	0.700.12.37	NA	4.3%
Appearance	NA	NA	Off white powder

\*Testing performed at a subcontracted laboratory.

ADJUSTED PURITY: 92.7% IS BASED ON (100 - 0.1 SOLVENTS - 4.3 WATER) X 97.0% HPLC

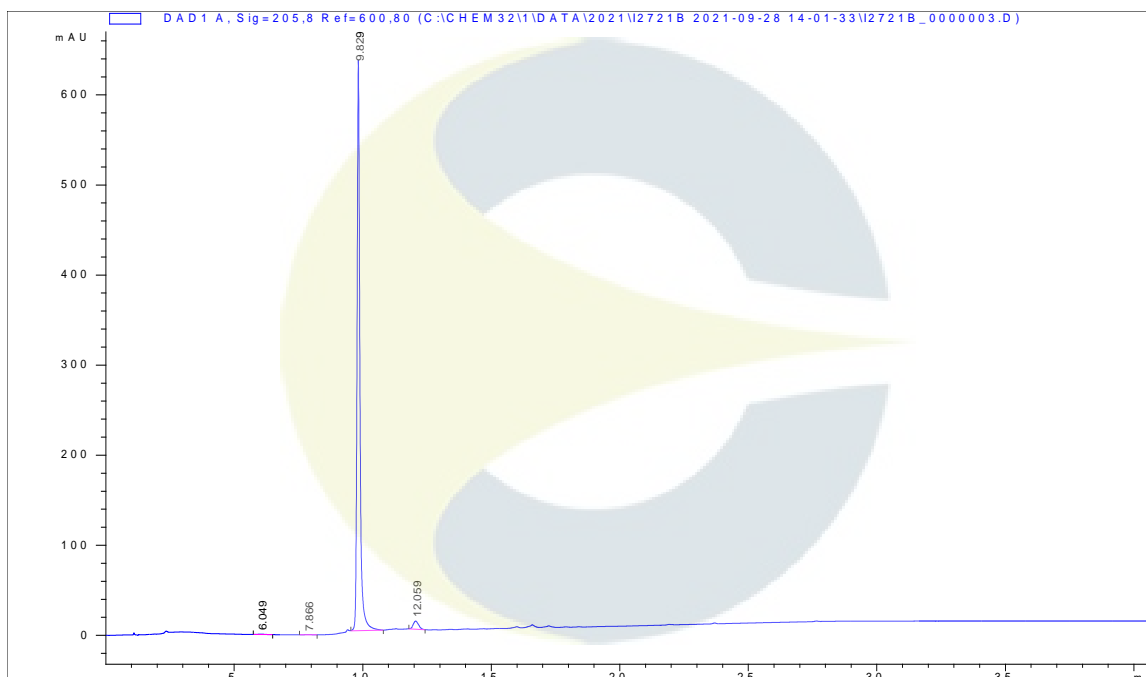
**STORAGE CONDITIONS**

<b>STORAGE</b>	-20 °C in a dry place.
<b>EXPIRATION DATE</b>	09/2026 under the above conditions.

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**ANALYTICAL CONDITIONS**

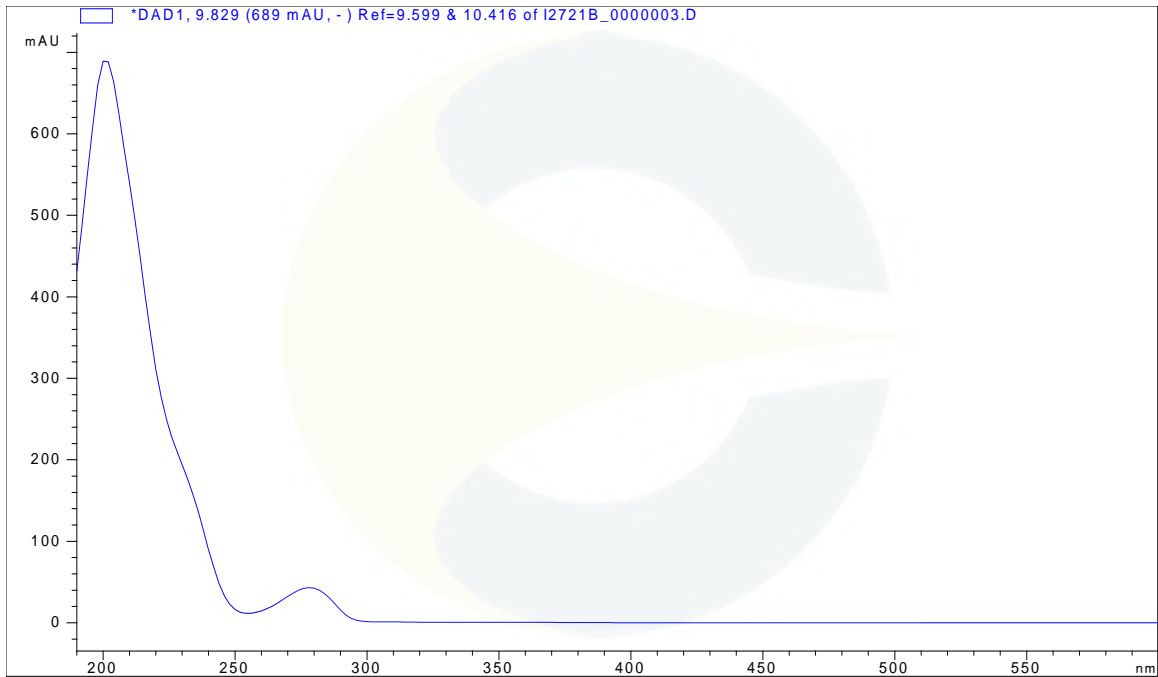
<b>INSTRUMENT</b>	AGILENT 1260 HPLC UV-VIS (DAD); AB-SCIEX 6600 TRIPLE TOF
<b>COLUMN</b>	Phenomenex Luna C18(2) 150 x 2.00 mm, 5 µm particle size
<b>MOBILE PHASE</b>	A - Ultrapure water, B - Acetonitrile; Isocratic 5% B for 5 minutes, then increasing to 95% B over 20 minutes. Hold at 95% B for 15 minutes, then decreasing to 5% B over 1 minute.
<b>COLUMN TEMP.</b>	60 °C
<b>FLOW RATE</b>	0.4 mL/minute
<b>INJECTION VOL.</b>	0.2 µL
<b>INJECTION CONC.</b>	1.1 mg/mL in Methanol
<b>DETECTION</b>	205 ± 4 nm

**HPLC CHROMATOGRAM OF PROCYANIDIN B2 (CDXP-21-00664)**


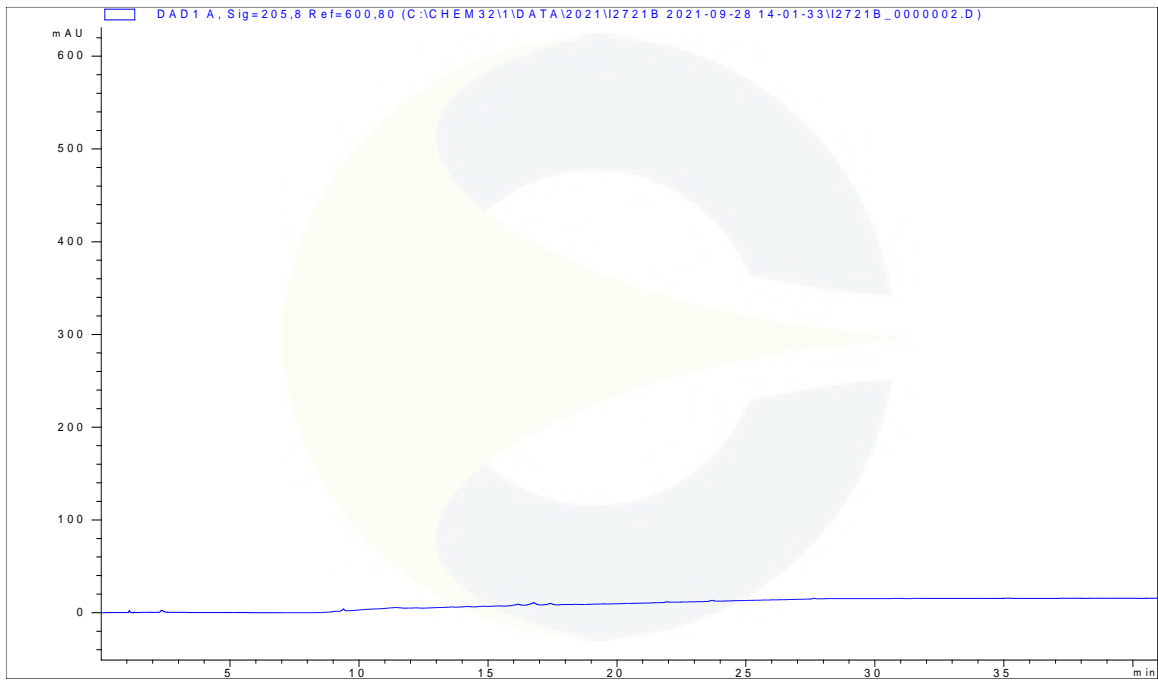
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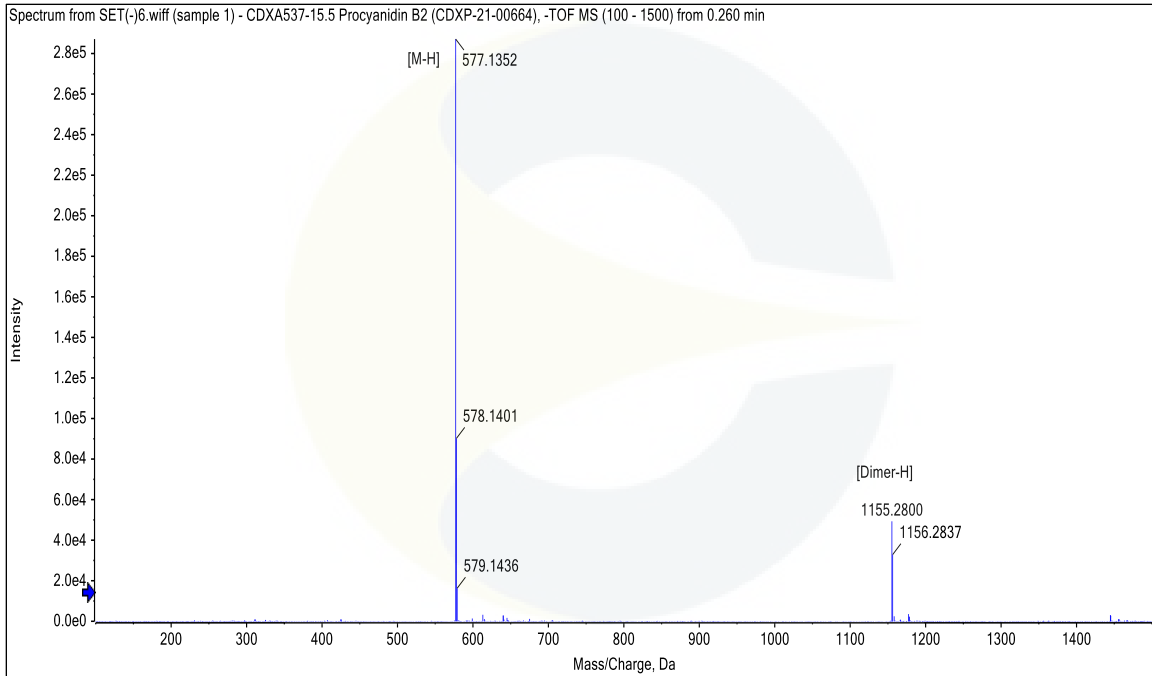
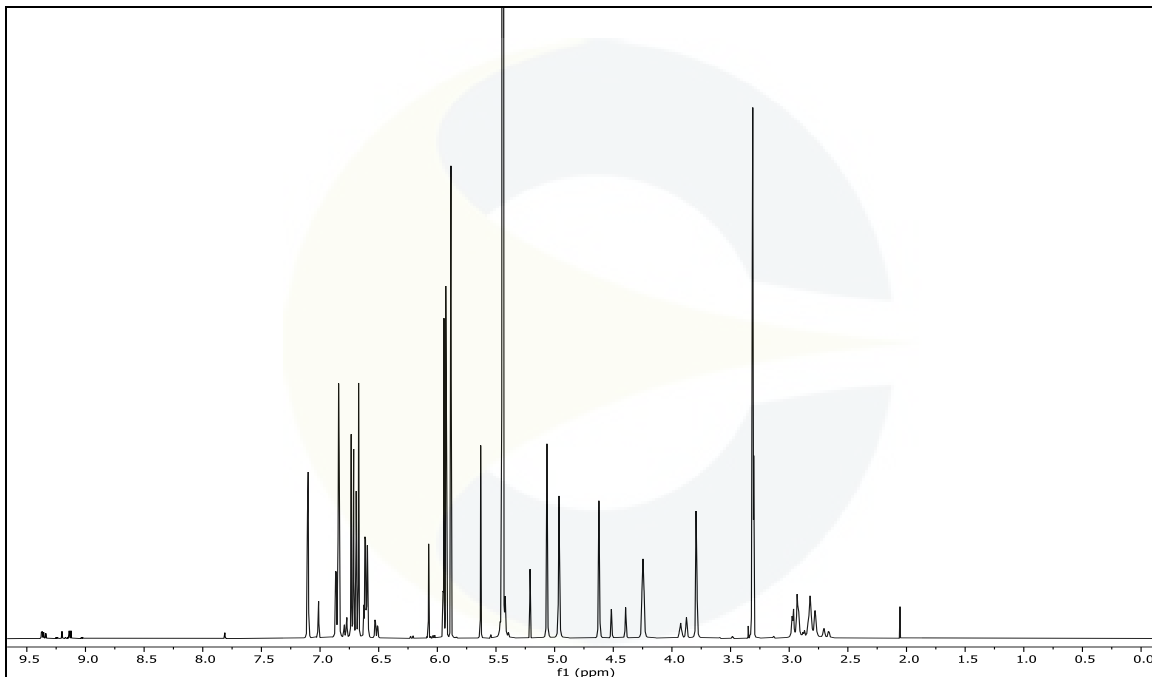
**UV SPECTRUM AT RT = 9.8 MINUTES**



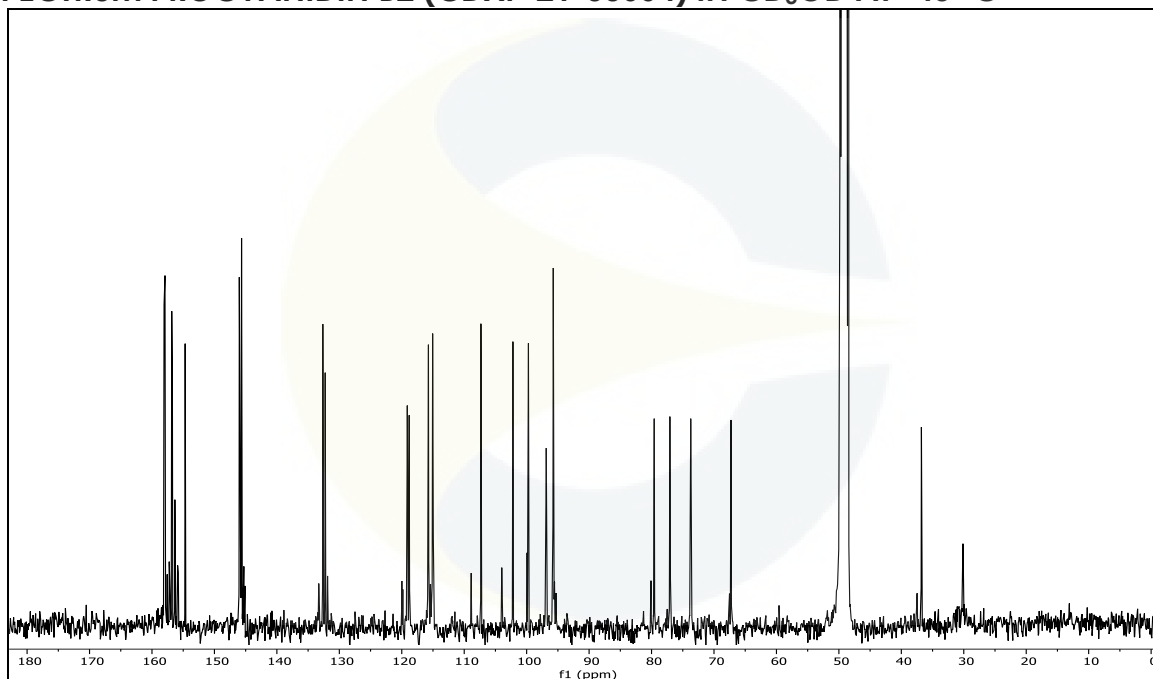
**HPLC CHROMATOGRAM OF DILUENT BLANK**



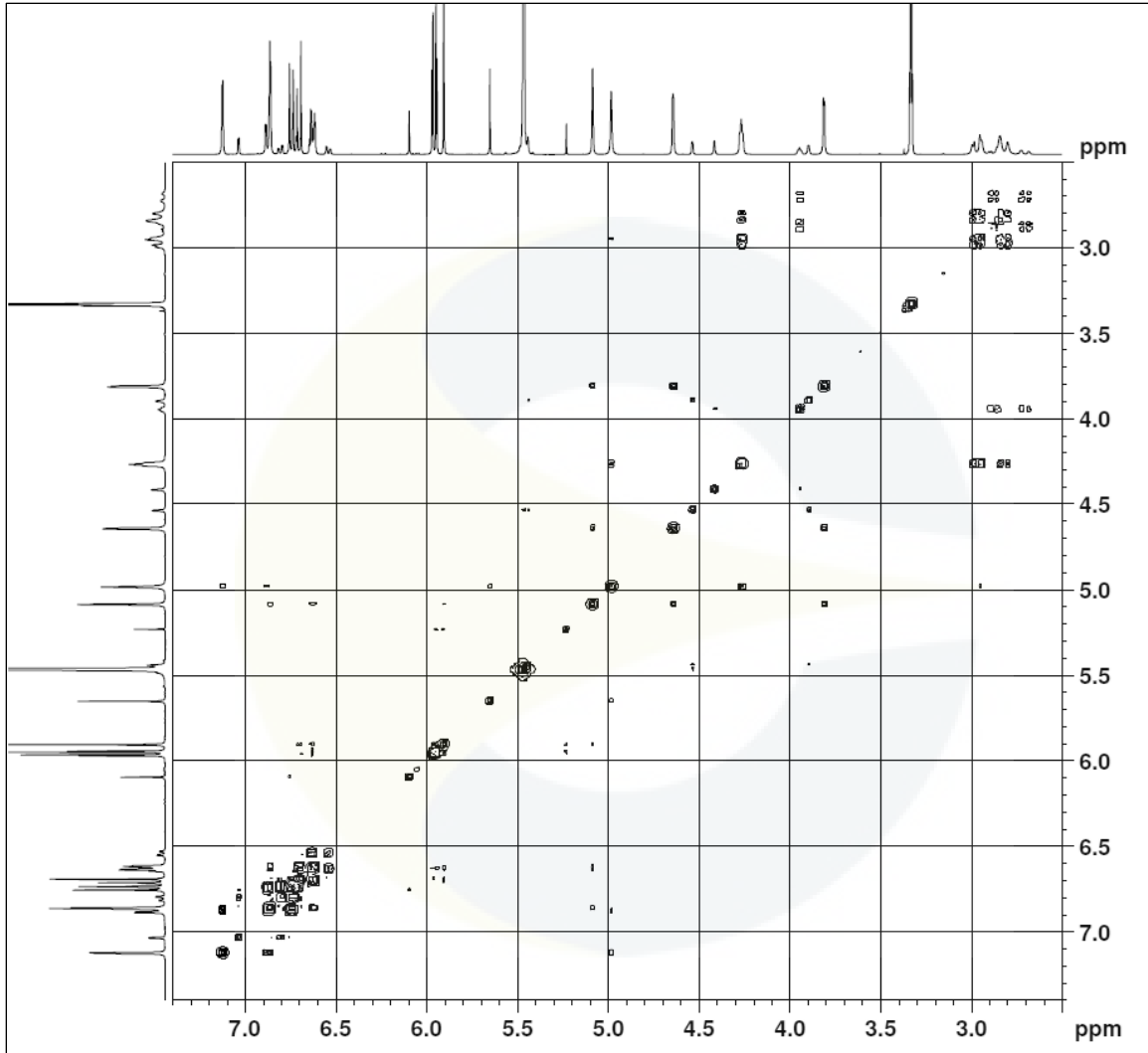
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**MASS SPECTRUM OF PROCYANIDIN B2 (CDXP-21-00664)**

**<sup>1</sup>H-NMR SPECTRUM OF PROCYANIDIN B2 (CDXP-21-00664) IN CD<sub>3</sub>OD AT -40 °C**


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**<sup>13</sup>C-NMR SPECTRUM PROCYANIDIN B2 (CDXP-21-00664) IN CD<sub>3</sub>OD AT -40 °C**

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**COSY-NMR SPECTRUM OF PROCYANIDIN B2 (CDXP-21-00664) IN CD<sub>3</sub>OD AT -40 °C**

**REVISION HISTORY**

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	10/15/2021	New report

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