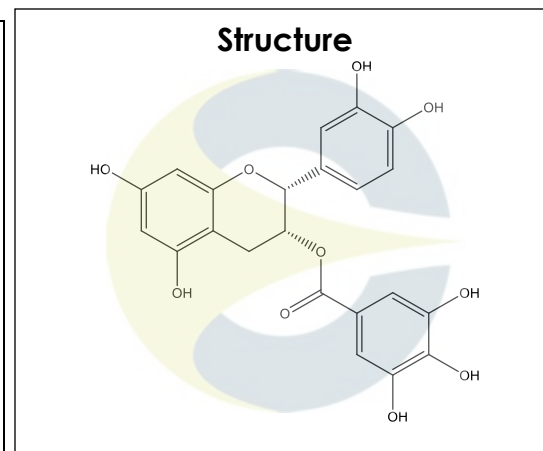


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<b>PRODUCT NAME</b>	(-)-Epicatechin gallate
<b>PART NUMBER</b>	00005135
<b>STANDARD TYPE</b>	Primary (P)
<b>LOT NUMBER</b>	00005135-601
<b>REPORT NUMBER</b>	CDXA-RSS-9152-00
<b>SAMPLE NUMBER</b>	CDXP-20-00655
<b>DATE OF SAMPLE</b>	09/09/2020
<b>DATE OF REPORT</b>	10/08/2020



<b>CHEMICAL NAMES</b>	(2R,3R)-2-(3,4-Dihydroxyphenyl)-3,4-dihydro-5,7-dihydroxy-2H-1-benzopyran-3-yl ester 3,4,5-trihydroxy-benzoic acid; Epicatechol 3-gallate; (-)-Epicatechin 3-gallate; ECG
<b>CHEMICAL FORMULA</b>	C <sub>22</sub> H <sub>18</sub> O <sub>10</sub>
<b>MOLECULAR WEIGHT (MW)</b>	442.37
<b>CHEMICAL FAMILY</b>	Flavonoids
<b>CAS NUMBER</b>	[1257-08-5]
<b>EC#(EINECS)</b>	603-088-4
<b>RTECS</b>	DH9030000

**ANALYTICAL RESULTS**

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	93.2%
HPLC	0.700.10.2.METH22	≥ 90%	94.4%
NMR	0.700.12.4	Conforms to structure	Conforms to structure
Mass Spectrum	0.700.12.27	Conforms	Conforms
Residual Solvent*	USP <467>	NA	MeOH = 1130 ppm
Water	0.700.12.37	NA	1.2%
Appearance	NA	NA	White powder

\*Testing performed at an ISO 17025 accredited subcontracted laboratory.  
 ADJUSTED PURITY: 93.2% IS BASED ON (100 - 0.1 SOLVENTS - 1.2 WATER) X 94.4% HPLC

**STORAGE CONDITIONS**

<b>STORAGE</b>	+4 °C in a dry place.
<b>EXPIRATION DATE</b>	09/2025 under the above conditions.

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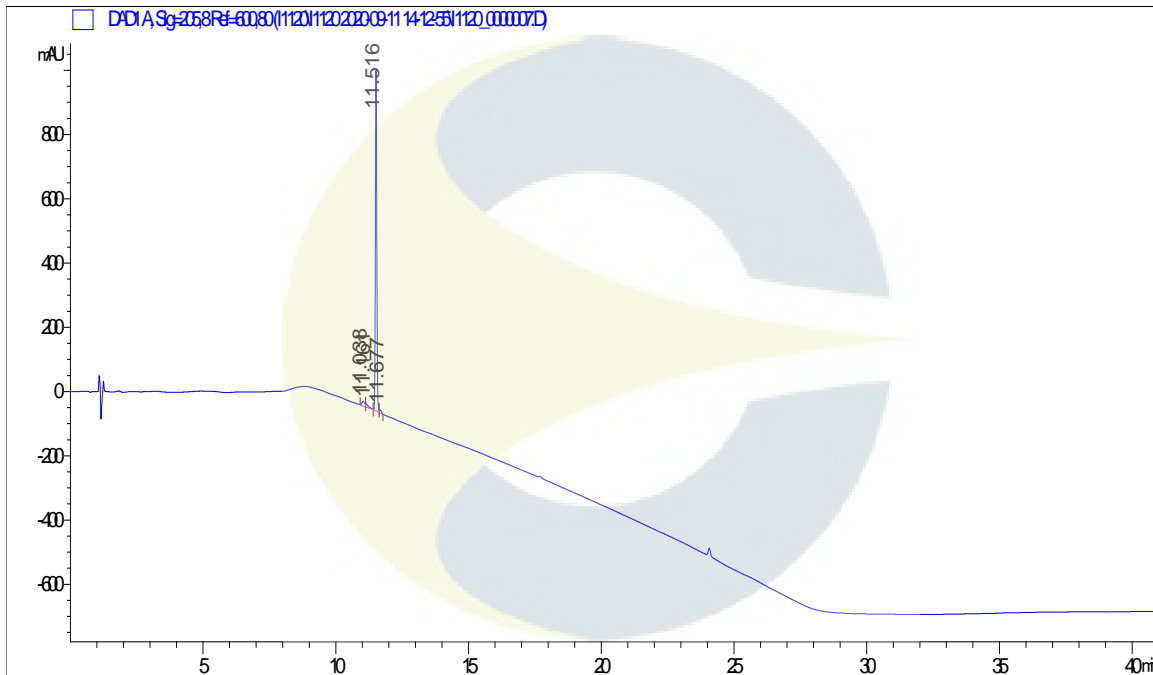
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## ANALYTICAL CONDITIONS

<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 - 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.
<b>COLUMN TEMP.</b>	60 °C
<b>FLOW RATE</b>	0.4 mL/minute
<b>INJECTION VOL.</b>	0.1 µL
<b>INJECTION CONC.</b>	1.5 mg/mL in Methanol
<b>DETECTION</b>	205 ± 4 nm

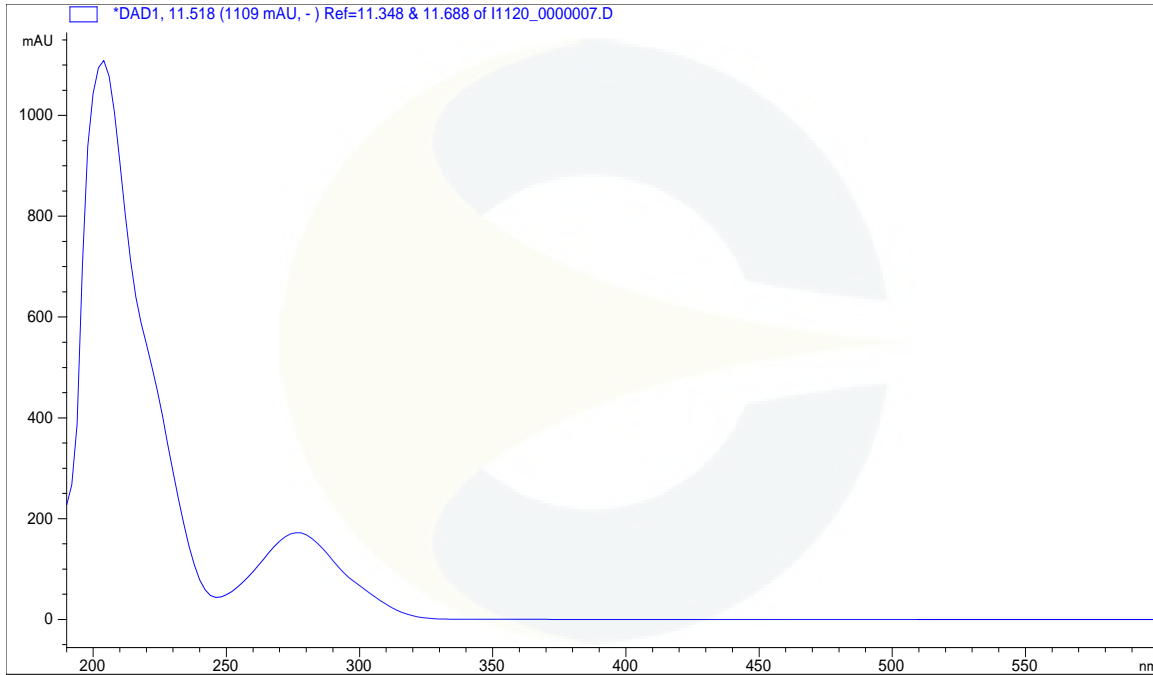
## HPLC CHROMATOGRAM OF (-)-EPICATECHIN GALLATE (CDXP-20-00655)



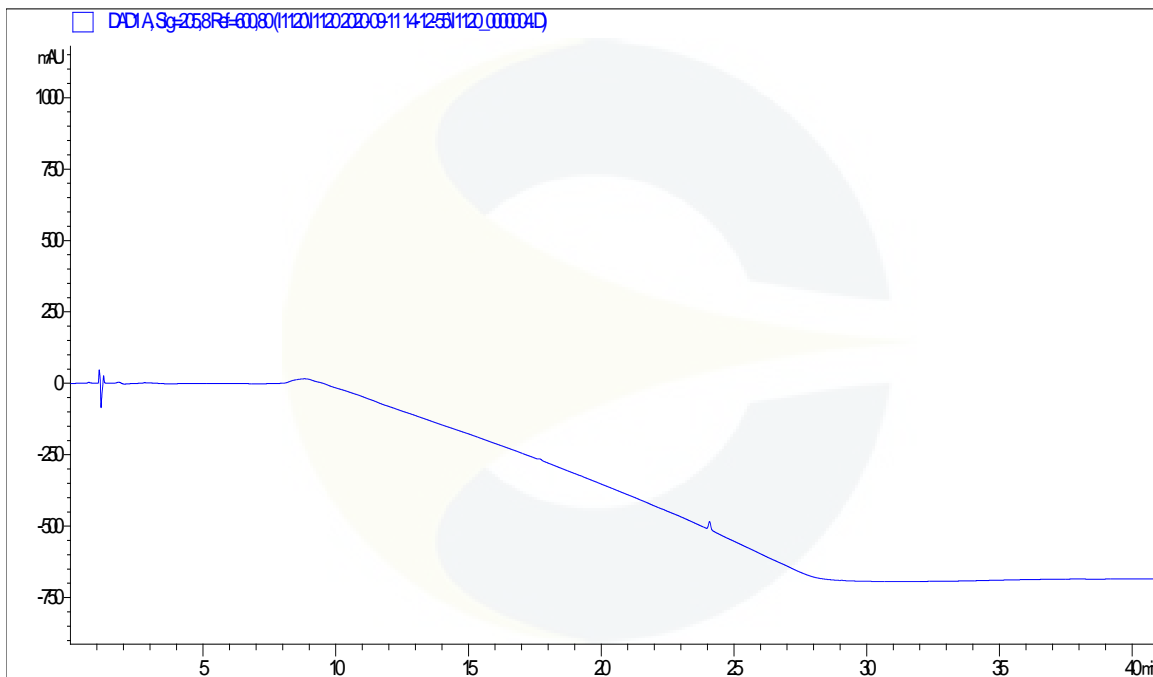
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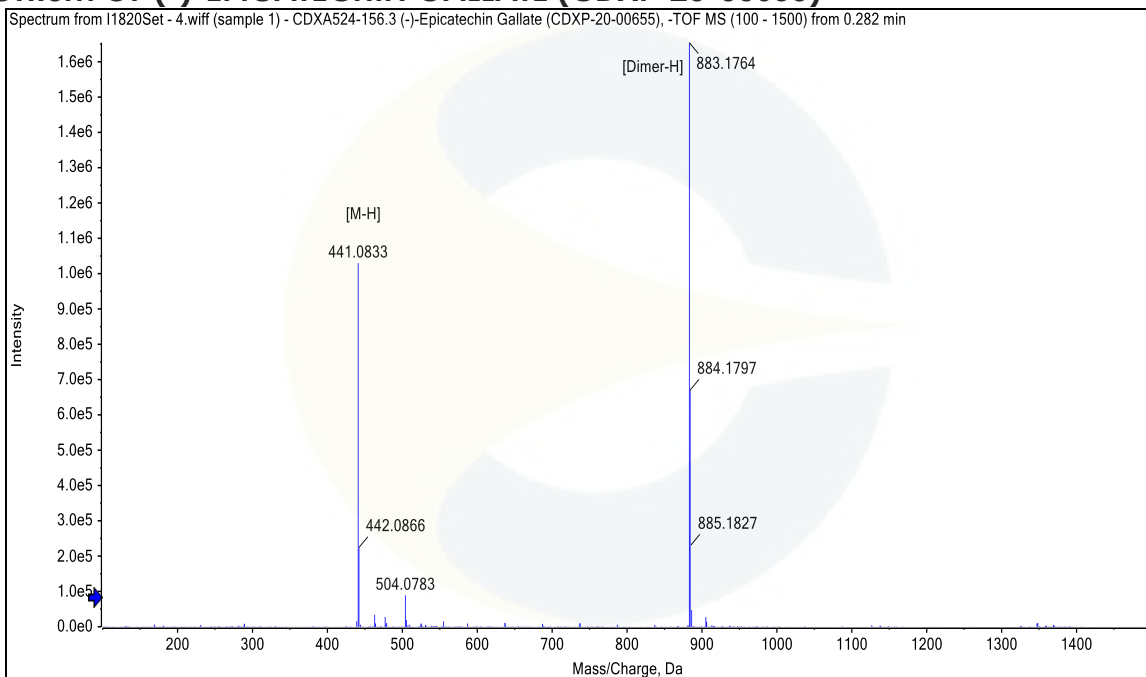
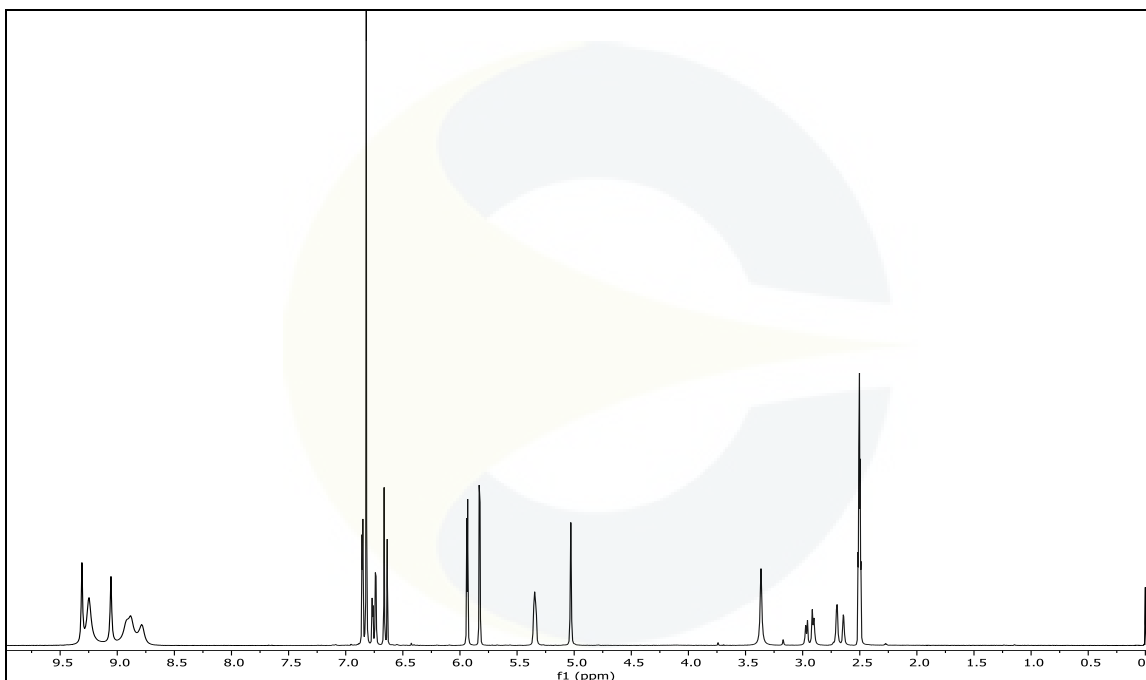
**UV SPECTRUM AT RT = 11.5 MINUTES**



**HPLC CHROMATOGRAM OF DILUENT BLANK**



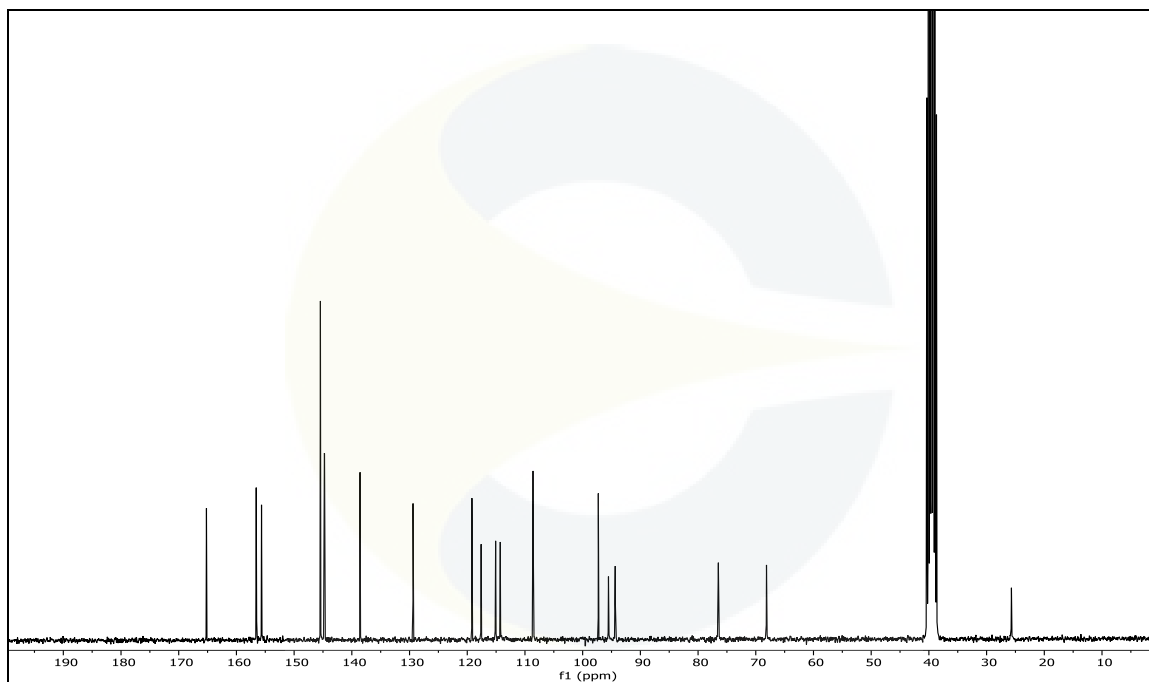
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**MASS SPECTRUM OF (-)-EPICATECHIN GALLATE (CDXP-20-00655)**

**<sup>1</sup>H-NMR SPECTRUM OF (-)-EPICATECHIN GALLATE (CDXP-20-00655) IN DMSO-d<sub>6</sub>**


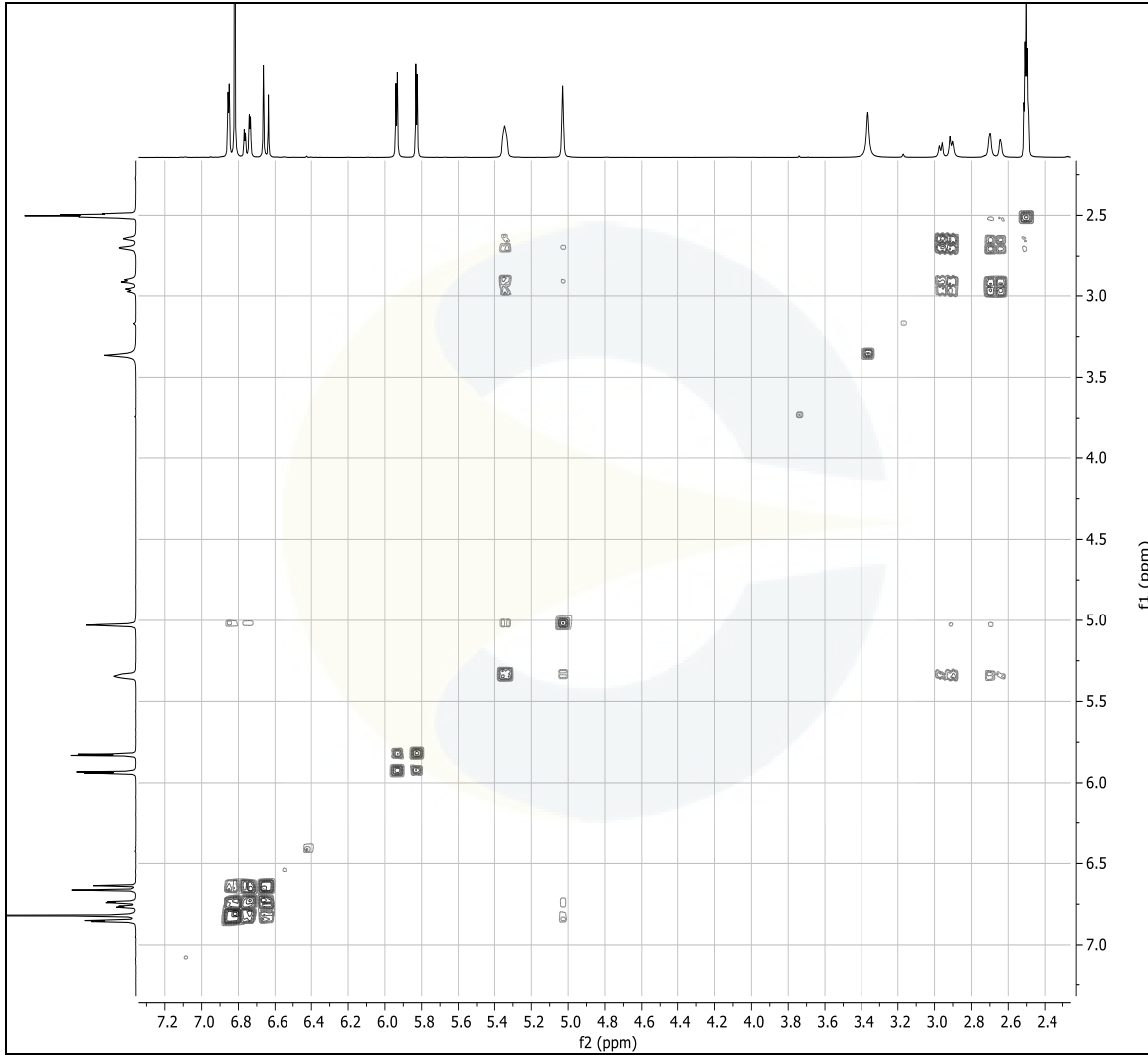
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 $^{13}\text{C}$ -NMR SPECTRUM (-)-EPICATECHIN GALLATE (CDXP-20-00655) IN DMSO- $d_6$ 

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**COSY-NMR SPECTRUM OF (-)-EPICATECHIN GALLATE (CDXP-20-00655) IN DMSO-d<sub>6</sub>**

**REVISION HISTORY**

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	10/08/2020	New report

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