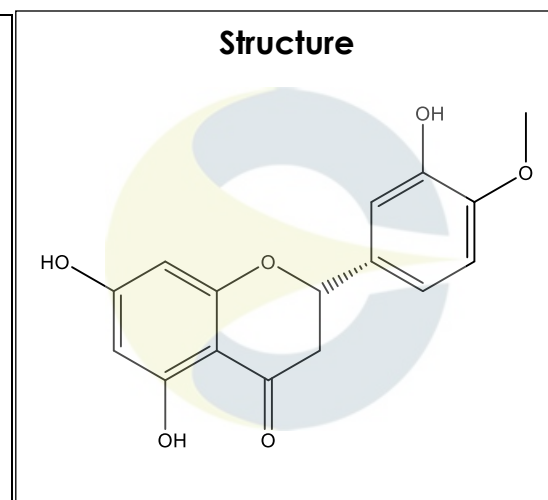


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<b>PRODUCT NAME</b>	Hesperetin
<b>PART NUMBER</b>	00008111
<b>STANDARD TYPE</b>	Primary (P)
<b>LOT NUMBER</b>	00008111-RAG
<b>REPORT NUMBER</b>	CDXA-RSS-7373-01
<b>SAMPLE NUMBER</b>	CDXA-16-015953
<b>DATE OF SAMPLE</b>	12/06/2016
<b>DATE OF RE-EVALUATION</b>	01/06/2021
<b>DATE OF REPORT</b>	02/12/2021



<b>CHEMICAL NAMES</b>	3',5,7-Trihydroxy-4'-methoxy-flavanone; (-)-Hesperetin
<b>CHEMICAL FORMULA</b>	C <sub>16</sub> H <sub>14</sub> O <sub>6</sub>
<b>MOLECULAR WEIGHT (MW)</b>	302.28
<b>CHEMICAL FAMILY</b>	Flavonoids
<b>CAS NUMBER</b>	[520-33-2]
<b>EC#(EINECS)</b>	208-290-2
<b>RTECS</b>	DT2981480

**ANALYTICAL RESULTS**

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	98.4%
HPLC	0.700.10.2.METH22	≥ 90%	98.4%
NMR	4.5.3-CD-4.0-000338	Conforms to structure	Conforms to structure
Mass Spectrum	99.1-CDXA-2.0-000126	Conforms	Conforms
Residual Solvent	99.1-CD-10.0-000115	NA	Methanol < 0.1%
Water	0.700.12.37	NA	ND
Appearance	NA	NA	White powder

ADJUSTED PURITY: 98.4% IS BASED ON (100 - 0.0 SOLVENTS - 0.0 WATER) X 98.4% HPLC

**STORAGE CONDITIONS**

<b>STORAGE</b>	Room Temperature in a dry place.
<b>EXPIRATION DATE</b>	01/2026 under the above conditions.

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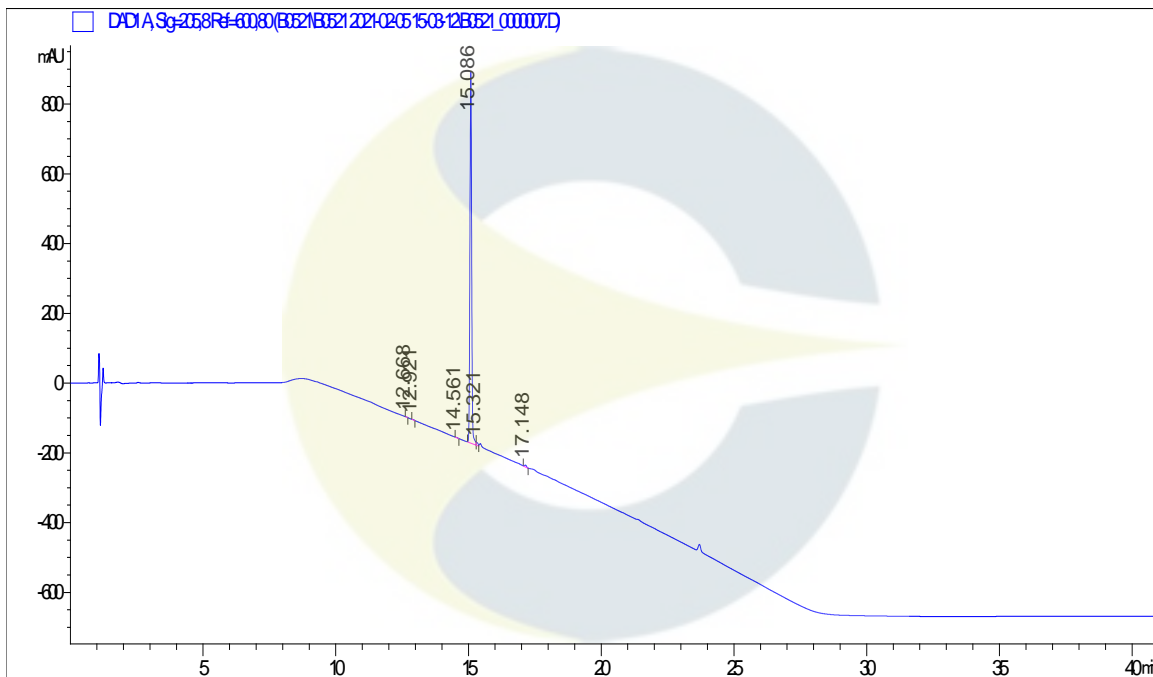
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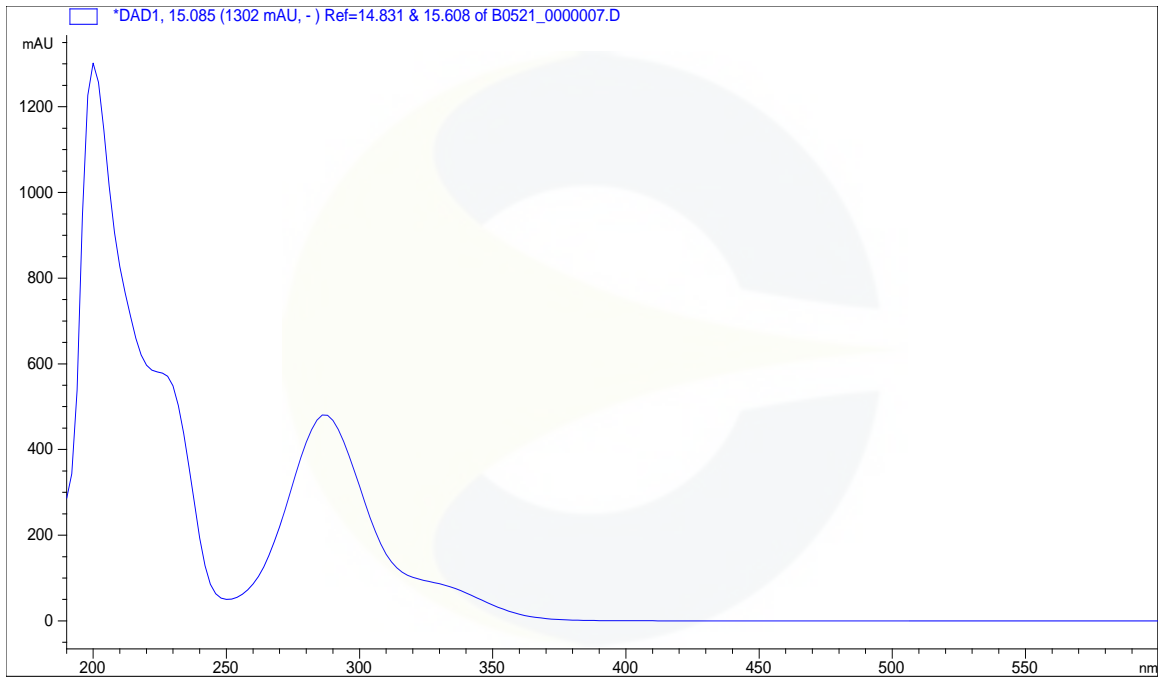
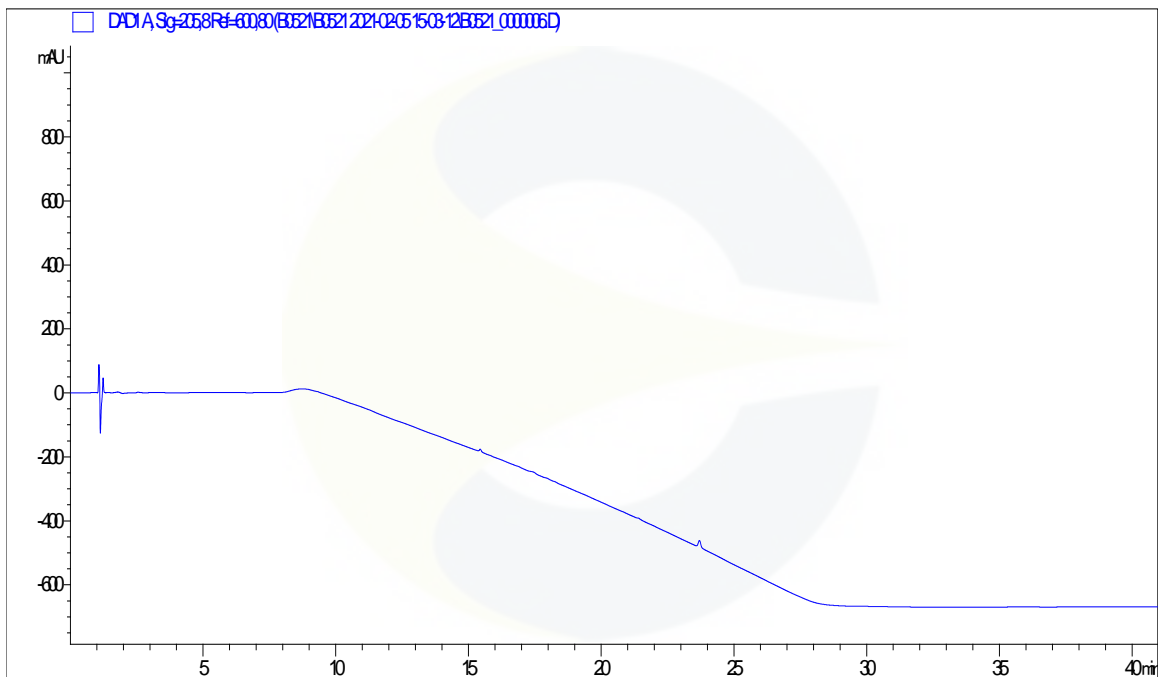
## ANALYTICAL CONDITIONS

<b>INSTRUMENT</b>	AGILENT 1260 HPLC UV-VIS (DAD); AGILENT 6510 QTOF
<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.
<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>	1.0 mg/mL in Methanol
<b>DETECTION</b>	205 ± 4 nm

## HPLC CHROMATOGRAM OF HESPERETIN (CDXA-16-015953)



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**UV SPECTRUM AT RT = 15.1 MINUTES**

**HPLC CHROMATOGRAM OF DILUENT BLANK**


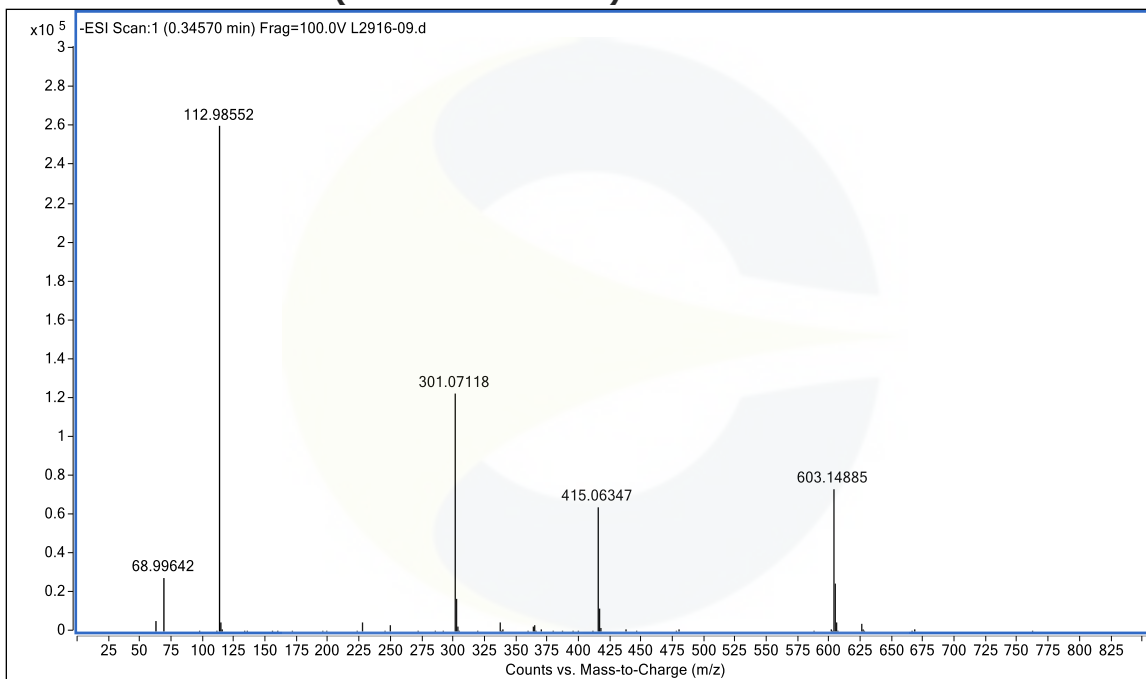
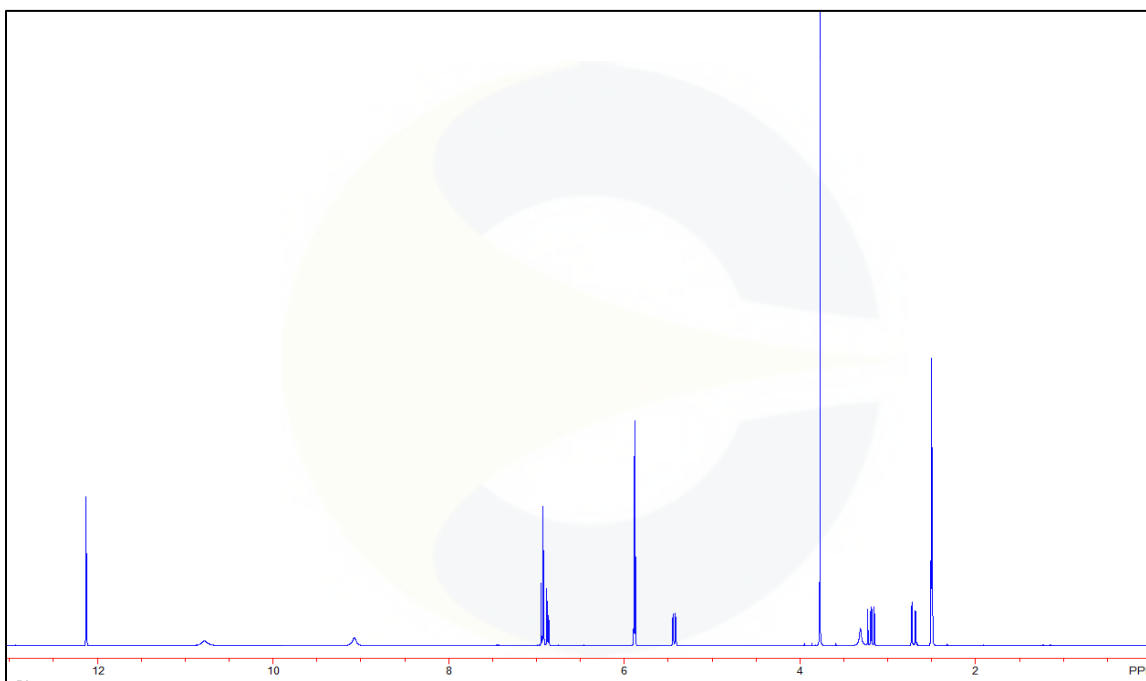
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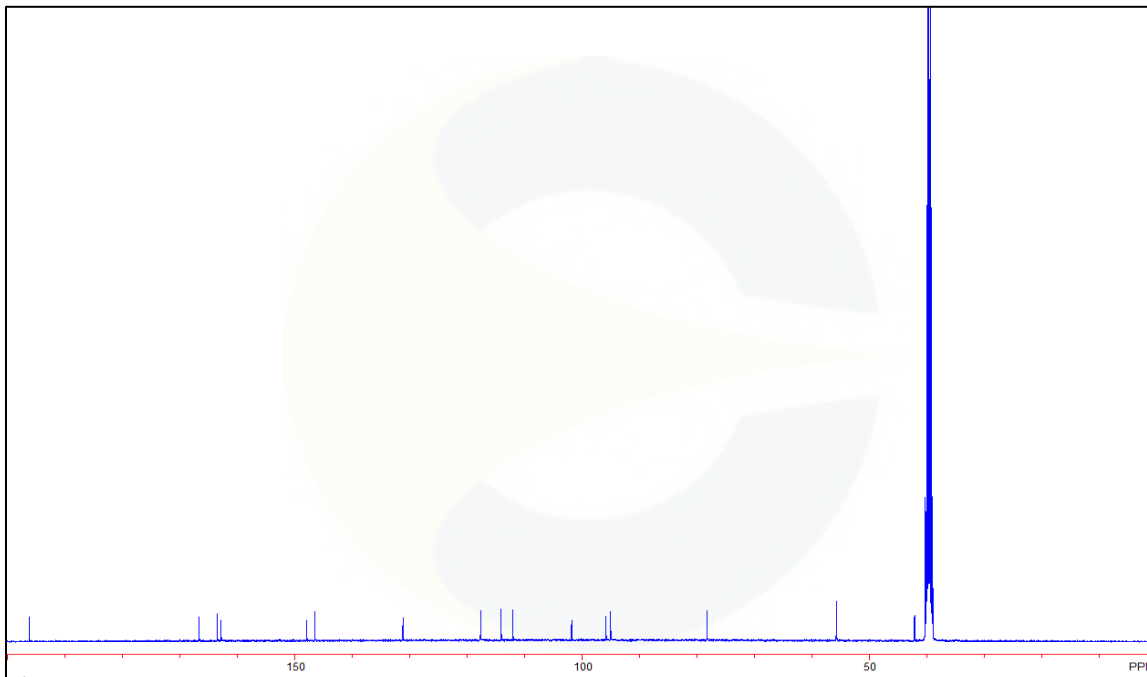
**MASS SPECTRUM OF HESPERETIN (CDXA-16-015953)**

**<sup>1</sup>H-NMR SPECTRUM OF HESPERETIN (CDXA-16-015953) IN DMSO-d<sub>6</sub>**


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**<sup>13</sup>C-NMR SPECTRUM OF HESPERETIN (CDXA-16-015953) IN DMSO-d<sub>6</sub>**



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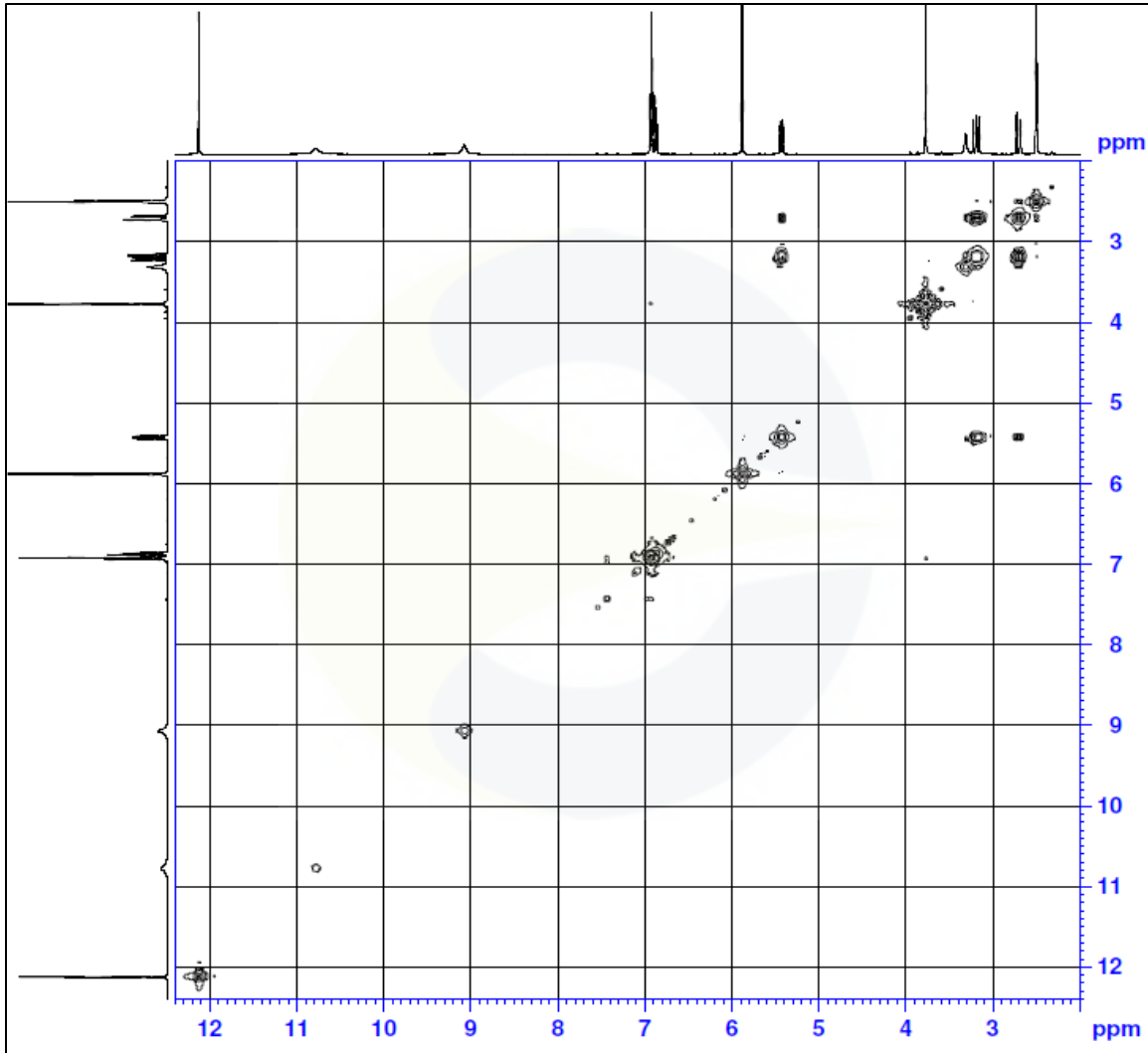
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**COSY-NMR SPECTRUM OF HESPERETIN (CDXA-16-015953) IN DMSO-*d*<sub>6</sub>**

**REVISION HISTORY**

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	01/03/2017	New report
01	02/12/2021	Passed re-evaluation by HPLC, KF. Updated expiration date, analytical conditions, chromatograms and results. Removed melting point.

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