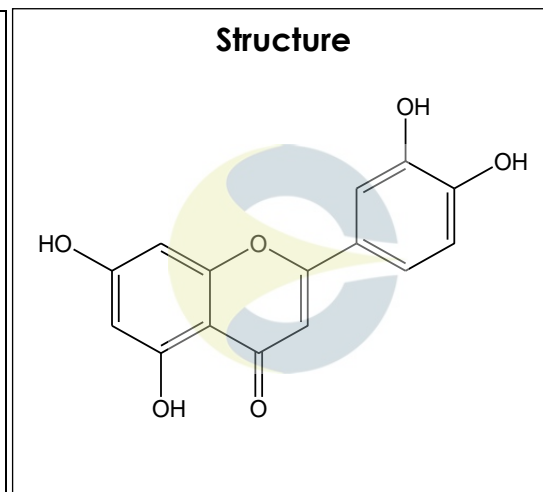


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PRODUCT NAME	Luteolin
PART NUMBER	00012461
STANDARD TYPE	Primary (P)
LOT NUMBER	00012461-233
REPORT NUMBER	CDXA-RSS-4136-02
SAMPLE NUMBER	CDXA-10-5977
DATE OF SAMPLE	09/20/2010
DATE OF RE-EVALUATION	02/09/2015 (1 st); 02/14/2019 (2 nd)
DATE OF REPORT	03/05/2019



CHEMICAL NAMES	3',4',5,7-Tetrahydroxyflavone; 2-(3,4-Dihydroxyphenyl)-5,7-dihydroxy-4H-1-benzopyran-4-one; Digtoflavone; Flacitran; Luteolol; Salifazide
CHEMICAL FORMULA	C ₁₅ H ₁₀ O ₆
MOLECULAR WEIGHT (MW)	286.24
CHEMICAL FAMILY	Flavones
CAS NUMBER	[491-70-3]
EC#(EINECS)	207-741-0
RTECS	LK9275210

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	NA	96.9%
HPLC	99.1-04-1.0-000684	NA	99.6%
NMR	99.1-CD-1.0-000122	Conforms to structure	Conforms to structure
Mass Spectrum	Direct Infusion, ESI (-)	Conforms	Conforms
Residual Solvent	99.1-CD-3.0-000115	NA	Methanol – 0.4%
Water	99.1-04-10.0-000094	NA	2.3%
Appearance	NA	NA	Yellow powder

ADJUSTED PURITY: 96.9% IS BASED ON (100 - 0.4 SOLVENTS - 2.3 WATER) X 99.6% HPLC

STORAGE CONDITIONS

STORAGE	+4 °C in a dry place.
EXPIRATION DATE	02/2024 under the above conditions.

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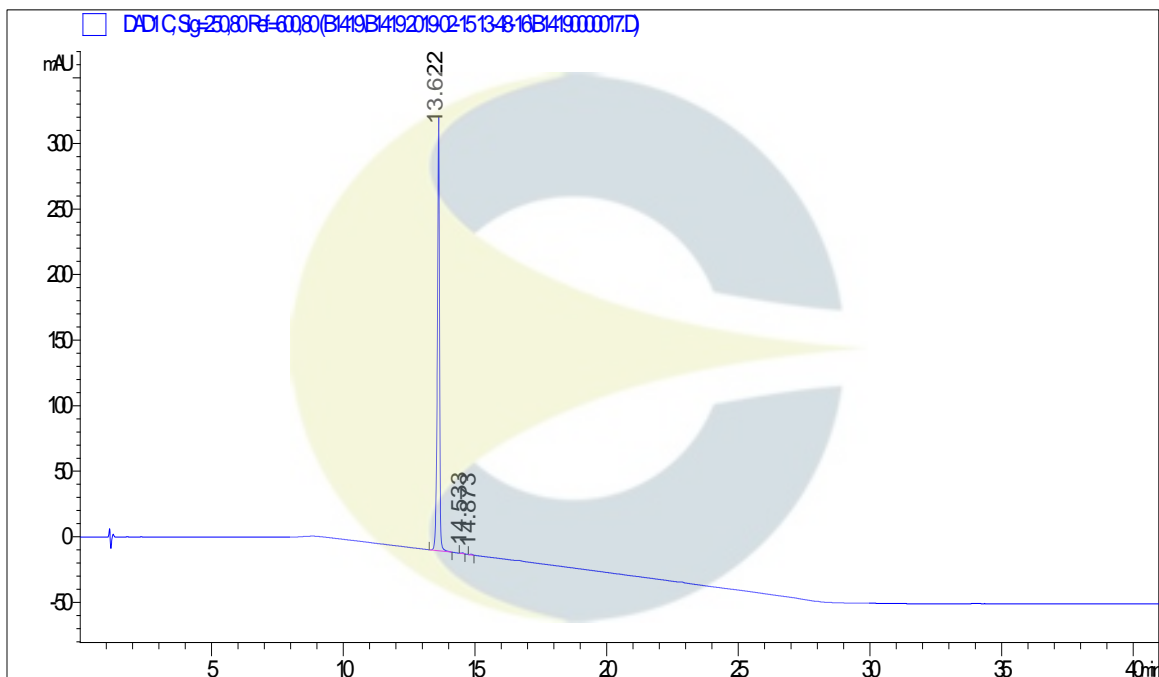
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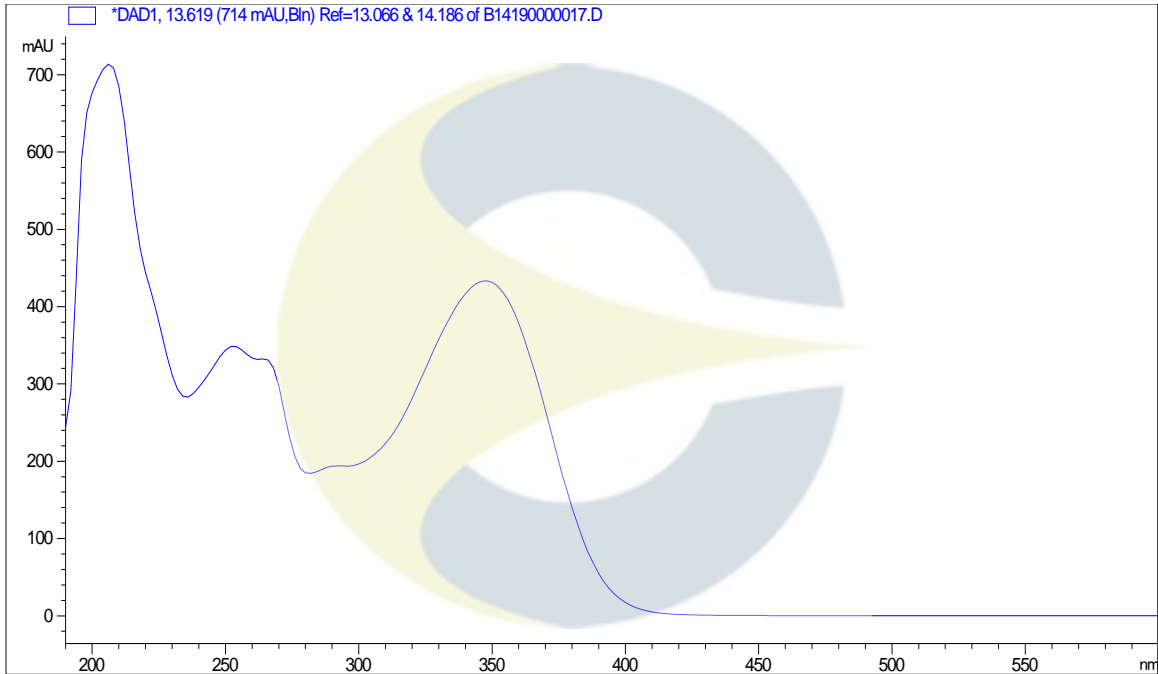
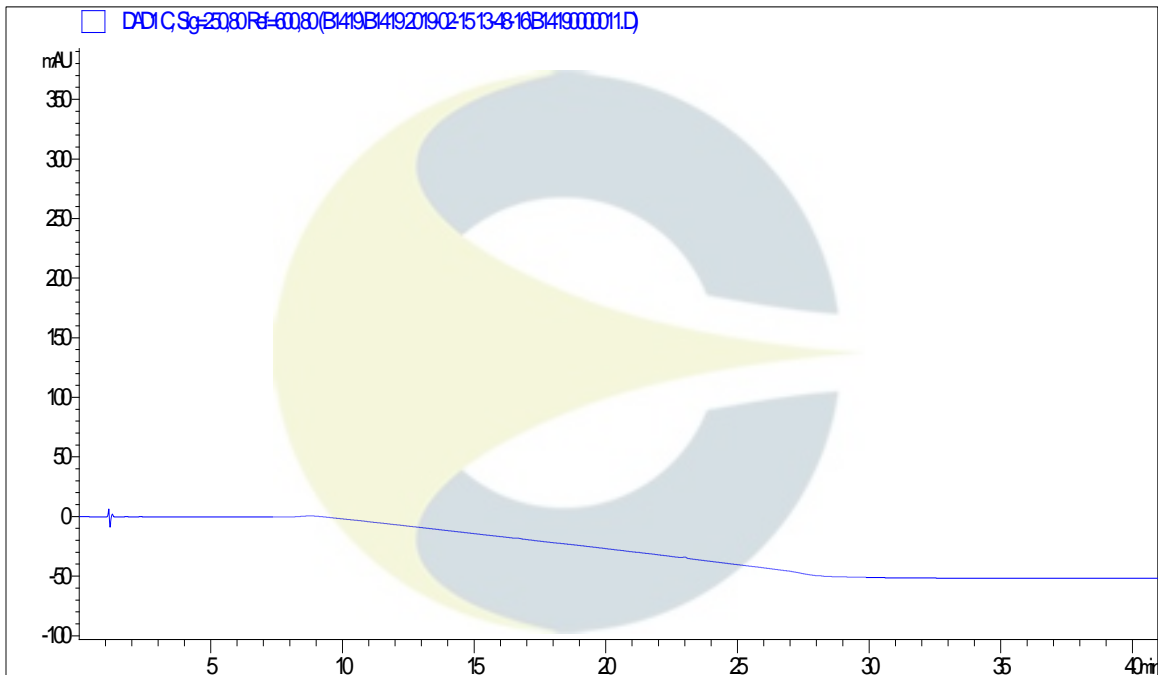
ANALYTICAL CONDITIONS

INSTRUMENT	AGILENT 1260 HPLC UV-VIS (DAD); AGILENT 6510 QTOF
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.
COLUMN TEMP.	60 °C
FLOW RATE	0.4 mL/minute
INJECTION VOL.	0.2 µL
INJECTION CONC.	1.1 mg/mL in Methanol
DETECTION	250 ± 40 nm

HPLC CHROMATOGRAM OF LUTEOLIN (CDXA-10-5977)

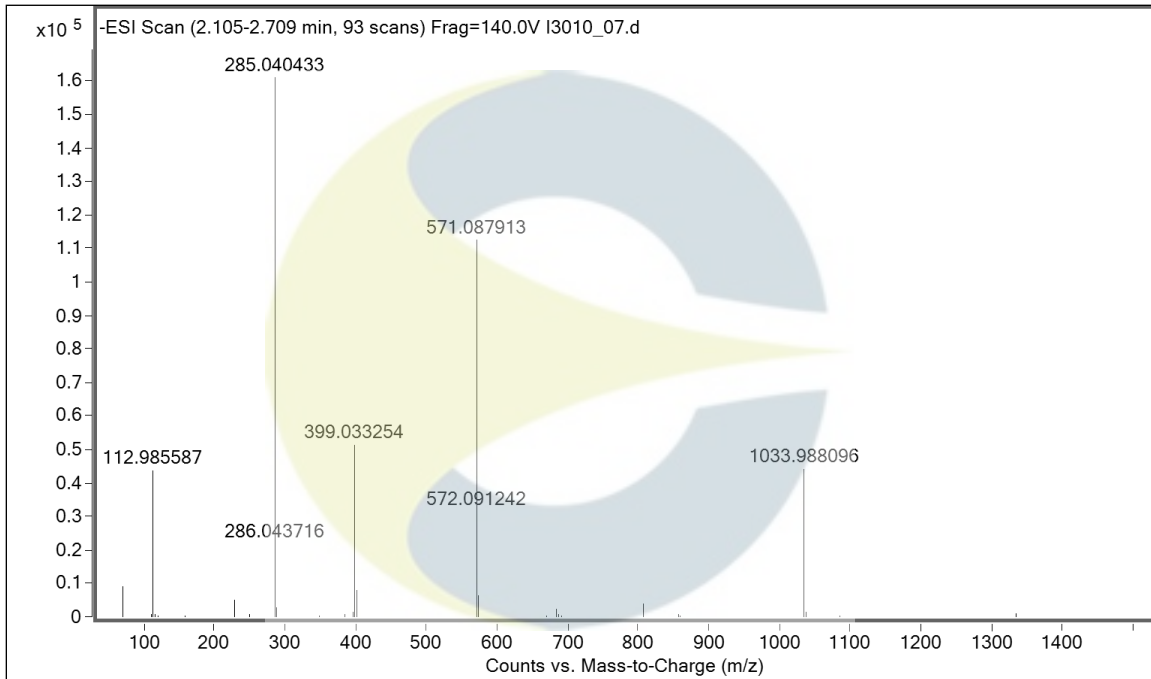


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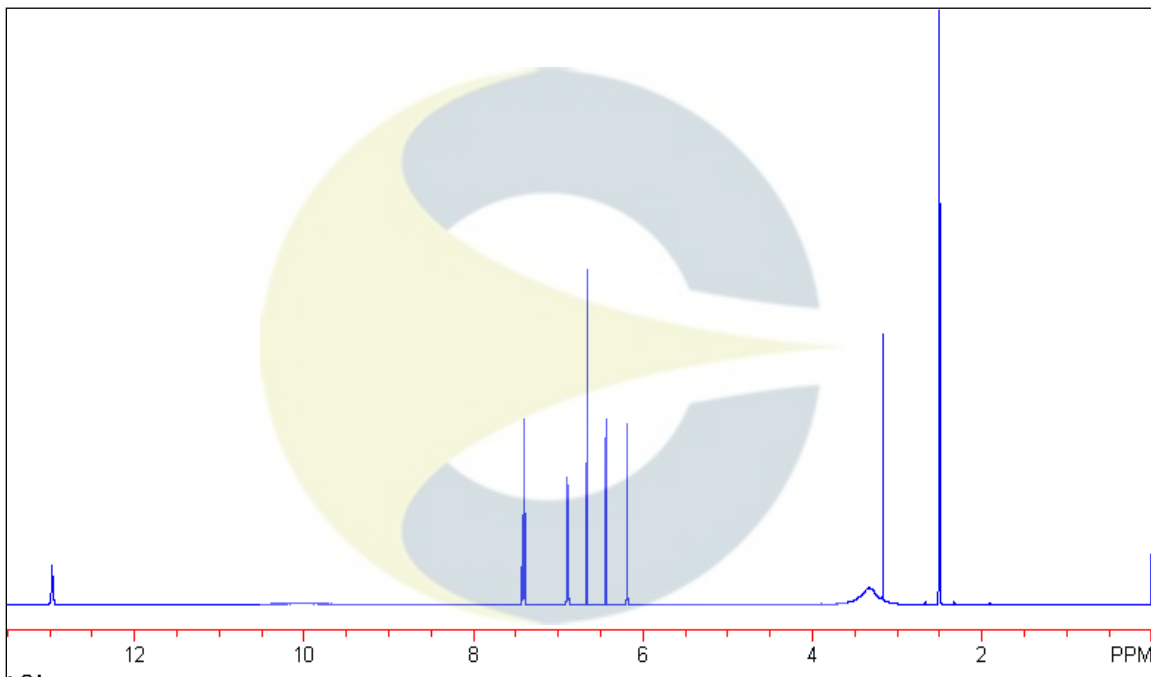
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UV SPECTRUM AT RT = 13.6 MINUTES

HPLC CHROMATOGRAM OF DILUENT BLANK


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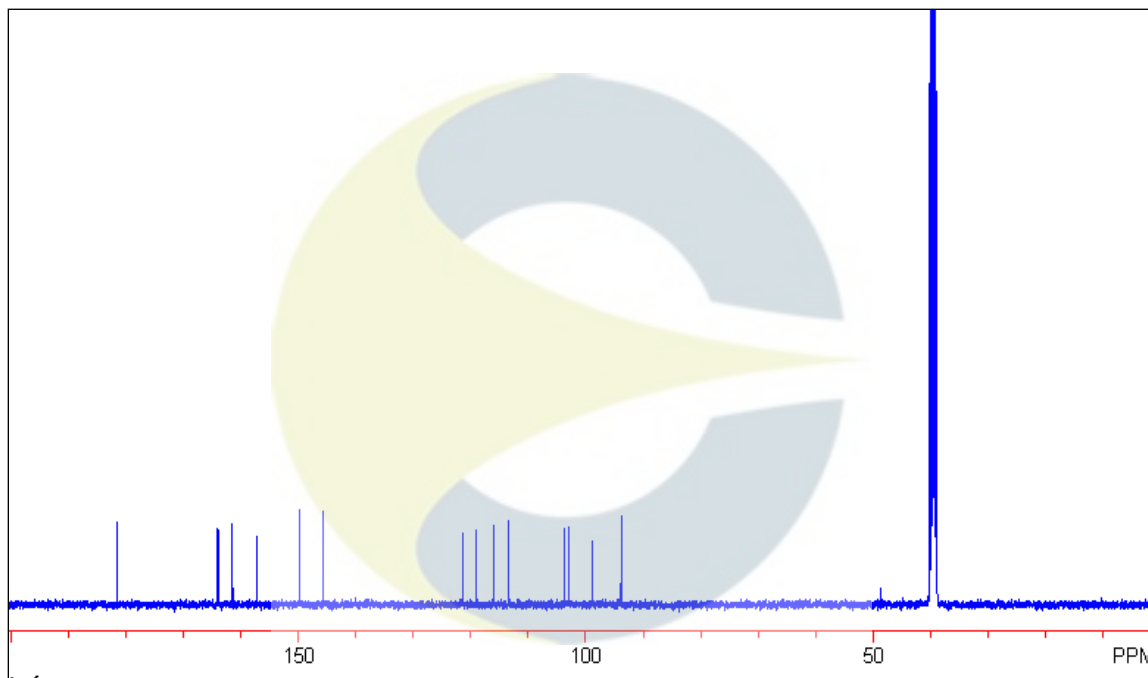
MASS SPECTRUM OF LUTEOLIN (CDXA-10-5977)



¹H-NMR SPECTRUM OF LUTEOLIN (CDXA-10-5977) IN DMSO-d₆



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¹³C-NMR SPECTRUM OF LUTEOLIN (CDXA-10-5977) IN DMSO-d₆

REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	10/28/2010	New report
01	02/19/2015	Passed re-evaluation by HPLC. Updated expiration date, chemical names and melting point.
02	03/05/2019	Passed second re-evaluation by HPLC, KF. Updated expiration date, analytical conditions, chromatograms and results. Removed melting point.

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