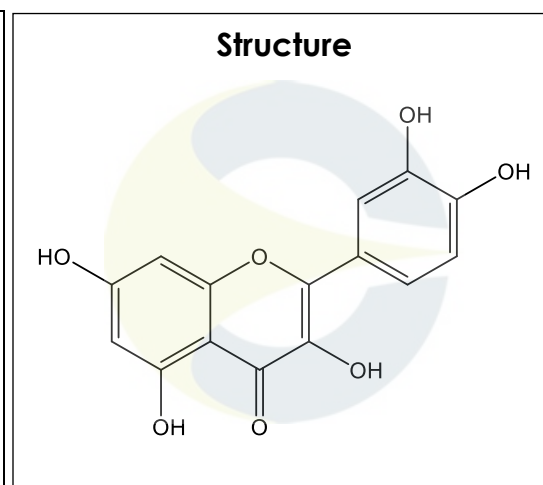


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PRODUCT NAME	Quercetin
PART NUMBER	00017030
STANDARD TYPE	Primary (P) – Compendial Traceable
LOT NUMBER	00017030-336
REPORT NUMBER	CDXA-RSS-7303-02
SAMPLE NUMBER	CDXA-16-012497
DATE OF SAMPLE	09/29/2016
DATE OF RE-EVALUATION	01/27/2017(1 st); 12/03/2020(2 nd)
DATE OF REPORT	12/16/2020



CHEMICAL NAMES	3,3',4',5,7-Pentahydroxyflavone; Quercetine; Quercetol; Quertin; Quertine; Sophoretin; Xanthaurine
CHEMICAL FORMULA	C ₁₅ H ₁₀ O ₇
MOLECULAR WEIGHT (MW)	302.24
CHEMICAL FAMILY	Flavonoids
CAS NUMBER	[117-39-5]
EC#(EINECS)	204-187-1
RTECS	LK8750000

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	96.5%
HPLC	0.700.10.2.METH22	≥ 90%	97.5%
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-9.0-000115	NA	ND
Water	0.700.12.37	NA	1.0%
Appearance	NA	NA	Yellow powder

ADJUSTED PURITY: 96.5% IS BASED ON (100 - 1.0 WATER - 0.0 SOLVENTS) X 97.5% HPLC

TRACEABLE SOURCE	LOT NUMBER	ASSAY RESULT (WEIGHT%)
USP	R120F0	91.0%

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STORAGE CONDITIONS

STORAGE Room Temperature in a dry place.

EXPIRATION DATE 12/2025 under the above conditions.

ANALYTICAL CONDITIONS

INSTRUMENT AGILENT 1260 HPLC UV-VIS (DAD); AGILENT 1100 ION TRAP

COLUMN Phenomenex Luna C18(2) 150 x 2.00 mm, 5 µm particle size

MOBILE PHASE A - 0.1% Trifluoroacetic acid in Milli-Q 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

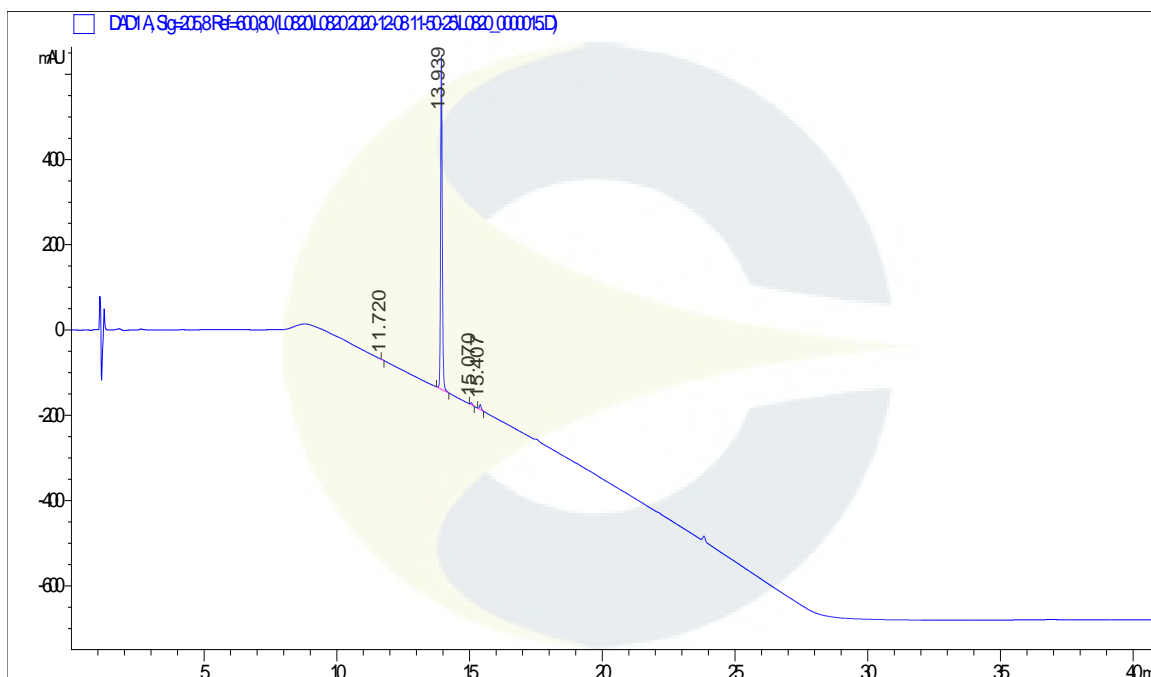
FLOW RATE 0.4 mL/minute

INJECTION VOL. 0.2 µL

INJECTION CONC. 1.0 mg/mL in Methanol

DETECTION 205 ± 4 nm

HPLC CHROMATOGRAM OF QUERCETIN (CDXA-16-012497)

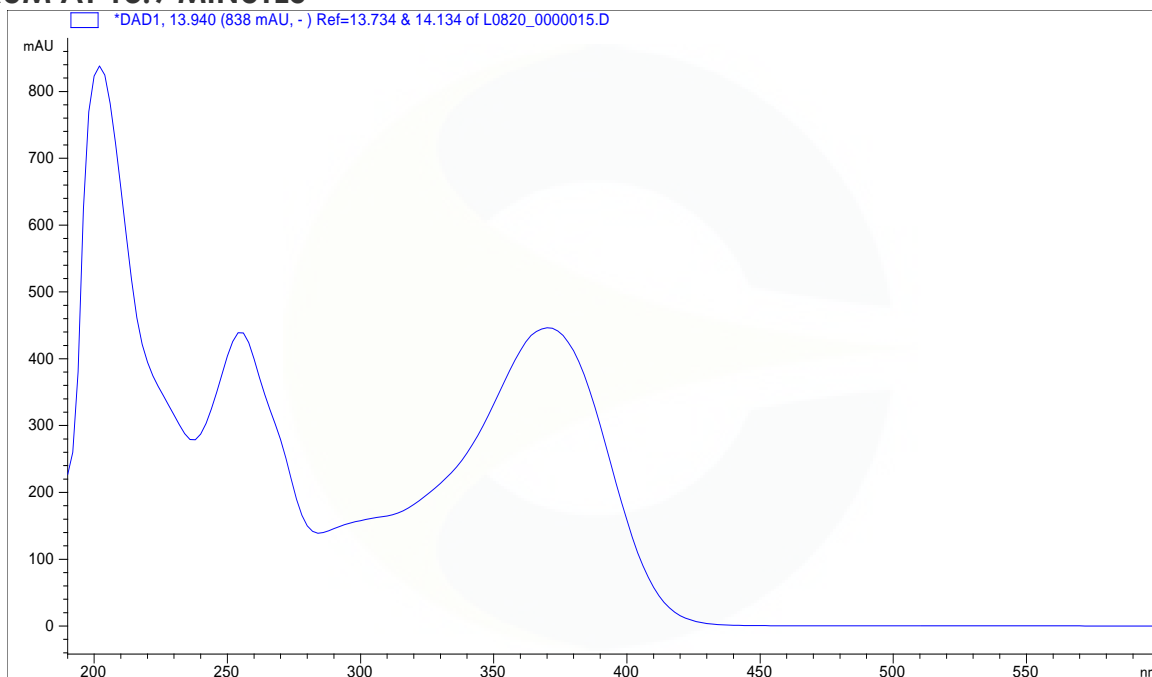


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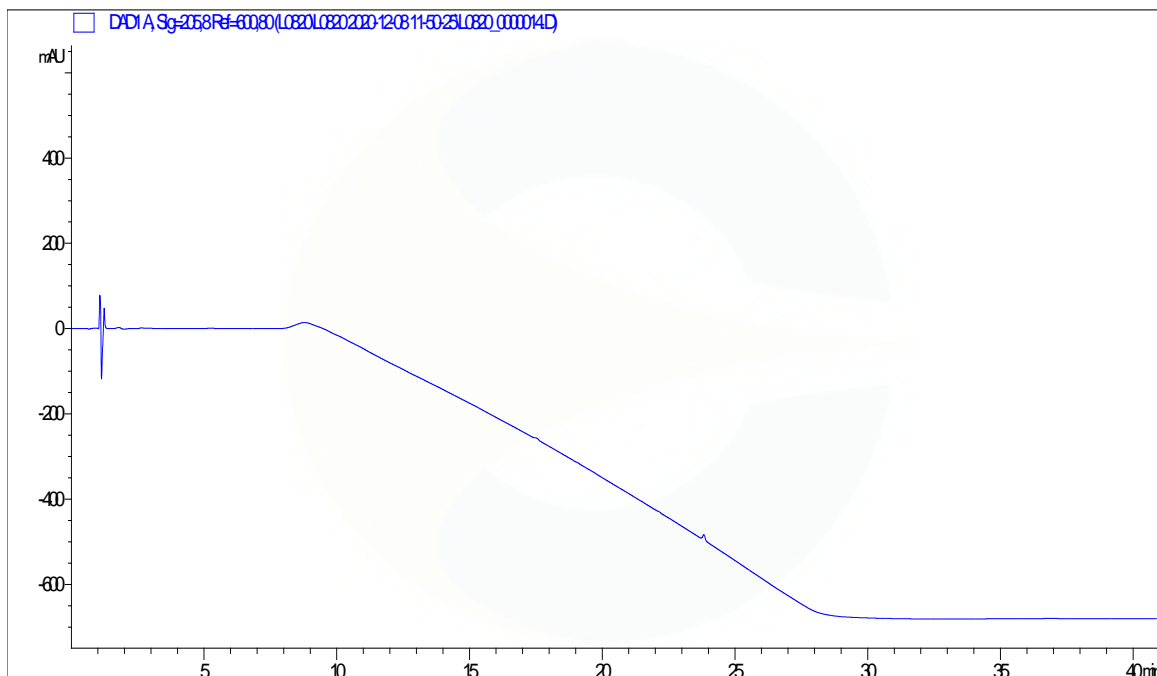
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UV SPECTRUM AT 13.9 MINUTES



HPLC CHROMATOGRAM OF BLANK

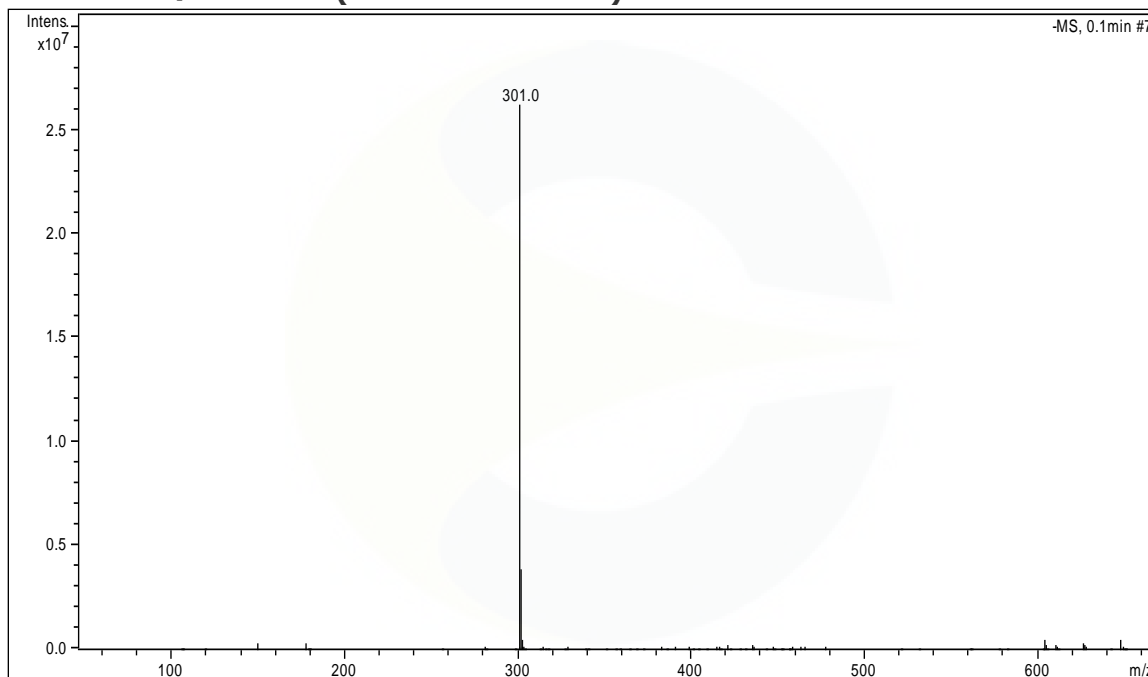


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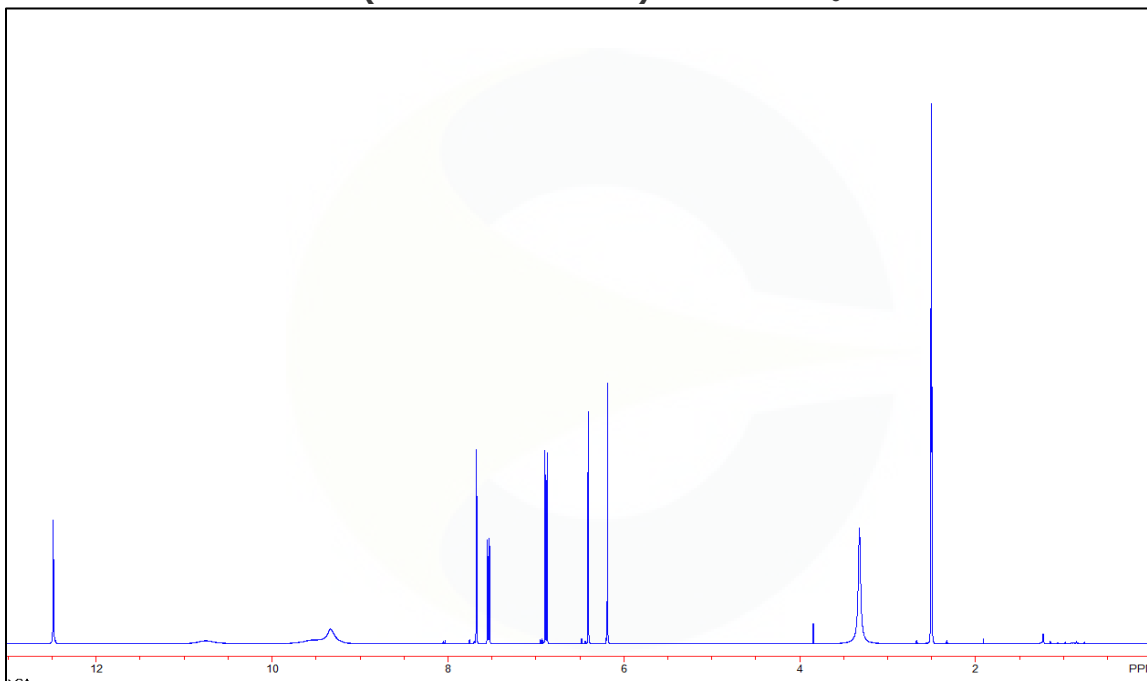
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MASS SPECTRUM OF QUERCETIN (CDXA-16-012497)



¹H-NMR SPECTRUM OF QUERCETIN (CDXA-16-012497) IN DMSO-d₆



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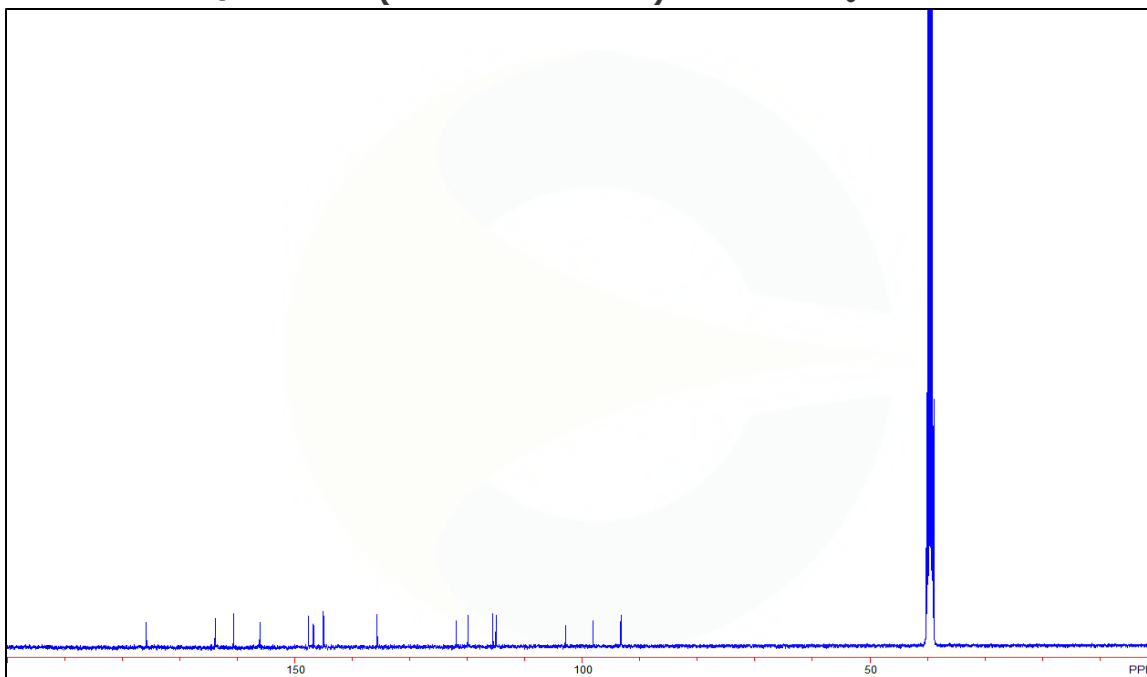
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¹³C-NMR SPECTRUM OF QUERCETIN (CDXA-16-012497) IN DMSO-d₆



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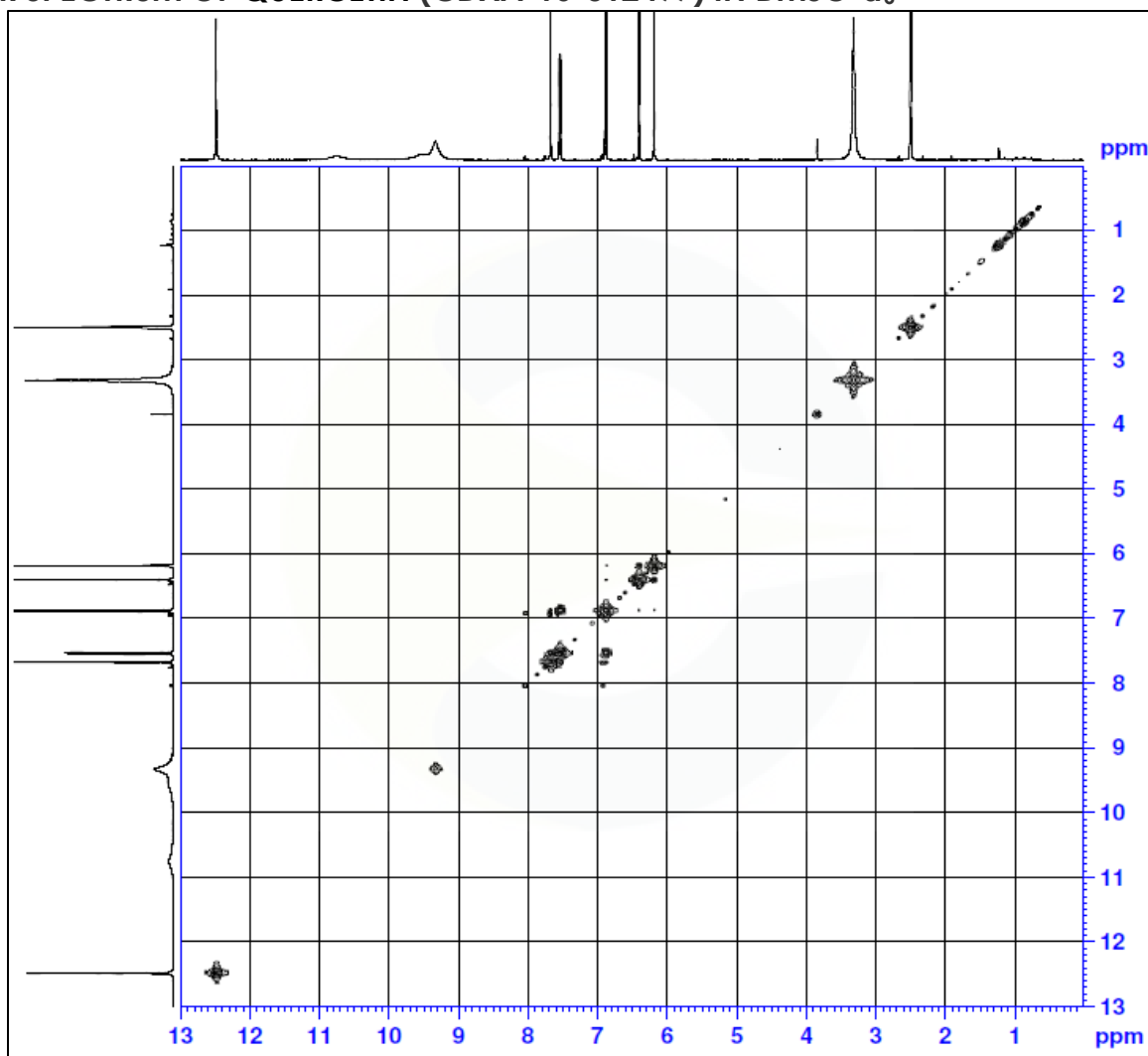
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COSY-NMR SPECTRUM OF QUERCETIN (CDXA-16-012497) IN DMSO- d_6



REVISION HISTORY

Revision History	Date of Revision	Document/Changes
00	10/20/2016	New report
01	03/03/2017	Passed re-evaluation for CT grade. Updated analytical conditions and analytical results.
02	12/16/2020	Passed re-evaluation by HPLC and KF. Updated analytical results, analytical conditions, chromatograms, and expiration date. Removed melting point.

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