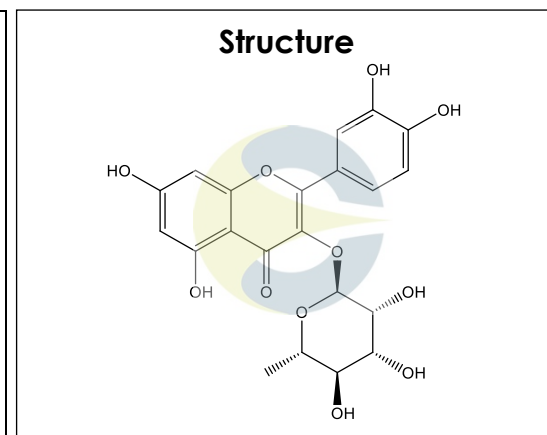


Certificate of Analysis
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PRODUCT NAME	Quercitrin
PART NUMBER	00017171
STANDARD TYPE	Primary (P)
LOT NUMBER	00017171-116
REPORT NUMBER	CDXA-RSS-8634-00
SAMPLE NUMBER	CDXP-19-00477
DATE OF SAMPLE	08/14/2019
DATE OF REPORT	09/19/2019



CHEMICAL NAMES	3-O- α -L-Rhamnopyranosylquercetin; Quercetin-3-rhamnoside; Quercitroside
CHEMICAL FORMULA	C ₂₁ H ₂₀ O ₁₁
MOLECULAR WEIGHT (MW)	448.38
CHEMICAL FAMILY	Flavonoids
CAS NUMBER	[522-12-3]
EC#(EINECS)	208-322-5
RTECS	UZ5950000

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	NA	87.6%
HPLC	99.1-04-1.0-000684	NA	99.3%
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 – 6.7%; EtOAc – 0.2%
Water	0.700.12.37	NA	4.9%
Appearance	NA	NA	Yellow powder

ADJUSTED PURITY: 87.6% IS BASED ON (100 - 6.9 SOLVENTS - 4.9 WATER) X 99.3% HPLC

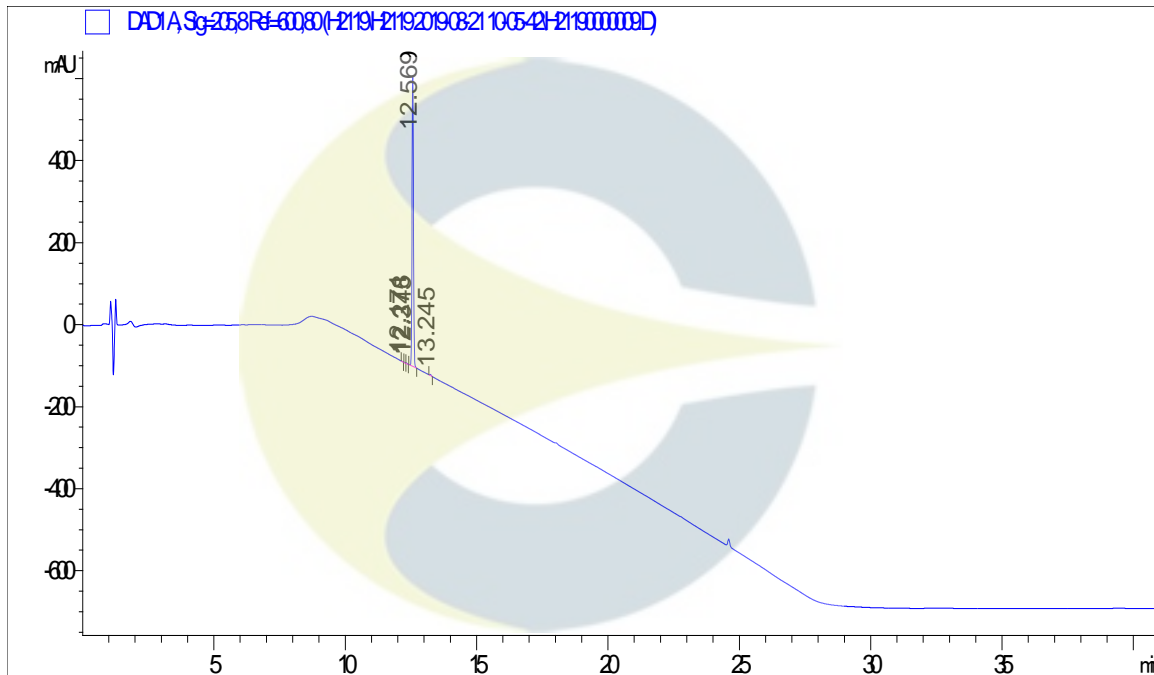
STORAGE CONDITIONS

STORAGE	Room Temperature in a dry place.
EXPIRATION DATE	08/2024 under the above conditions.

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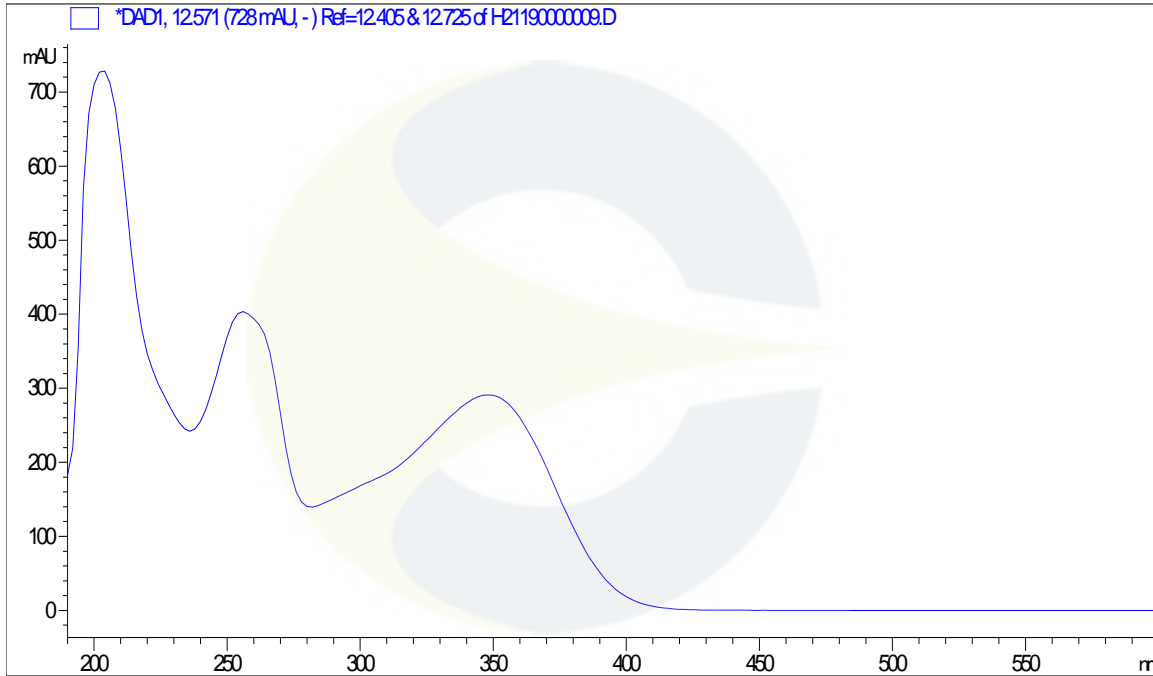
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ANALYTICAL CONDITIONS

INSTRUMENT	AGILENT 1260 HPLC UV-VIS (DAD); AB-SCIEX 6600 TRIPLE TOF
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	205 ± 4 nm

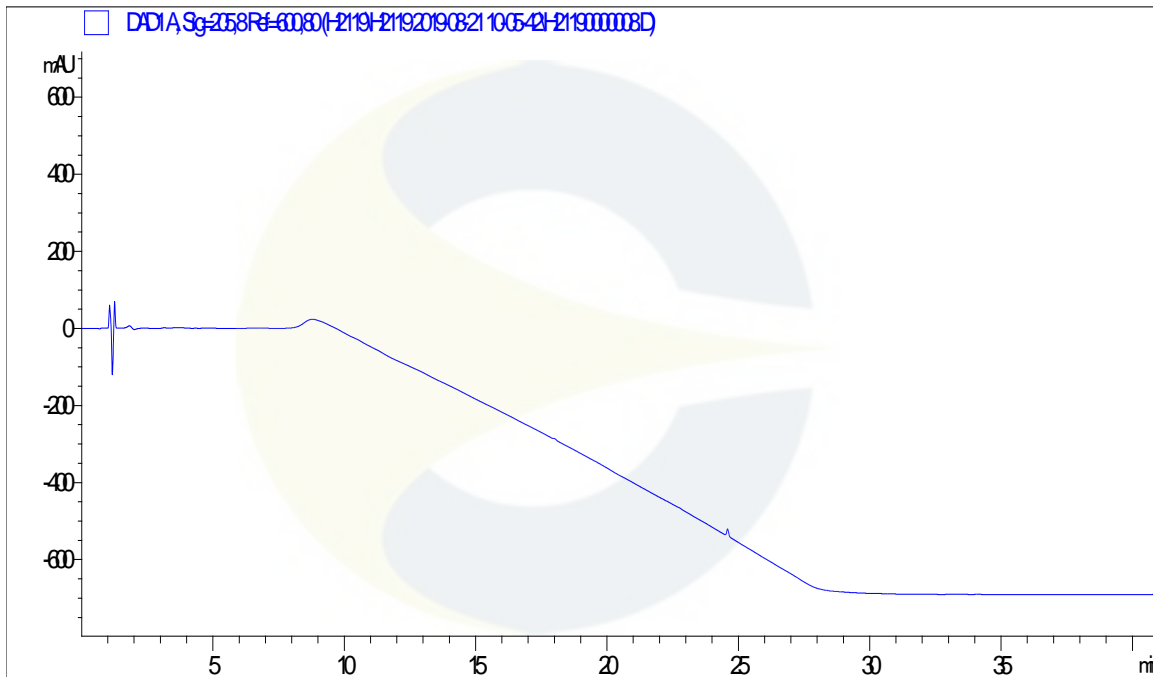
HPLC CHROMATOGRAM OF QUERCITRIN (CDXP-19-00477)


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UV SPECTRUM AT RT = 12.6 MINUTES

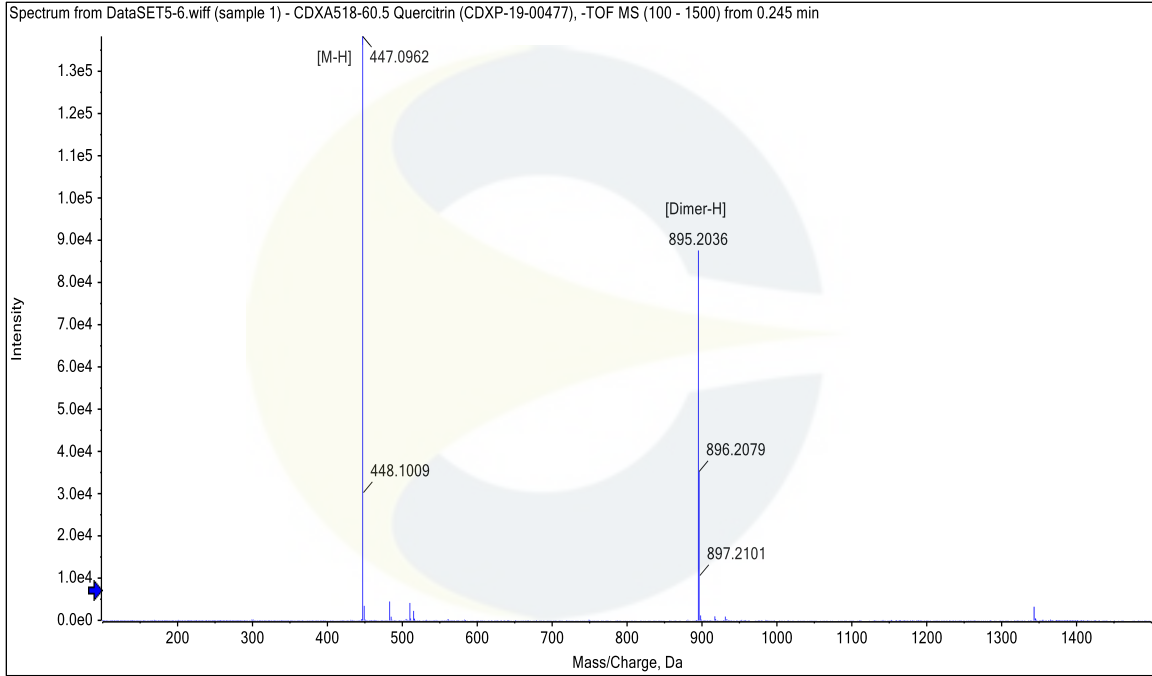


HPLC CHROMATOGRAM OF DILUENT BLANK

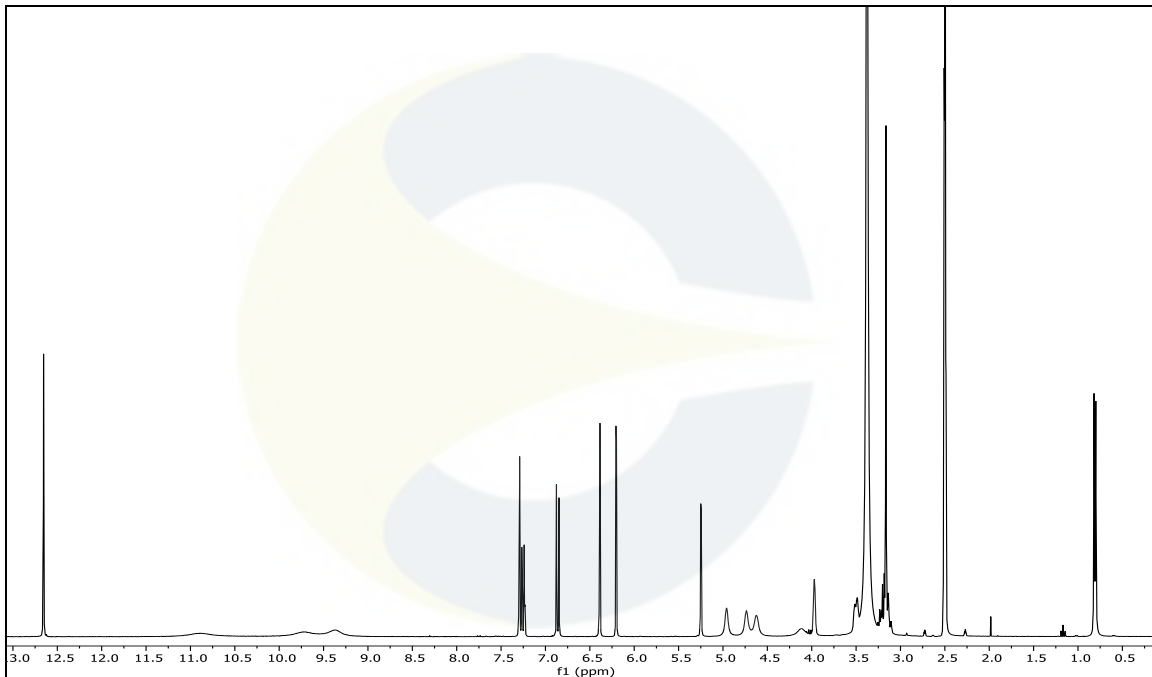


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MASS SPECTRUM OF QUERCITRIN (CDXP-19-00477)

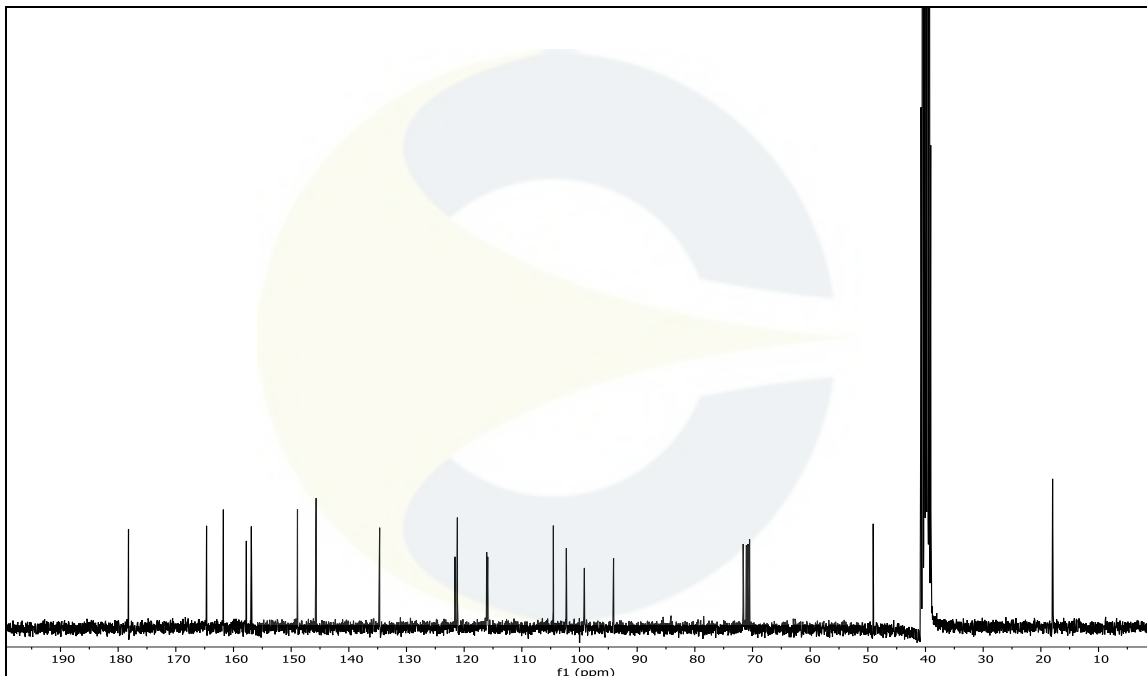


¹H-NMR SPECTRUM OF QUERCITRIN (CDXP-19-00477) IN DMSO-d₆

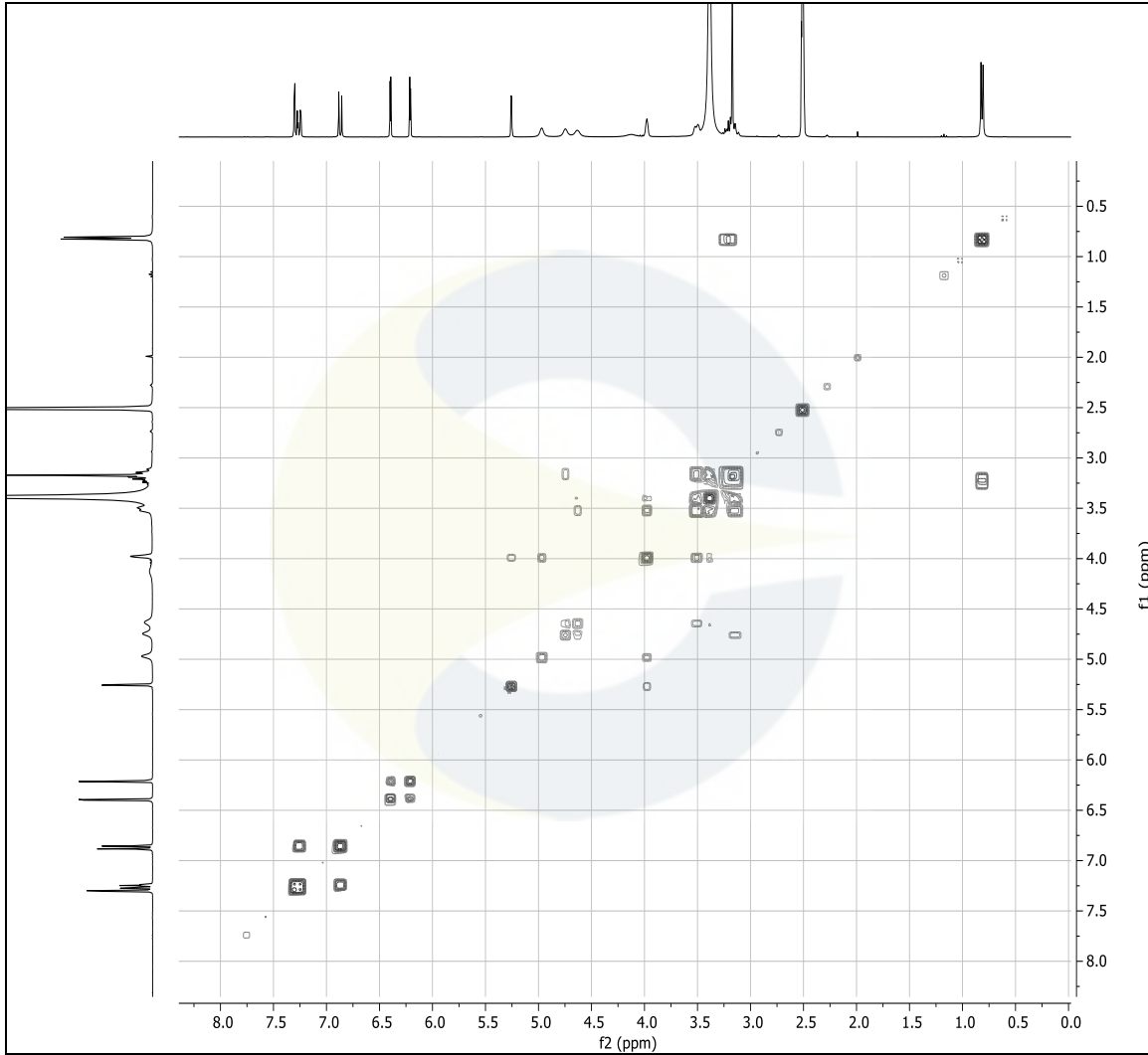


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¹³C-NMR SPECTRUM QUERCITRIN (CDXP-19-00477) IN DMSO-d₆



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COSY-NMR SPECTRUM OF QUERCITRIN (CDXP-19-00477) IN DMSO-d₆

REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	09/19/2019	New report

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