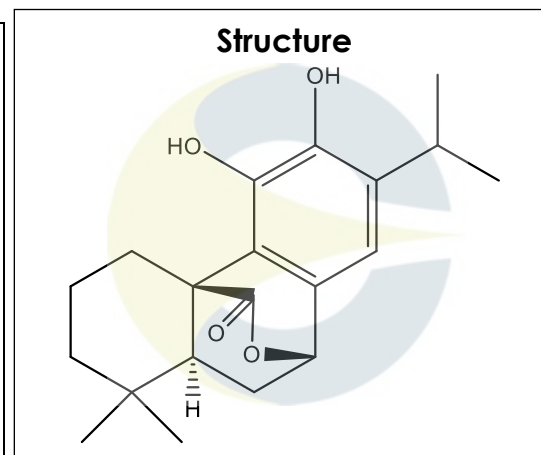


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PRODUCT NAME	Carnosol
PART NUMBER	00003199
STANDARD TYPE	Primary (P)
LOT NUMBER	00003199-5H0
REPORT NUMBER	CDXA-RSS-9288-00
SAMPLE NUMBER	CDXP-21-00049
DATE OF SAMPLE	01/22/2021
DATE OF REPORT	03/12/2021



CHEMICAL NAMES	7β,11,12-Trihydroxy-13-isopropyl-podocarpa-8,11,13-trien-17-oic acid 17,7-lactone; Picrosalvin
CHEMICAL FORMULA	C ₂₀ H ₂₆ O ₄
MOLECULAR WEIGHT (MW)	330.42
CHEMICAL FAMILY	Phenols
CAS NUMBER	[5957-80-2]
EC#(EINECS)	N/A
RTECS	KD0150000

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	99.4%
HPLC	0.700.10.2.METH22	≥ 90%	99.5%
NMR	0.700.12.4	Conforms to structure	Conforms to structure
Mass Spectrum	0.700.12.27	Conforms	Conforms
Residual Solvent*	USP <467>	NA	Ethanol: 731 ppm
Water	0.700.12.37	NA	ND
Appearance	NA	NA	White powder

*Testing performed at an ISO 17025 accredited subcontracted laboratory.

ADJUSTED PURITY: 99.4% IS BASED ON (100 - 0.1 SOLVENTS - 0.0 WATER) X 99.5% HPLC

STORAGE CONDITIONS

STORAGE	-20 °C in a dry place.
EXPIRATION DATE	01/2026 under the above conditions.

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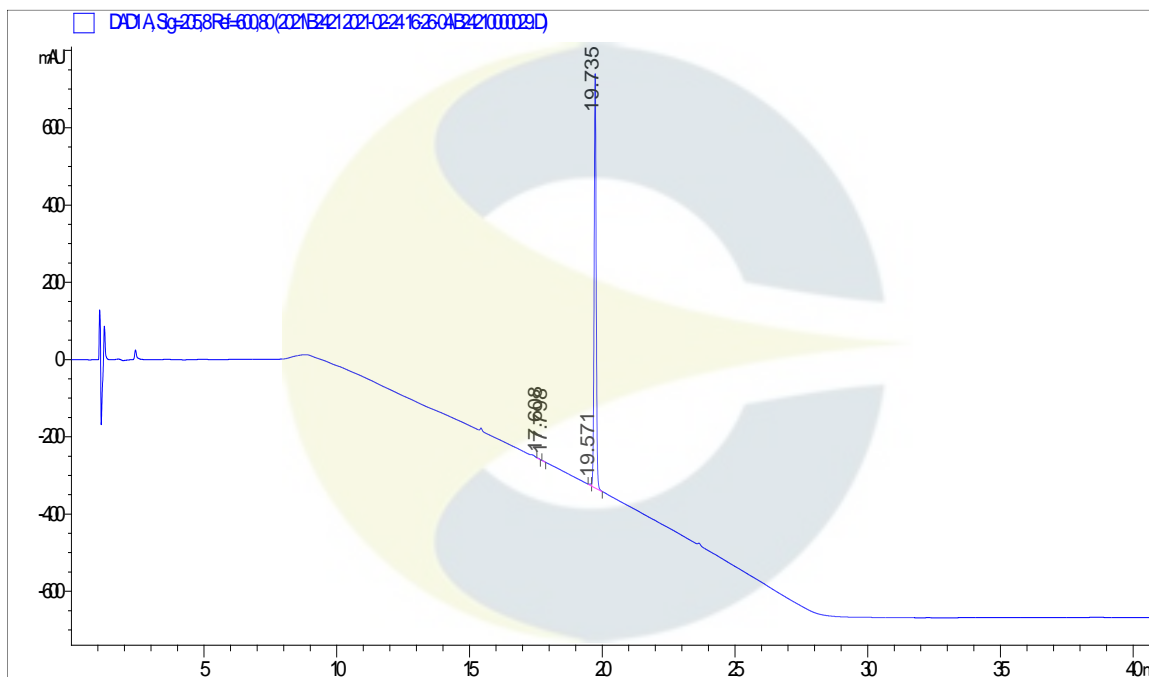
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ANALYTICAL CONDITIONS

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, then decreasing to 5% B over 1 minute.
COLUMN TEMP.	60 °C
FLOW RATE	0.4 mL/minute
INJECTION VOL.	0.4 µL
INJECTION CONC.	1.1 mg/mL in 1% acetic acid in methanol
DETECTION	205 ± 4 nm

HPLC CHROMATOGRAM OF CARNOSOL (CDXP-21-00049)

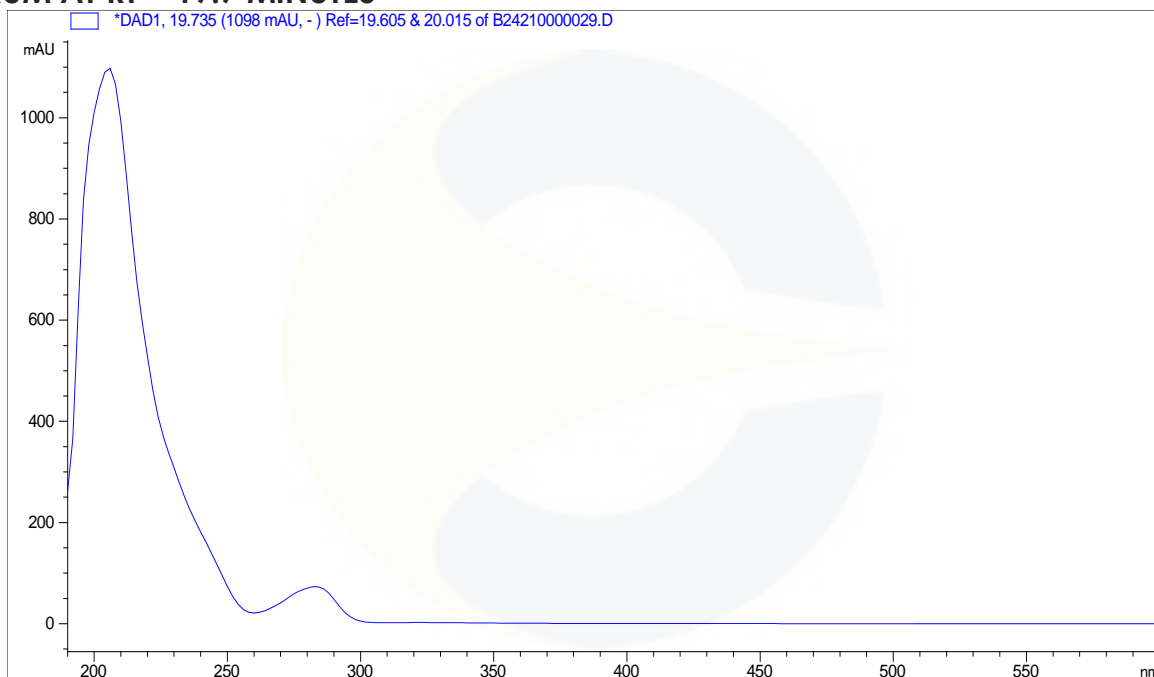


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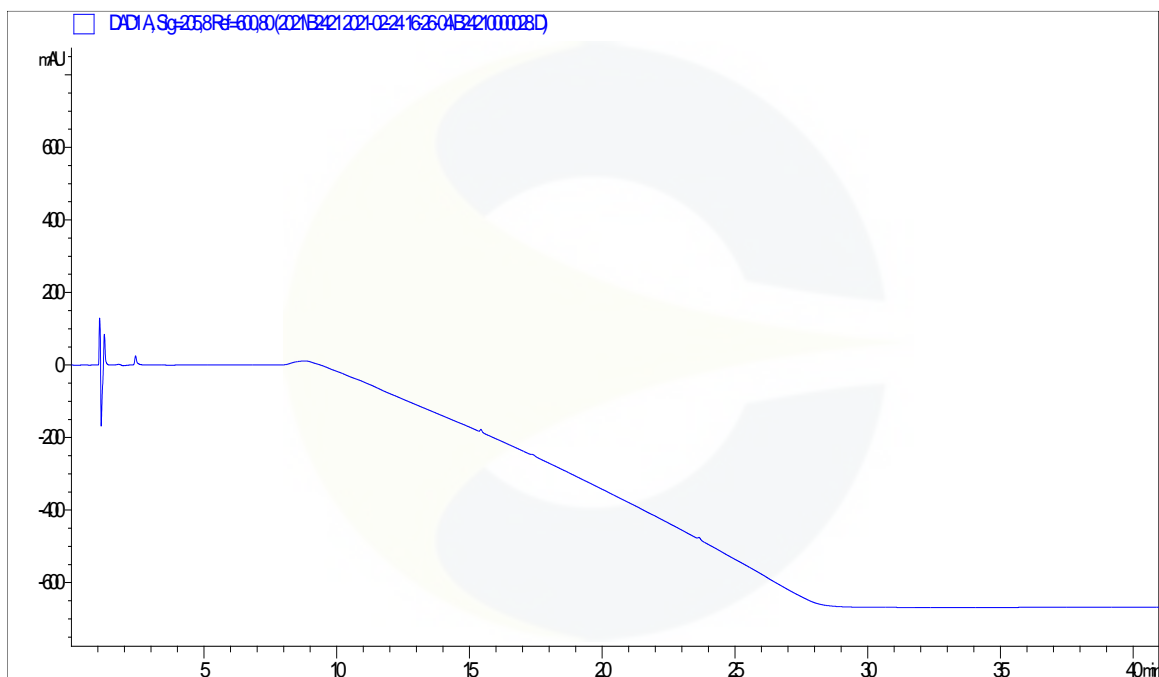
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UV SPECTRUM AT RT = 19.7 MINUTES



HPLC CHROMATOGRAM OF DILUENT BLANK

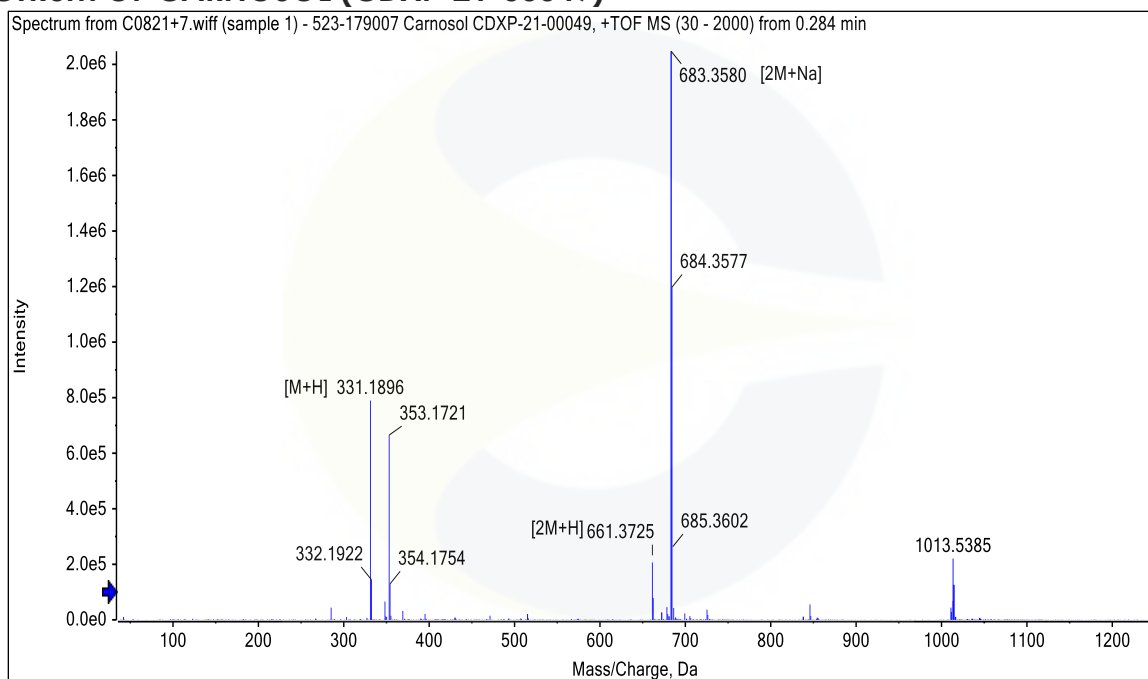


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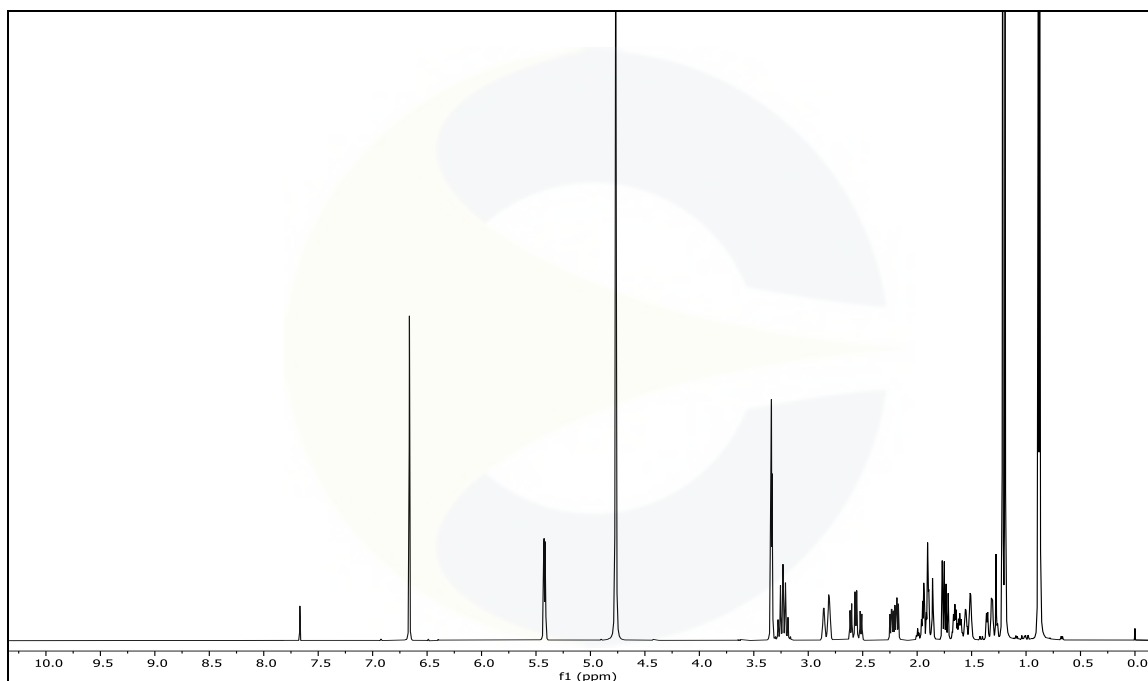
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MASS SPECTRUM OF CARNOSOL (CDXP-21-00049)



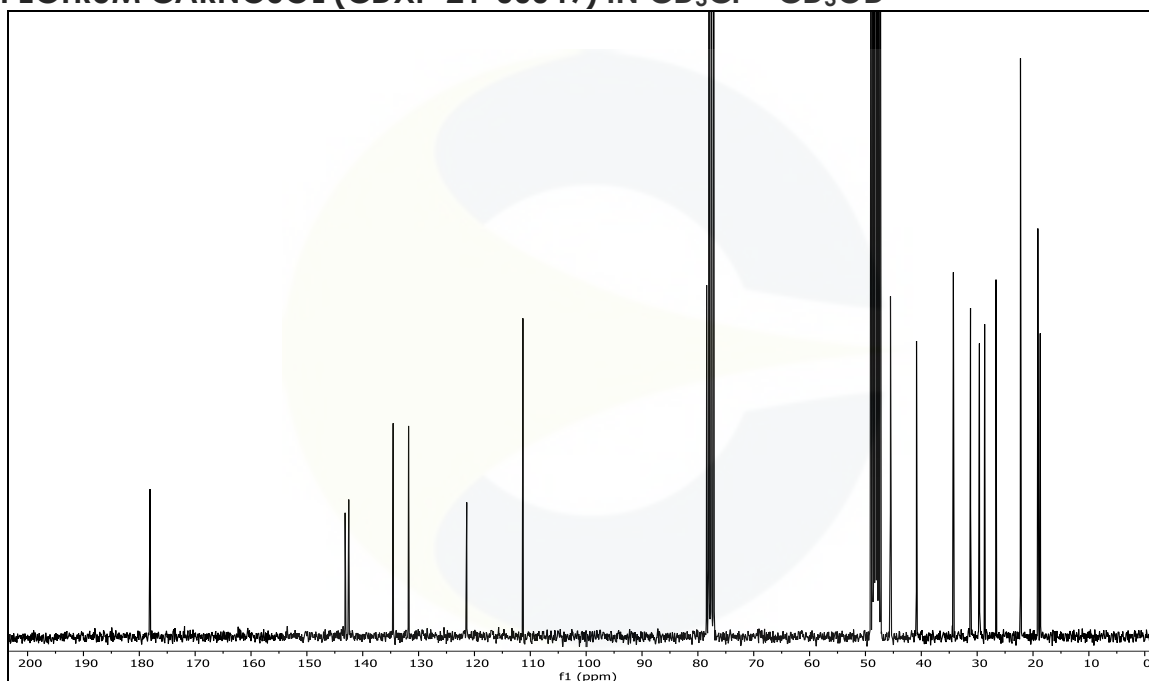
¹H-NMR SPECTRUM OF CARNOSOL (CDXP-21-00049) in CD₃Cl + CD₃OD



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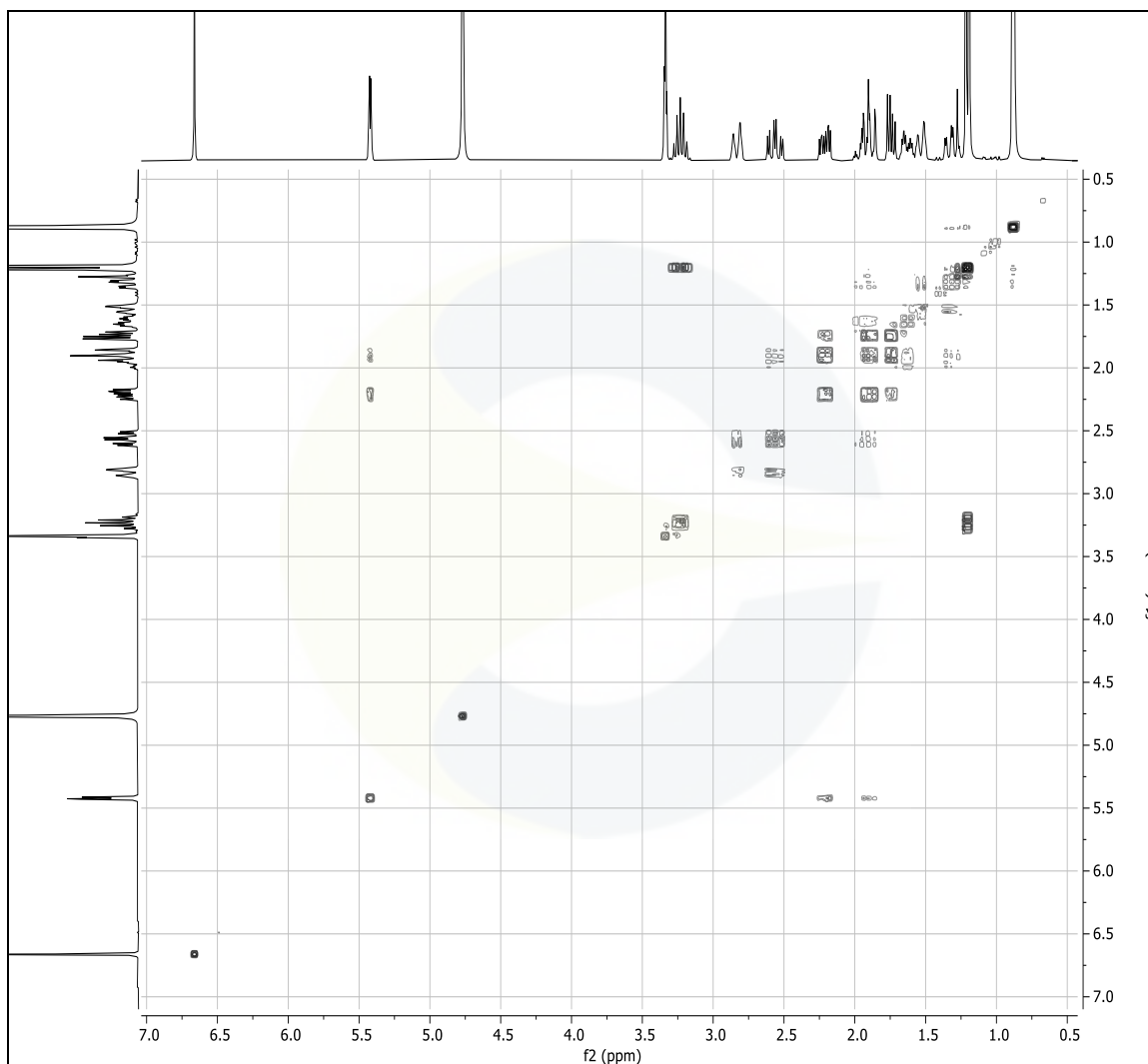
¹³C-NMR SPECTRUM CARNOSOL (CDXP-21-00049) IN CD₃Cl + CD₃OD


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COSY-NMR SPECTRUM OF CARNOSOL (CDXP-21-00049) IN CD₃Cl + CD₃OD



REVISION HISTORY

Revision History	Date of Revision	Document/Changes
00	03/12/2021	New report

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