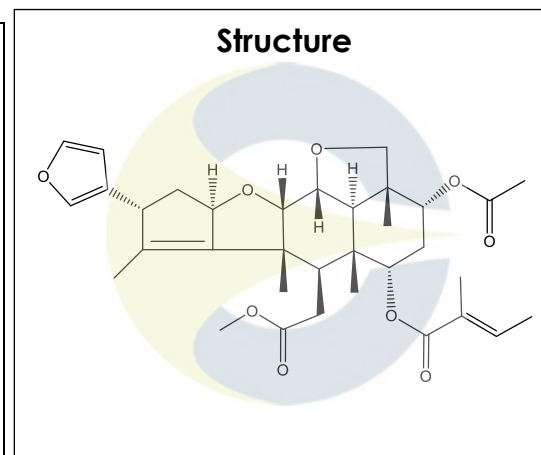


Certificate of Analysis

For Laboratory Use Only

PRODUCT NAME	Salannin
PART NUMBER	00019028
STANDARD TYPE	Primary (P)
LOT NUMBER	00019028-00778
REPORT NUMBER	CDXA-RSS-9207-00
SAMPLE NUMBER	CDXP-20-00778
DATE OF SAMPLE	10/21/2020
DATE OF REPORT	11/11/2020



CHEMICAL NAMES	Azadirachtin, neem; Margosan-O
CHEMICAL FORMULA	C ₃₄ H ₄₄ O ₉
MOLECULAR WEIGHT (MW)	596.71
CHEMICAL FAMILY	Triterpenoids
CAS NUMBER	[992-20-1]
EC#(EINECS)	N/A
RTECS	N/A

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	97.0%
HPLC	0.700.10.2.METH22	≥ 90%	97.1%
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: 940 ppm
Water	0.700.12.37	NA	ND
Appearance	NA	NA	White powder

*Testing performed at an ISO 17025 accredited subcontracted laboratory.

ADJUSTED PURITY: 97.0% IS BASED ON (100 - 0.1 SOLVENTS - 0.0 WATER) X 97.1% HPLC

STORAGE CONDITIONS

STORAGE	-20 °C in a dry place.
EXPIRATION DATE	10/2025 under the above conditions.

This document is the property of ChromaDex, Inc. and/or its relevant affiliates and contains confidential and proprietary material for the sole use of the intended recipient(s). Any review, use, distribution or disclosure by or to others is strictly prohibited.

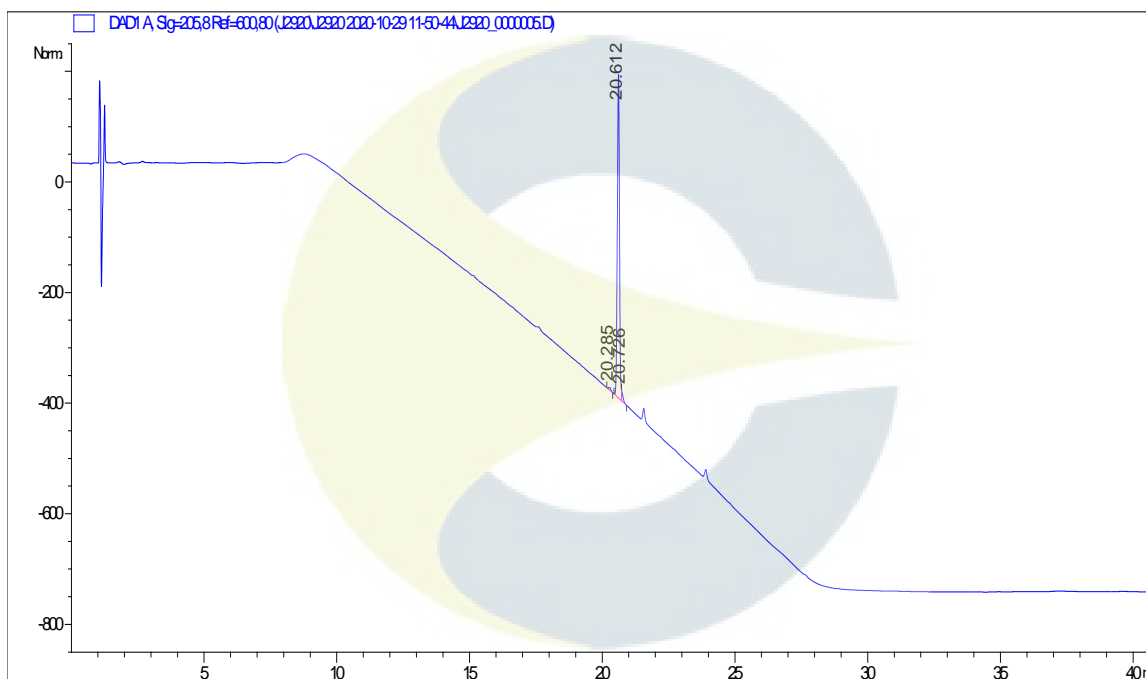
Certificate of Analysis

For Laboratory Use Only

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.	1.4 mg/mL in Methanol
DETECTION	205 ± 4 nm

HPLC CHROMATOGRAM OF SALANNIN (CDXP-20-00778)

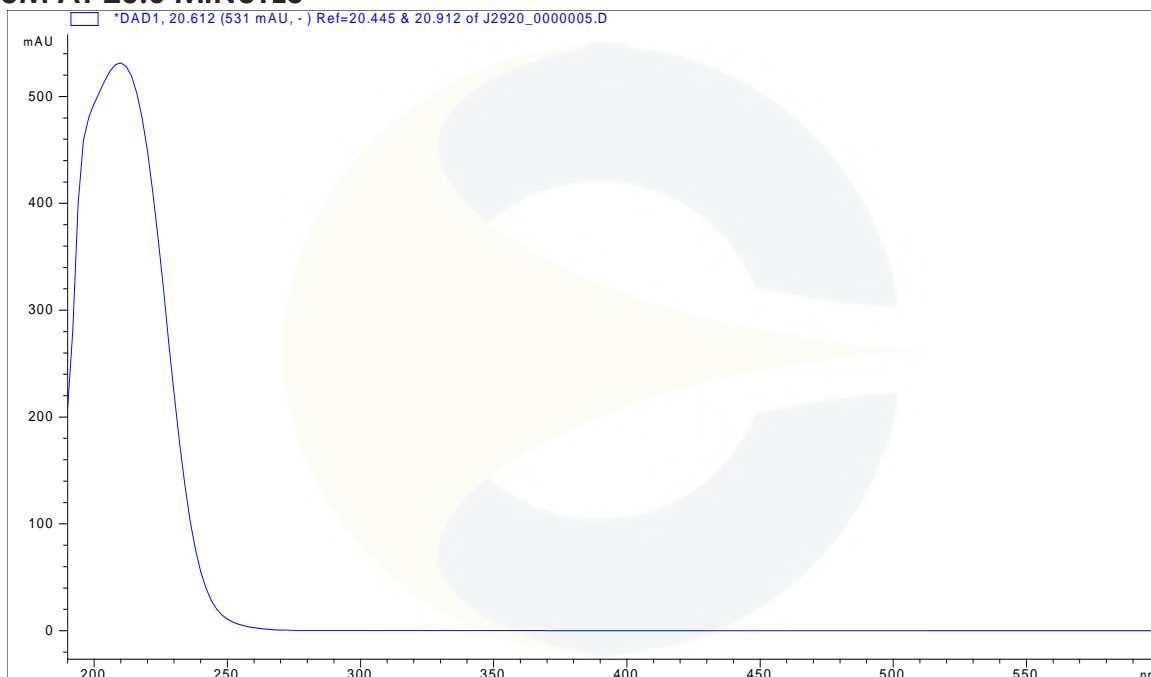


This document is the property of ChromaDex, Inc. and/or its relevant affiliates and contains confidential and proprietary material for the sole use of the intended recipient(s). Any review, use, distribution or disclosure by or to others is strictly prohibited.

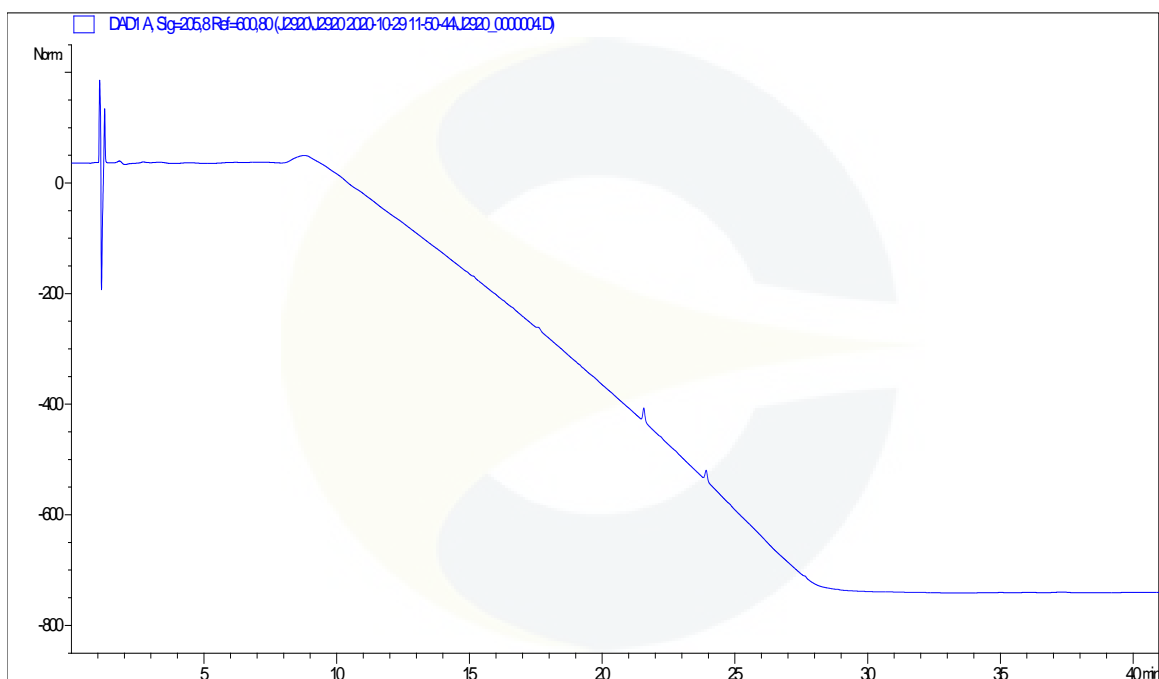
Certificate of Analysis

For Laboratory Use Only

UV SPECTRUM AT 20.6 MINUTES



HPLC CHROMATOGRAM OF DILUENT BLANK

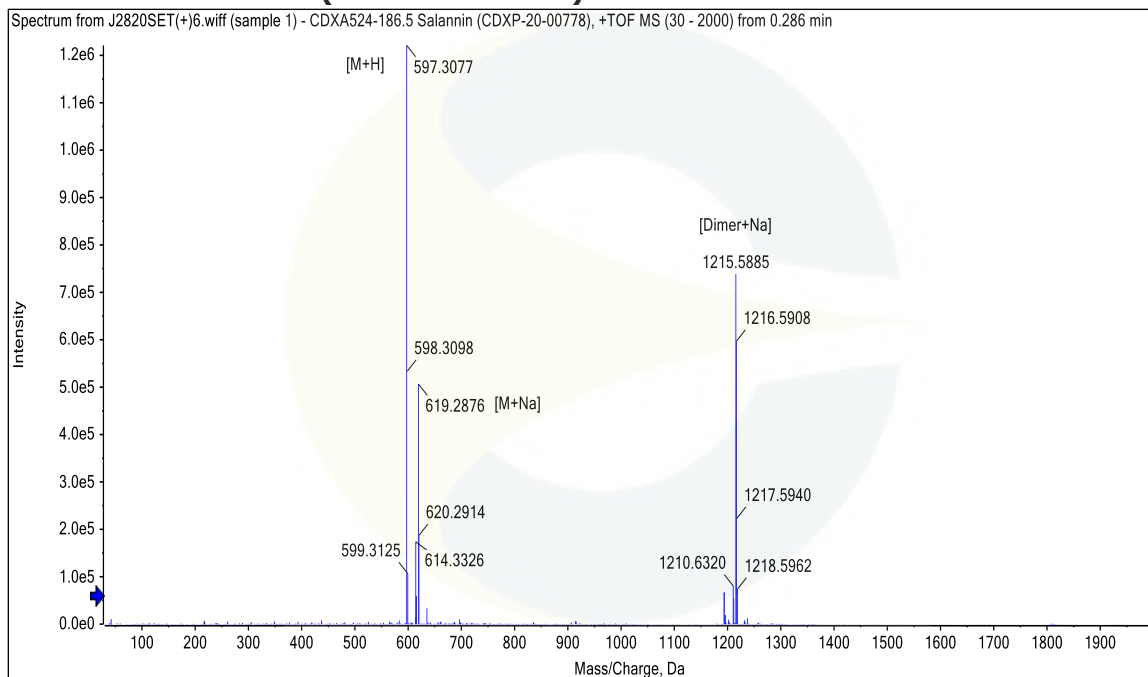


This document is the property of ChromaDex, Inc. and/or its relevant affiliates and contains confidential and proprietary material for the sole use of the intended recipient(s). Any review, use, distribution or disclosure by or to others is strictly prohibited.

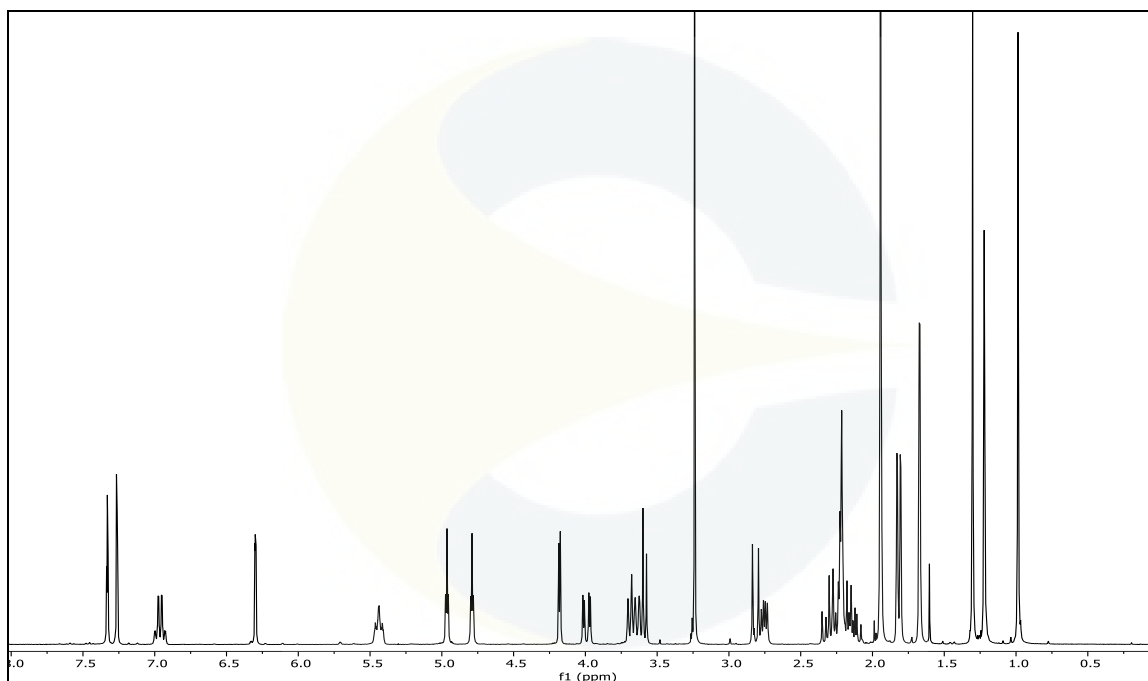
Certificate of Analysis

For Laboratory Use Only

MASS SPECTRUM OF SALANNIN (CDXP-20-00778)



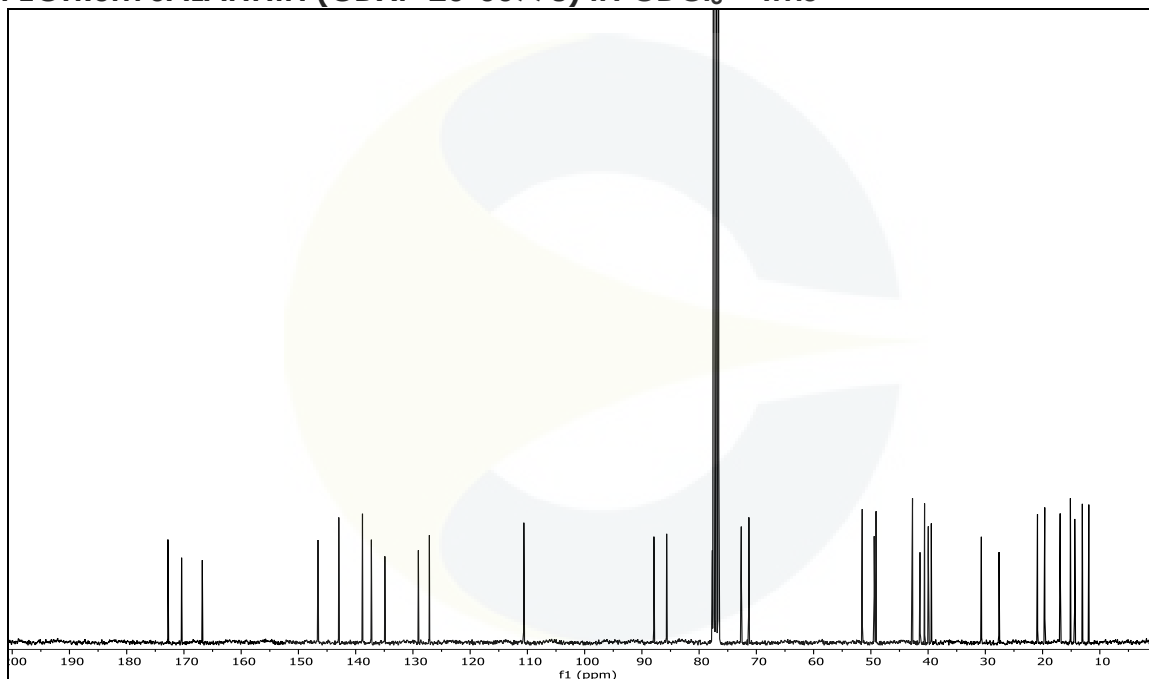
¹H-NMR SPECTRUM OF SALANNIN (CDXP-20-00778) IN CDCl₃ + TMS



This document is the property of ChromaDex, Inc. and/or its relevant affiliates and contains confidential and proprietary material for the sole use of the intended recipient(s). Any review, use, distribution or disclosure by or to others is strictly prohibited.

Certificate of Analysis

For Laboratory Use Only

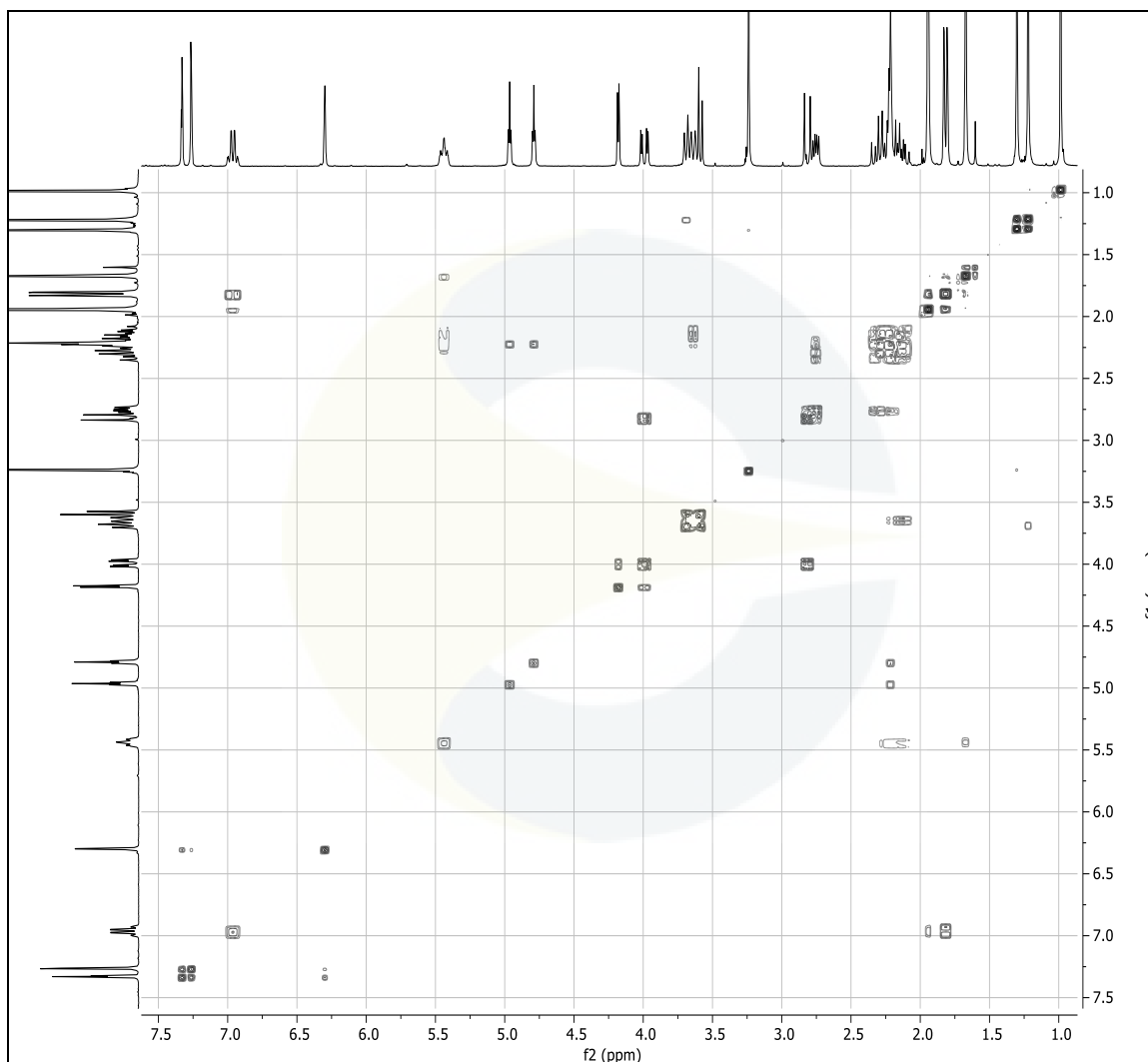
¹³C-NMR SPECTRUM SALANNIN (CDXP-20-00778) IN CDCl₃ + TMS


This document is the property of ChromaDex, Inc. and/or its relevant affiliates and contains confidential and proprietary material for the sole use of the intended recipient(s). Any review, use, distribution or disclosure by or to others is strictly prohibited.

Certificate of Analysis

For Laboratory Use Only

COSY-NMR SPECTRUM OF SALANNIN (CDXP-20-00778) IN CDCl₃ + TMS



REVISION HISTORY

Revision History	Date of Revision	Document/Changes
00	11/11/2020	New report

This document is the property of ChromaDex, Inc. and/or its relevant affiliates and contains confidential and proprietary material for the sole use of the intended recipient(s). Any review, use, distribution or disclosure by or to others is strictly prohibited.