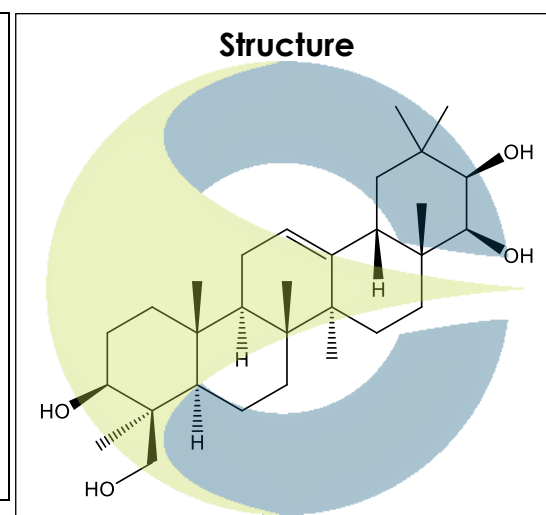


Certificate of Analysis

For Laboratory Use Only

PRODUCT NAME	Soyasapogenol A
PART NUMBER	00019335
STANDARD TYPE	Primary (P)
LOT NUMBER	00019335-6419
REPORT NUMBER	CDXA-RSS-5819-02
SAMPLE NUMBER	CDXA-13-6419
DATE OF SAMPLE	09/20/2013
DATE OF RE-EVALUATION	08/15/2018 (1 st); 07/07/2022(2 nd)
DATE OF REPORT	07/21/2022


CHEMICAL NAMES

(3β,4β,21β,22β)-Olean-12-ene-3,21,22,23-tetrol

CHEMICAL FORMULA
 $C_{30}H_{50}O_4$
MOLECULAR WEIGHT (MW)

474.72

CHEMICAL FAMILY

Saponins

CAS NUMBER

[508-01-0]

EC#(EINECS)

NA

RTECS

NA

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	96.1%
HPLC	0.700.10.2.METH22	≥ 90%	99.2%
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-7.0-000115	NA	ND
Water	0.700.12.37	NA	3.1%
Appearance	NA	NA	White powder

ADJUSTED PURITY: 96.1% IS BASED ON (100 - 0.0 SOLVENTS - 3.1 WATER) X 99.2% HPLC

STORAGE CONDITIONS
STORAGE

+4 °C in a dry place.

EXPIRATION DATE

07/2027 under the above conditions.

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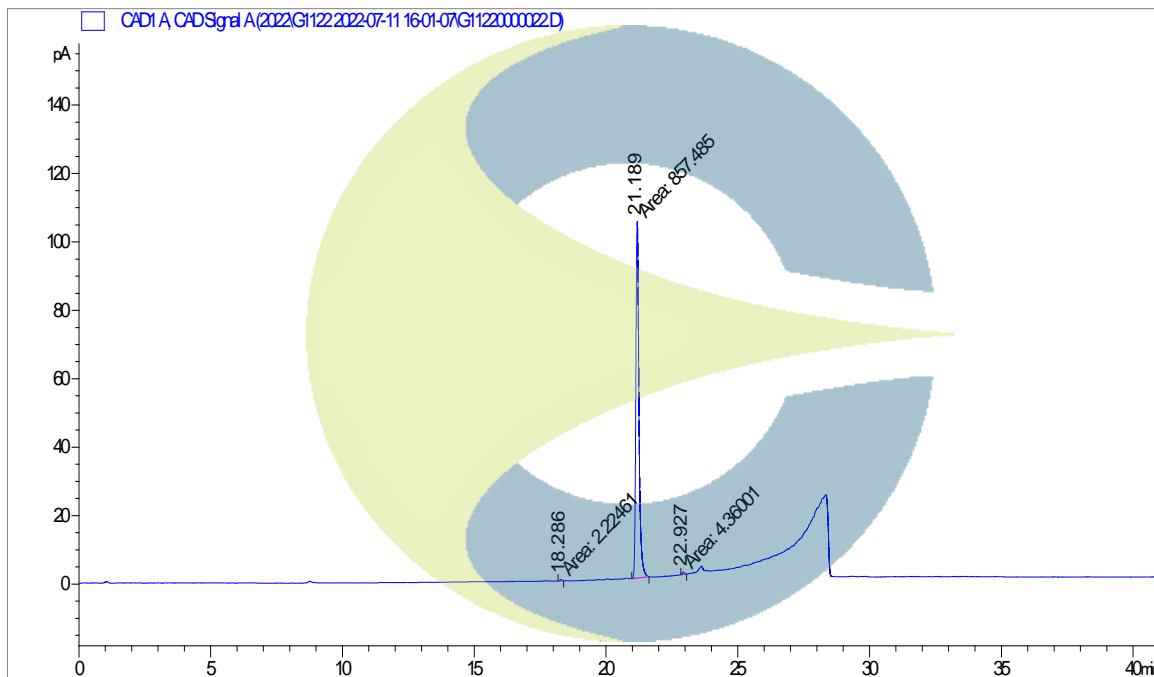
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ANALYTICAL CONDITIONS

INSTRUMENT	AGILENT 1260 HPLC UV-VIS (DAD) CONNECTED TO DIONEX CORONA VEO CHARGED AEROSOL DETECTOR (CAD); 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, then decreasing to 5% B over 1 minute.
COLUMN TEMP.	60 °C
FLOW RATE	0.4 mL/minute
INJECTION VOL.	2.0 µL
INJECTION CONC.	1.0 mg/mL in Methanol
DETECTION	CAD

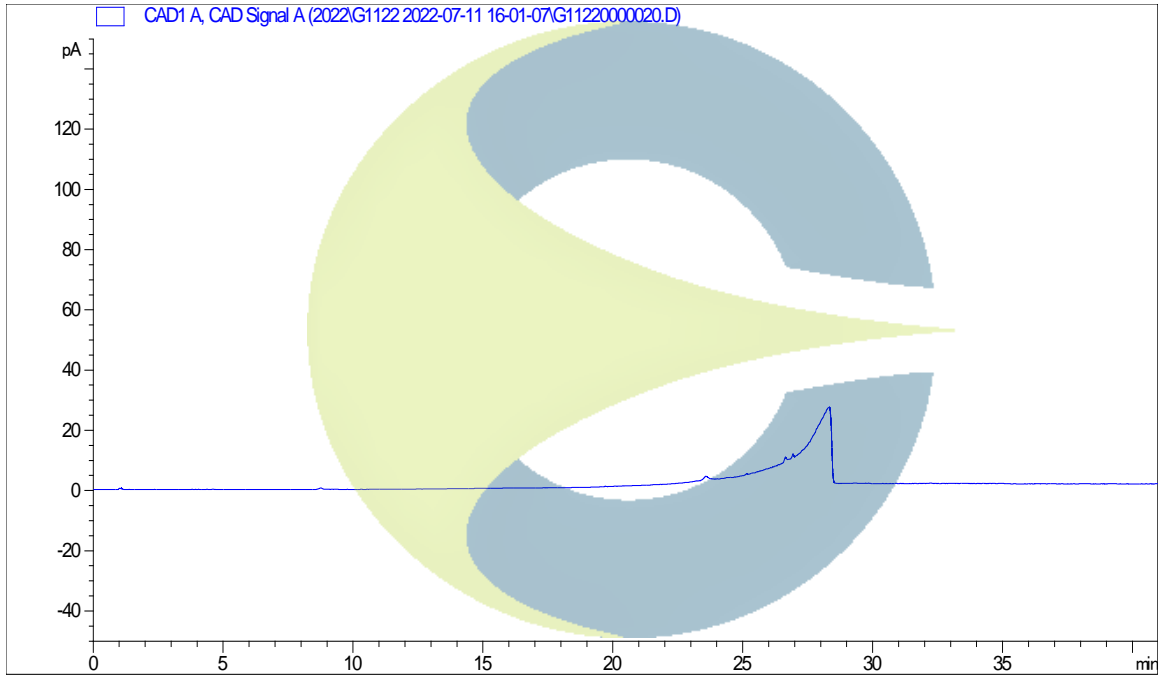
HPLC CHROMATOGRAM OF SOYASAPOGENOL A (CDXA-13-6419)



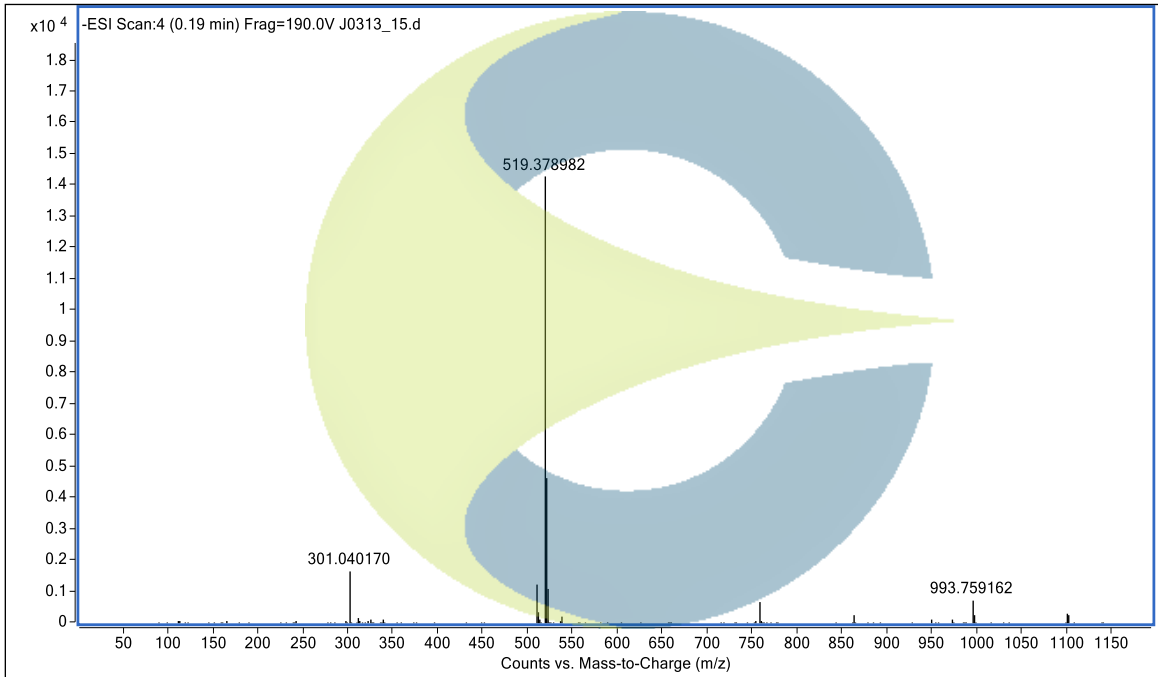
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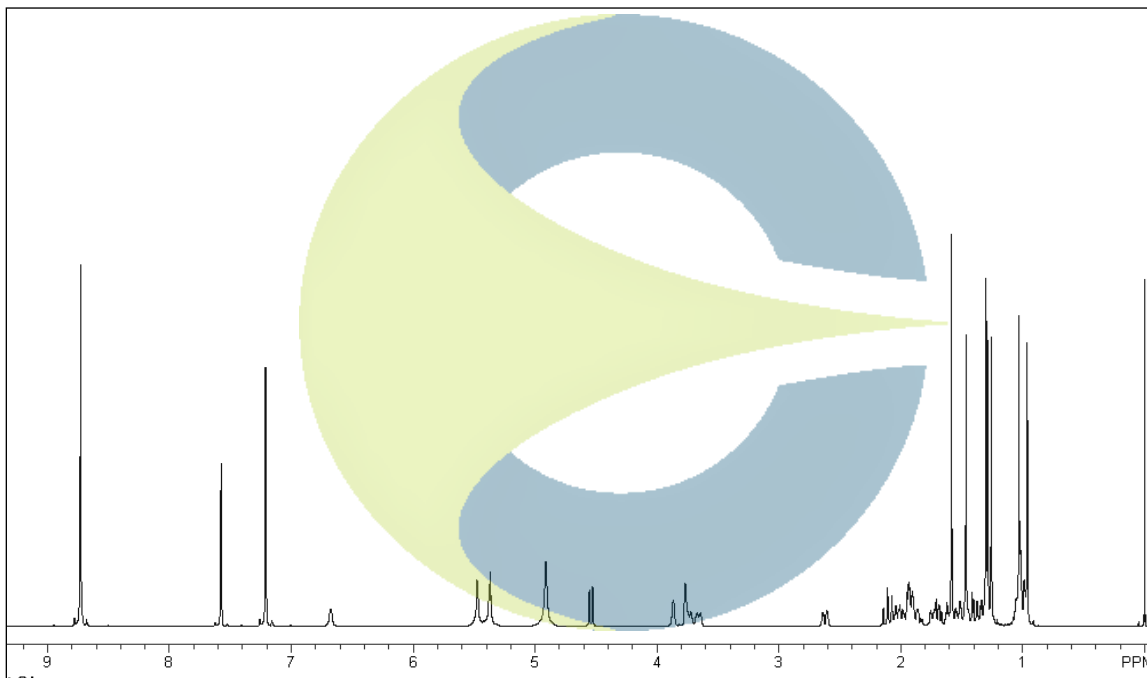
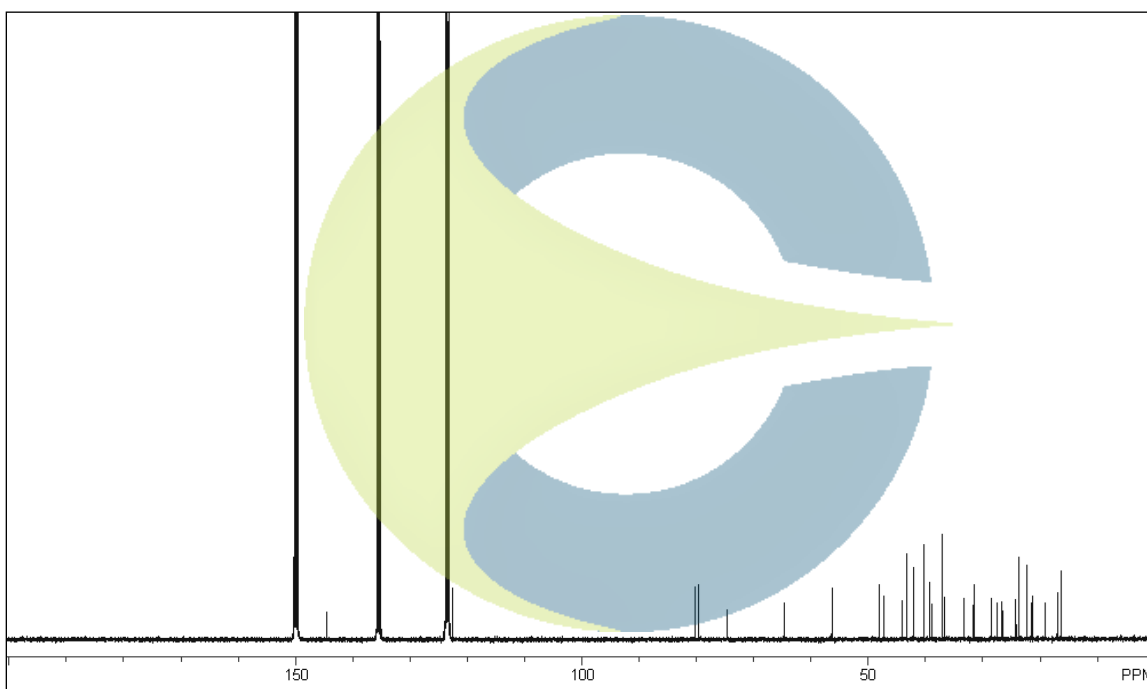
HPLC CHROMATOGRAM OF DILUENT BLANK



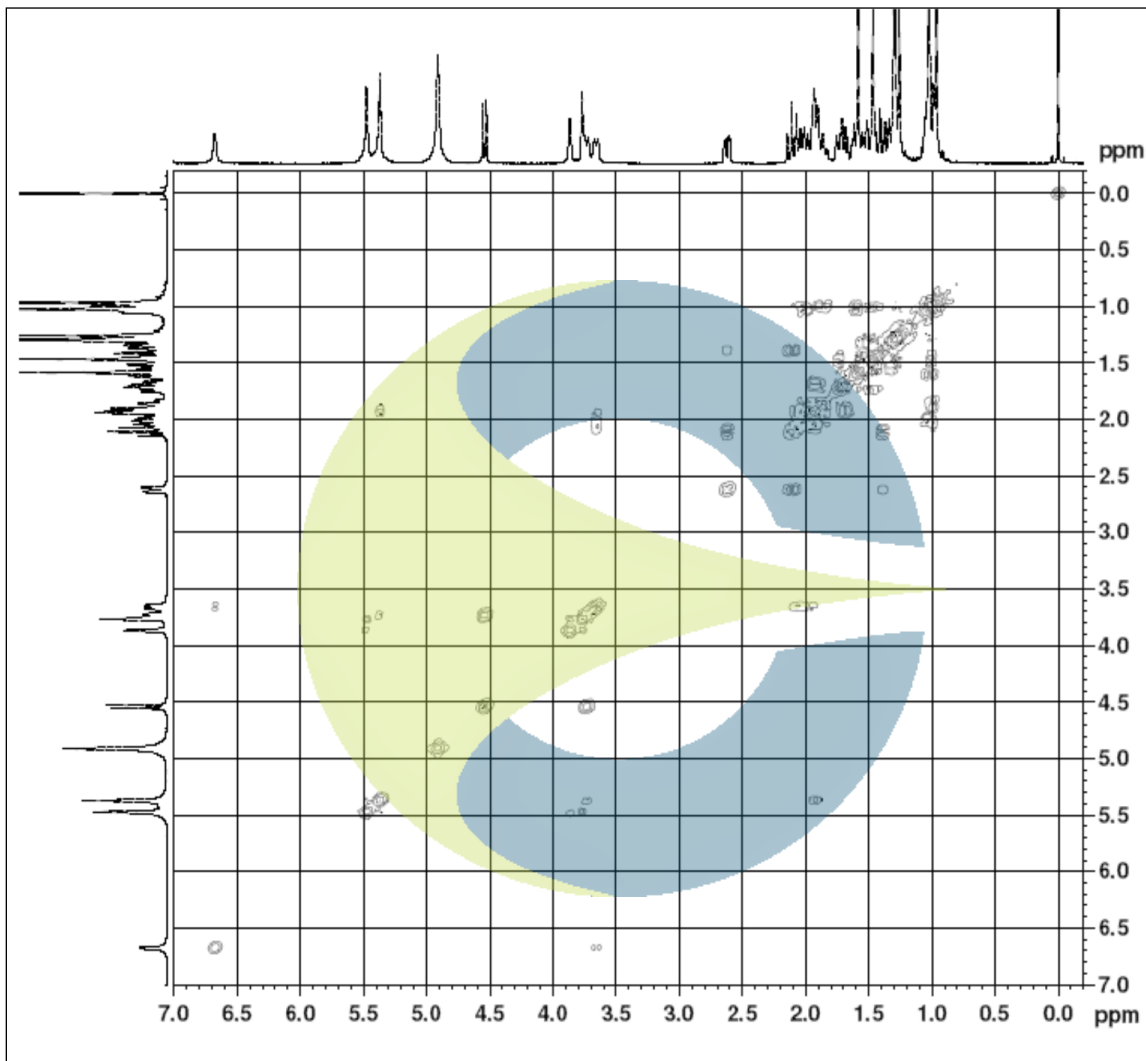
MASS SPECTRUM OF SOYASAPOGENOL A (CDXA-13-6419)



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^1H -NMR SPECTRUM OF SOYASAPOGENOL A (CDXA-13-6419) IN PYRIDINE- d_5

 ^{13}C -NMR SPECTRUM OF SOYASAPOGENOL A (CDXA-13-6419) IN PYRIDINE- d_5


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COSY-NMR SPECTRUM OF SOYASAPOGENOL A (CDXA-13-6419) IN PYRIDINE-*d*₅

REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	10/24/2013	New report
01	09/10/2018	Passed re-evaluation by HPLC, KF. Updated expiration date, chemical structure, analytical conditions, chromatograms and results. Removed melting point.
02	07/21/2022	Passed re-evaluation by HPLC, KF. Updated expiration date, chromatograms, analytical conditions, and results.

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