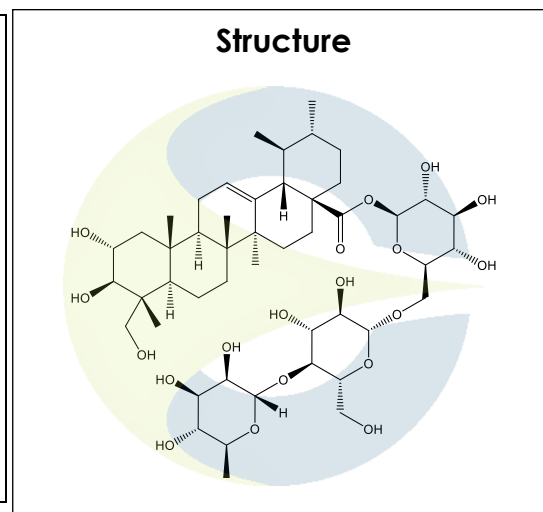


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PRODUCT NAME	Asiaticoside
PART NUMBER	00011030
STANDARD TYPE	Primary (P)
LOT NUMBER	00011030-131
REPORT NUMBER	CDXA-RSS-8257-01
SAMPLE NUMBER	CDXP-18-00965
DATE OF SAMPLE	09/24/2018
DATE OF RE-EVALUATION	08/09/2022
DATE OF REPORT	08/30/2022



CHEMICAL NAMES	(2 α ,3 β ,4 α)-2,3,23-Trihydroxy-urs-12-en-28-oic acid-O-6-deoxy- α -L-mannopyranosyl-(1 \rightarrow 4)-O- β -D-glucopyranosyl-(1 \rightarrow 6)- β -D-glucopyranosyl ester; Madecassol
CHEMICAL FORMULA	C ₄₈ H ₇₈ O ₁₉
MOLECULAR WEIGHT (MW)	959.12
CHEMICAL FAMILY	Saponins
CAS NUMBER	[16830-15-2]
EC#(EINECS)	240-851-7
RTECS	YU9625000

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	93.6%
HPLC	0.700.10.2.METH22	≥ 90%	99.4%
NMR	99.1-04-2.0-000122	Conforms to structure	Conforms to structure
Mass Spectrum	99.1-04-3.0-000126	Conforms	Conforms
Residual Solvent	99.1-CDXA-3.0-000621	NA	EtOH < 0.1%; ACN < 0.1%
Water	0.700.12.37	NA	5.8%
Appearance	NA	NA	White powder

ADJUSTED PURITY: 93.6% IS BASED ON (100 - 0.0 SOLVENTS - 5.8 WATER) X 99.4% HPLC

STORAGE CONDITIONS

STORAGE	+4 °C in a dry place.
EXPIRATION DATE	08/2027 under the above conditions.

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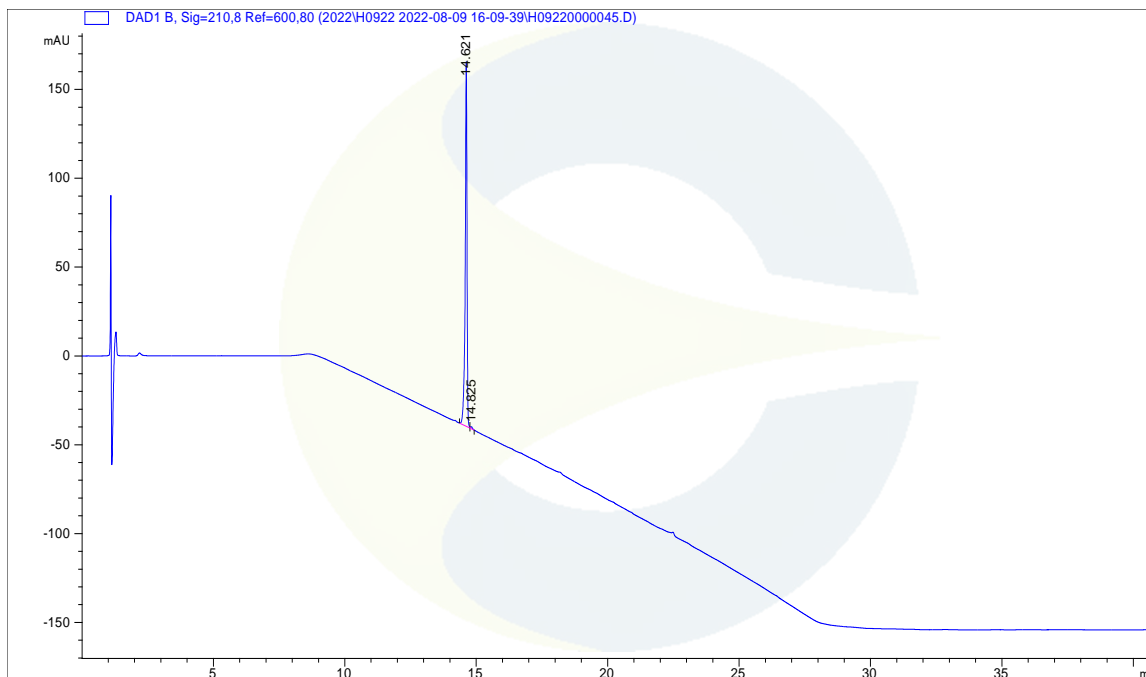
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ANALYTICAL CONDITIONS

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.	2.0 µL
INJECTION CONC.	1.2 mg/mL in Methanol
DETECTION	210 ± 4 nm

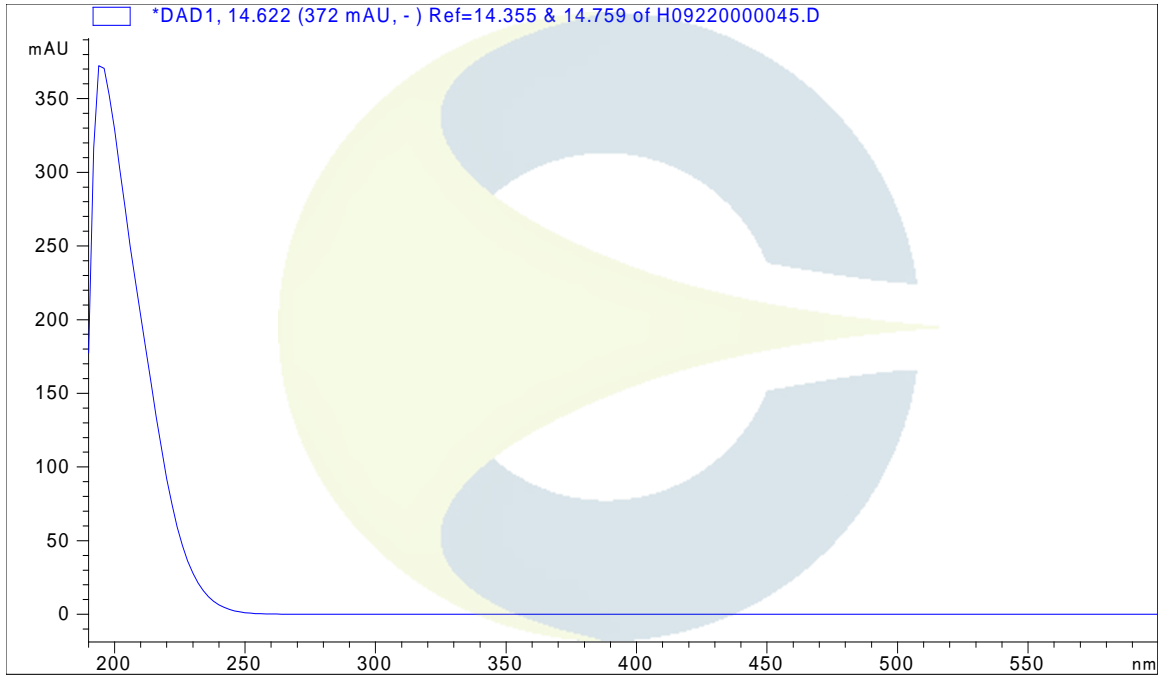
HPLC CHROMATOGRAM OF ASIATICOSIDE (CDXP-18-00965)



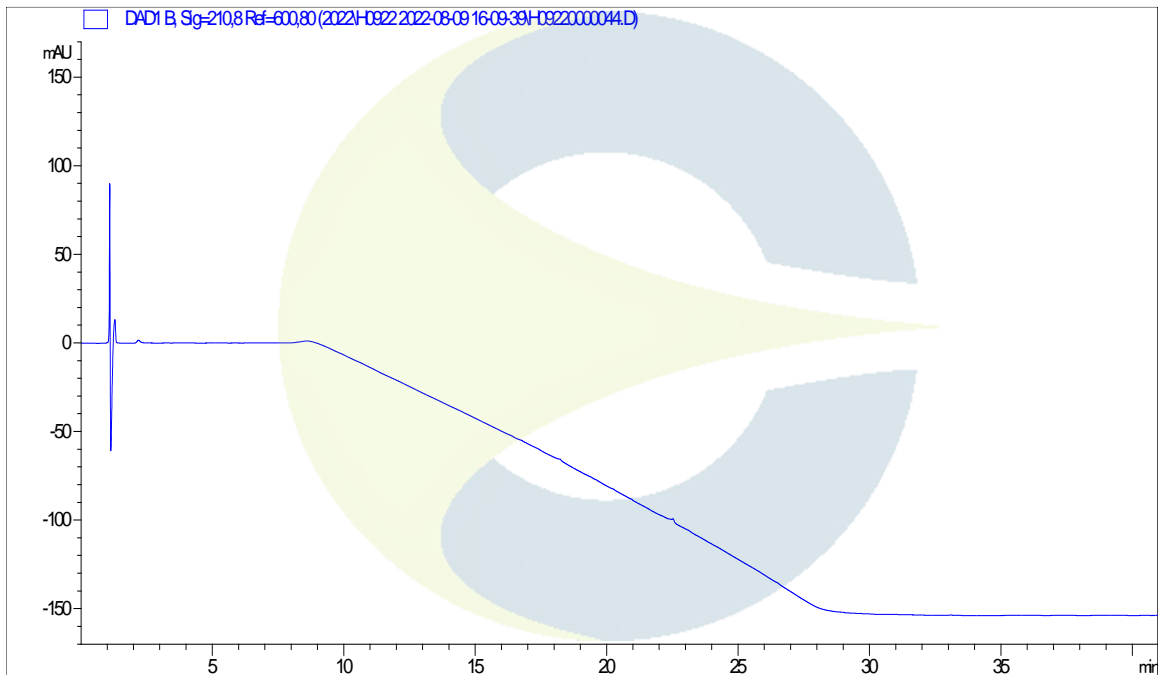
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UV SPECTRUM AT RT = 14.6 MINUTES



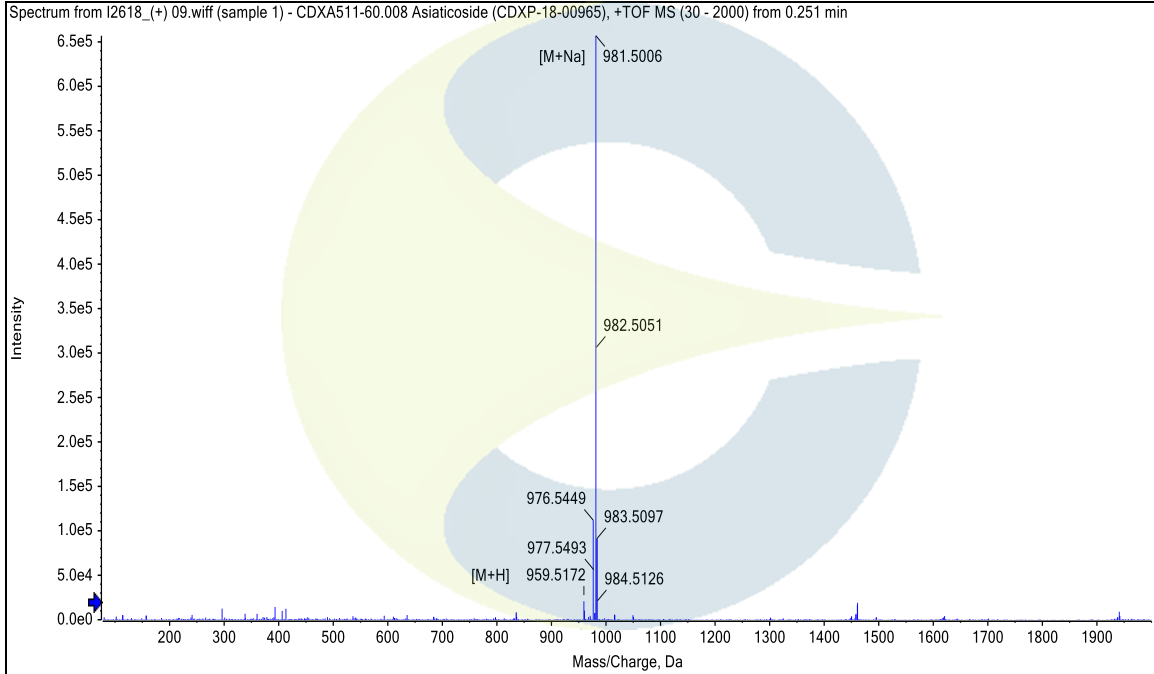
HPLC CHROMATOGRAM OF DILUENT BLANK



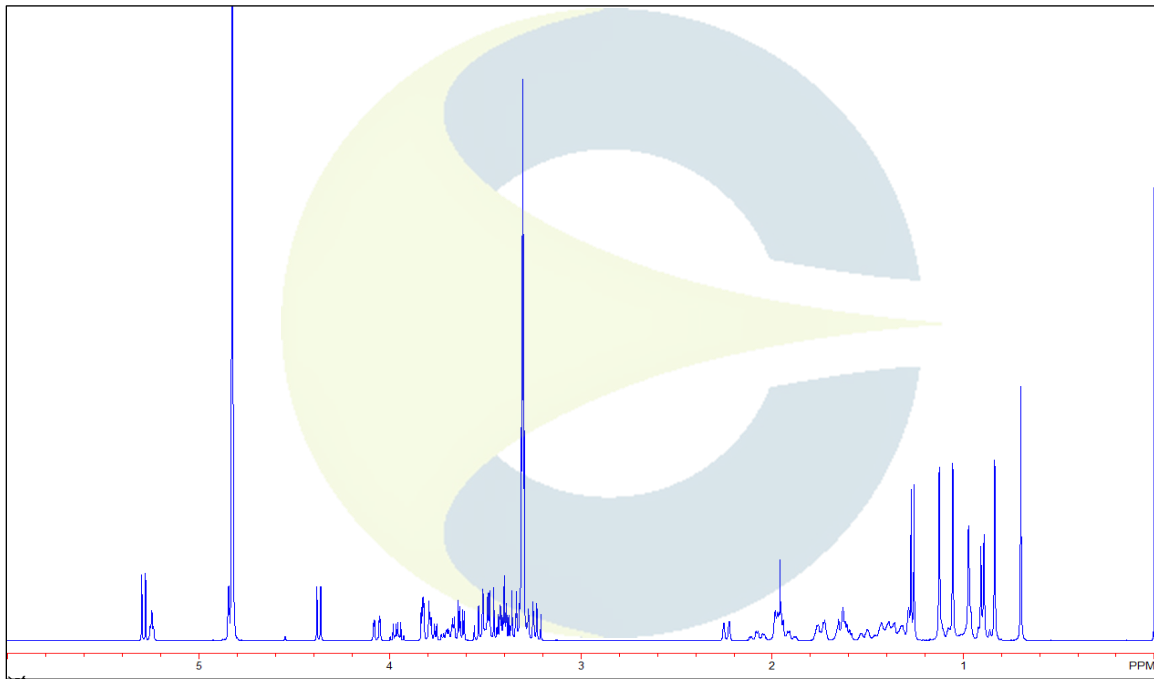
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MASS SPECTRUM OF ASIATICOSIDE (CDXP-18-00965)

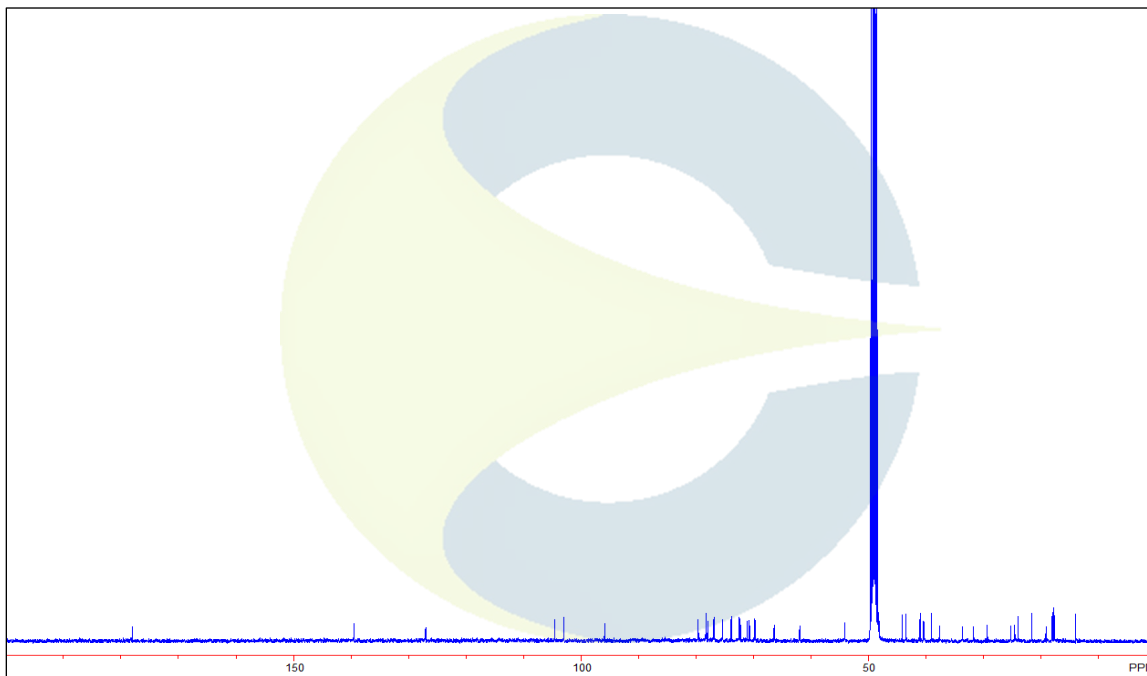


¹H-NMR SPECTRUM OF ASIATICOSIDE (CDXP-18-00965) IN CD₃OD

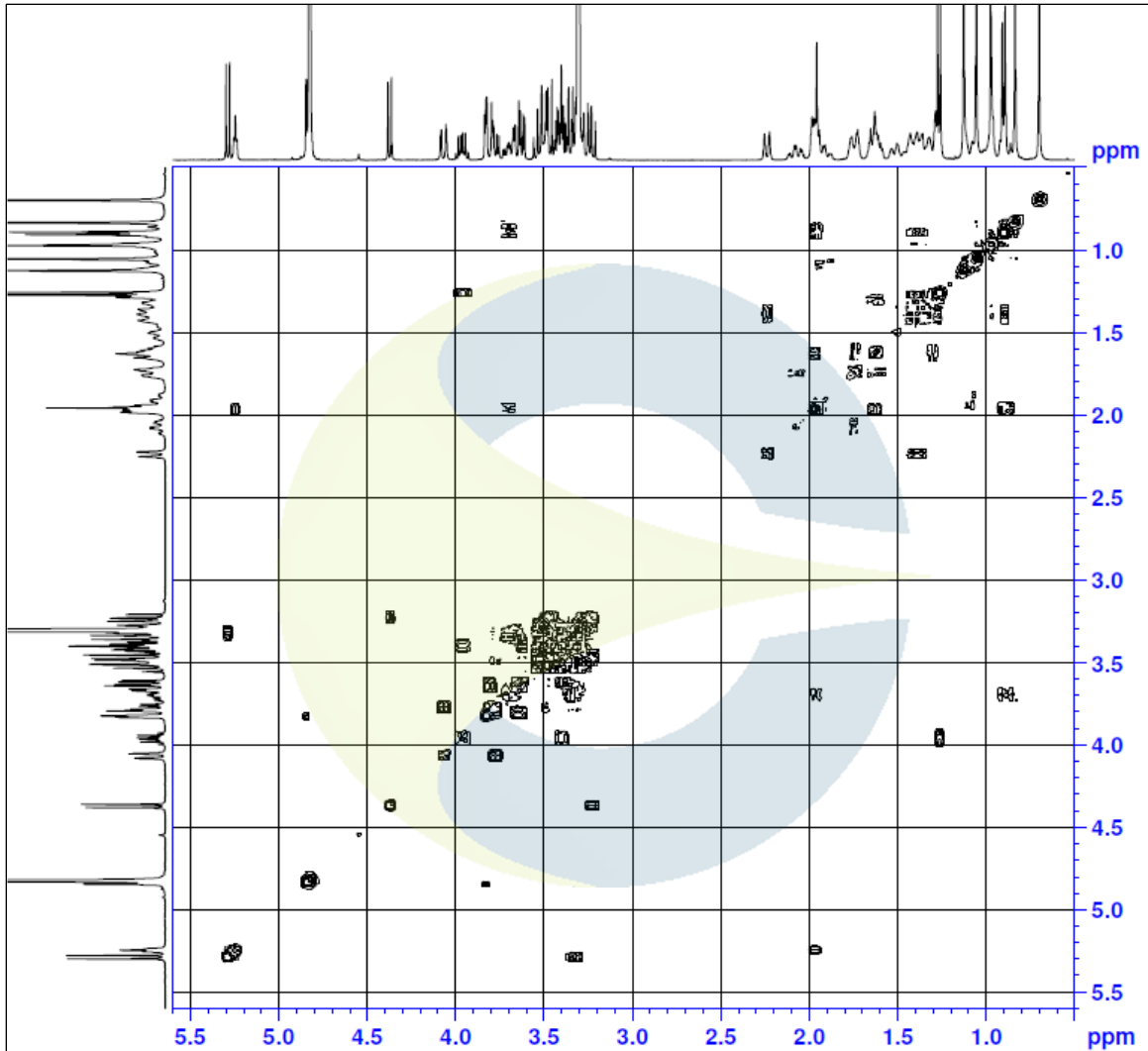


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¹³C-NMR SPECTRUM OF ASIATICOSIDE (CDXP-18-00965) IN CD₃OD



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COSY-NMR SPECTRUM OF ASIATICOSIDE (CDXP-18-00965) IN CD₃OD

REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	10/10/2018	New report
01	08/30/2022	Passed re-evaluation by HPLC and KF. Updated chromatograms, analytical conditions, analytical results, and expiration date.

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