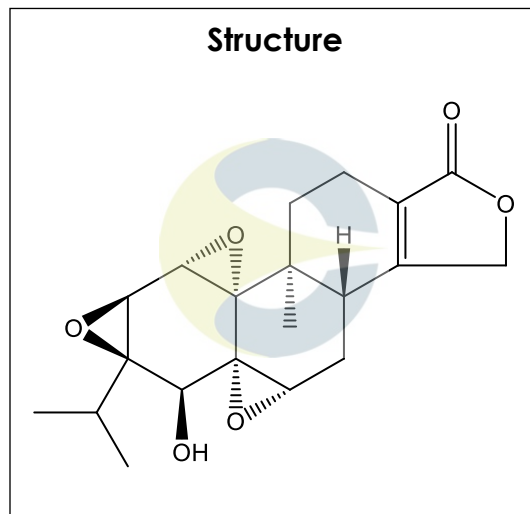


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PRODUCT NAME	(+,-)-14-epi-Triptolide
PART NUMBER	00020481
STANDARD TYPE	Primary (P)
LOT NUMBER	00020481-2126
REPORT NUMBER	CDXA-RSS-3569-02
SAMPLE NUMBER	CDXA-09-2126
DATE OF SAMPLE	06/23/2009
DATE OF RE-EVALUATION	06/04/2014 (1 st); 03/20/2019 (2 nd)
DATE OF REPORT	04/12/2019



CHEMICAL NAMES	(3bR,4aR,5aR,6R,6aS,7aR,7bR,8aR,8bR)-3b,4,4a,6,6a,7a,7b,8b,9,10-Decahydro-6-hydroxy-8b-methyl-6a-(1-methylethyl)-trioxireno(4b,5:6,7:8a,9)phenanthro(1,2-c)furan-1(3H)-one; (14a)-(±)-Triptolide; (±)-14-Epitriptolide
CHEMICAL FORMULA	C ₂₀ H ₂₄ O ₆
MOLECULAR WEIGHT (MW)	360.40
CHEMICAL FAMILY	Terpenes
CAS NUMBER	[73543-06-3]
EC#(EINECS)	NA
RTECS	NA

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	NA	94.9%
HPLC	99.1-04-1.0-000684	NA	95.3%
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-3.0-000115	NA	Ethanol – 0.2% Dichloromethane – 0.2%
Water	99.1-04-10.0-000094	NA	ND
Appearance	NA	NA	White powder

ADJUSTED PURITY: 94.9% IS BASED ON (100 - 0.4 SOLVENTS - 0.0 WATER) X 95.3% HPLC

STORAGE CONDITIONS

STORAGE	-20 °C in a dry place.
EXPIRATION DATE	03/2024 under the above conditions.

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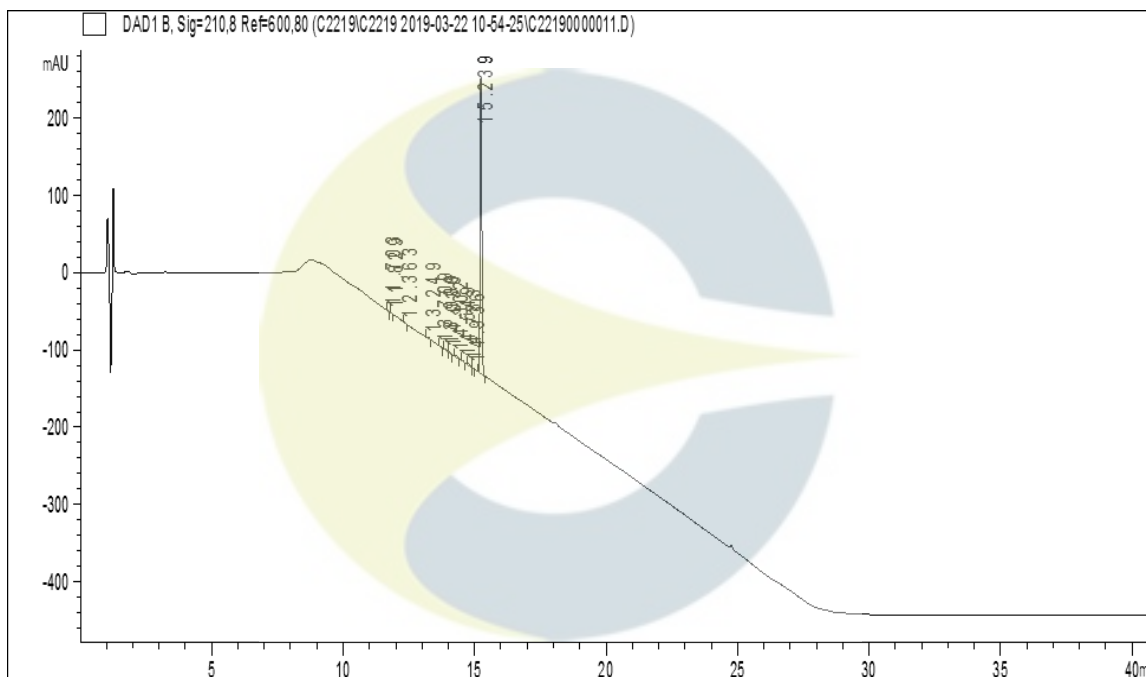
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ANALYTICAL CONDITIONS

INSTRUMENT	AGILENT 1260 HPLC UV-VIS (DAD); FINNIGAN LCQ-DECA
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.	0.4 µL
INJECTION CONC.	1.1 mg/mL in Methanol
DETECTION	210 ± 4 nm

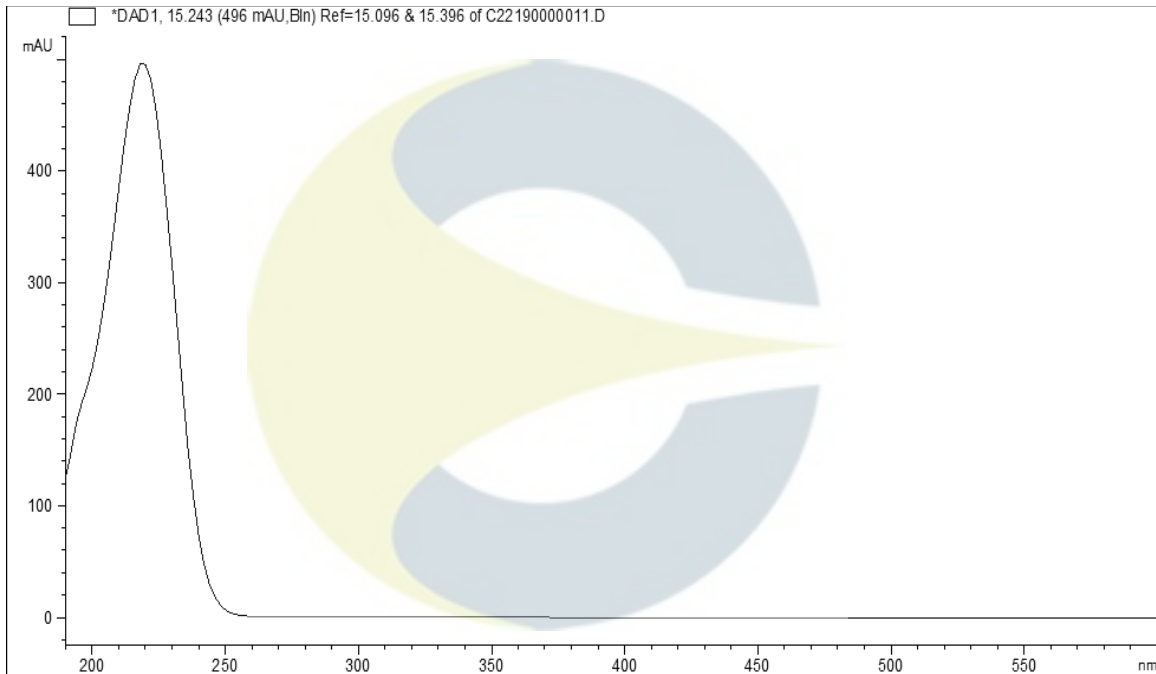
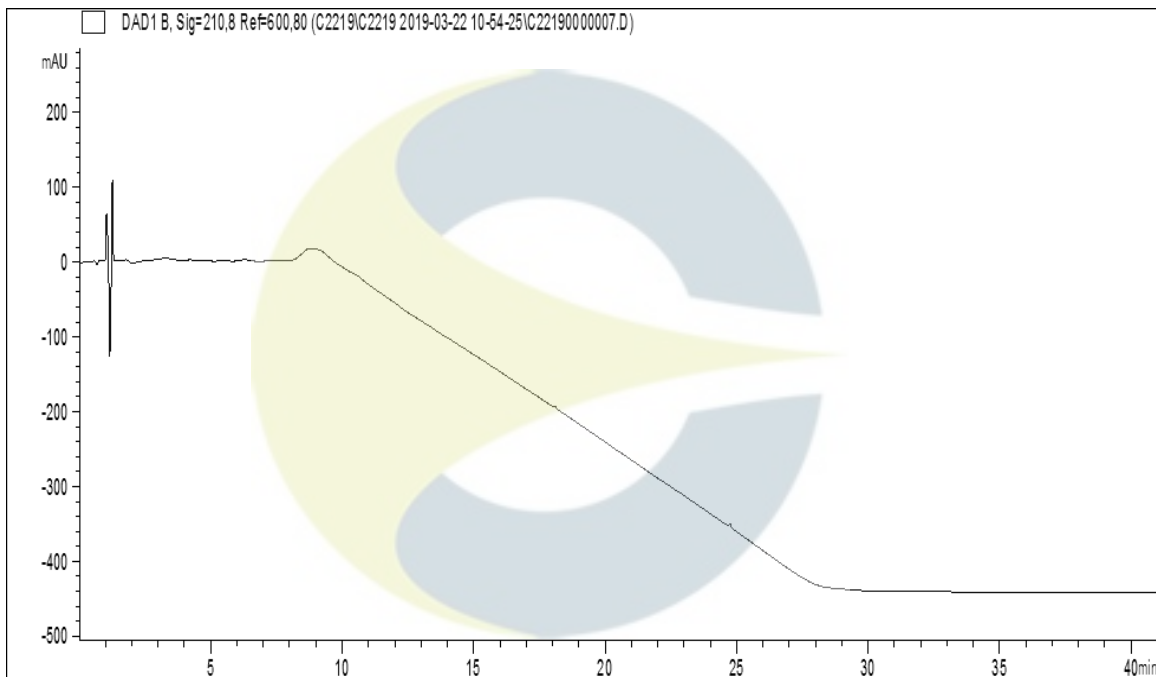
HPLC CHROMATOGRAM OF (+,-)-14-EPI-TRIPTOLIDE (CDXA-09-2126)



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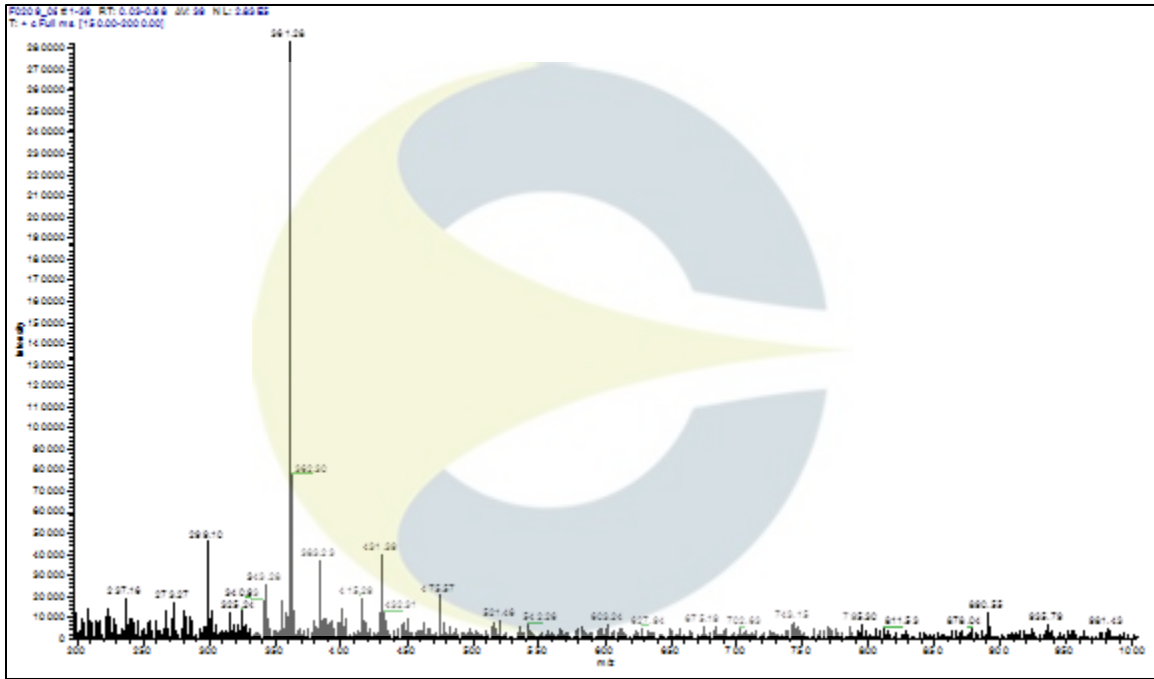
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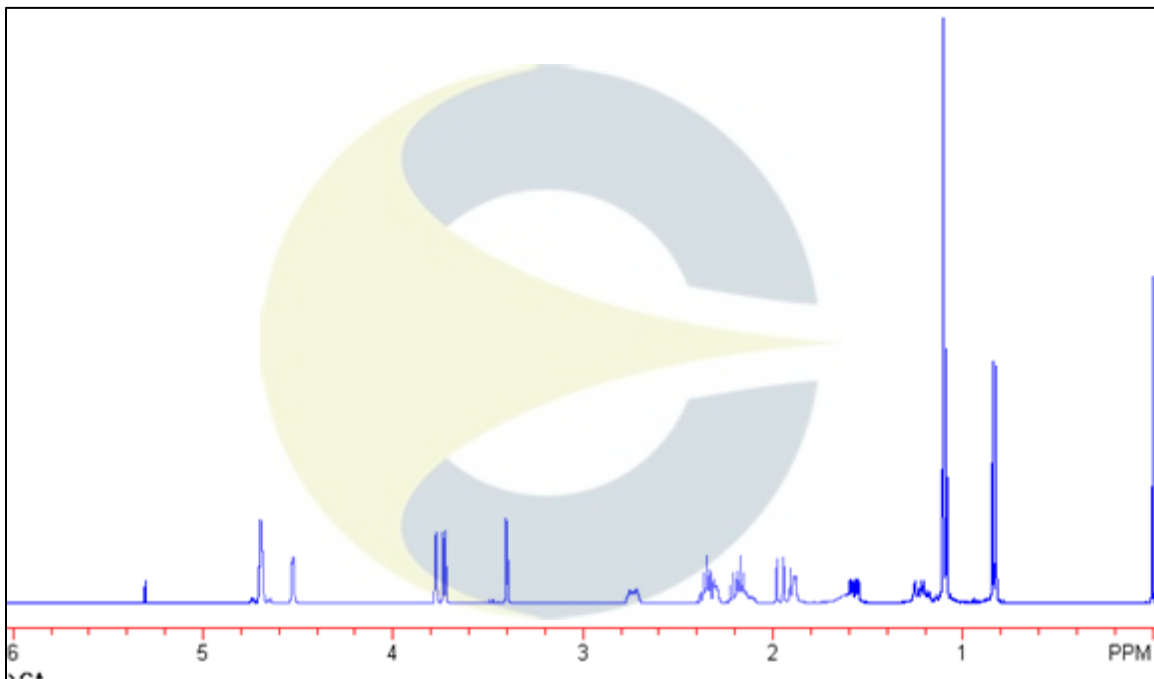
UV SPECTRUM AT RT = 15.2 MINUTES**HPLC CHROMATOGRAM OF DILUENT BLANK**

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MASS SPECTRUM OF (+,-)-14-EPI-TRIPTOLIDE (CDXA-09-2126)



¹H-NMR SPECTRUM OF (+,-)-14-EPI-TRIPTOLIDE (CDXA-09-2126) IN CDCl₃



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REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	07/13/2009	New report
01	06/06/2014	Passed re-evaluation. Updated chemical name, CAS#, chemical formula and expiration date.
02	04/12/2019	Material passed re-evaluation. Updated chemical names, analytical results, analytical conditions, chromatograms, and expiration date. Removed melting point.

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