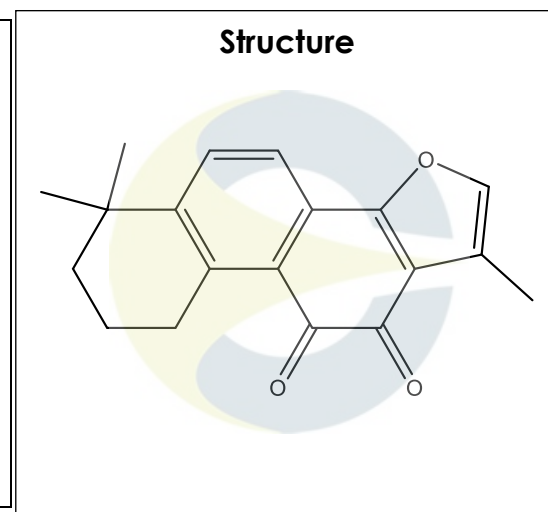


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PRODUCT NAME	Tanshinone II A
PART NUMBER	00020043
STANDARD TYPE	Primary (P)
LOT NUMBER	00020043-901
REPORT NUMBER	CDXA-RSS-7291-01
SAMPLE NUMBER	CDXA-16-012195
DATE OF SAMPLE	09/22/2016
DATE OF RE-EVALUATION	06/30/2021
DATE OF REPORT	07/23/2021



CHEMICAL NAMES	6,7,8,9-Tetrahydro-1,6,6-trimethyl-phenanthro[1,2-b]furan-10,11-dione; Tanshinone B; Tanshinon II
CHEMICAL FORMULA	C ₁₉ H ₁₈ O ₃
MOLECULAR WEIGHT (MW)	294.34
CHEMICAL FAMILY	Diterpenes
CAS NUMBER	[568-72-9]
EC#(EINECS)	NA
RTECS	SF8282695

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	99.5%
HPLC	0.700.10.2.METH22	≥ 90%	99.6%
NMR	4.5.3-CD-4.0-000338	Conforms to structure	Conforms to structure
Mass Spectrum	99.1-CDXA-2.0-000126	Conforms	Conforms
Residual Solvent	99.1-CD-9.0-000115	NA	Chloroform – 0.1 %
Water	0.700.12.37	NA	ND
Appearance	NA	NA	Orange powder

ADJUSTED PURITY: 99.5% IS BASED ON (100 - 0.1 SOLVENTS - 0.0 WATER) X 99.6% HPLC

STORAGE CONDITIONS

STORAGE	Room Temperature in a dry place.
EXPIRATION DATE	06/2026 under the above conditions.

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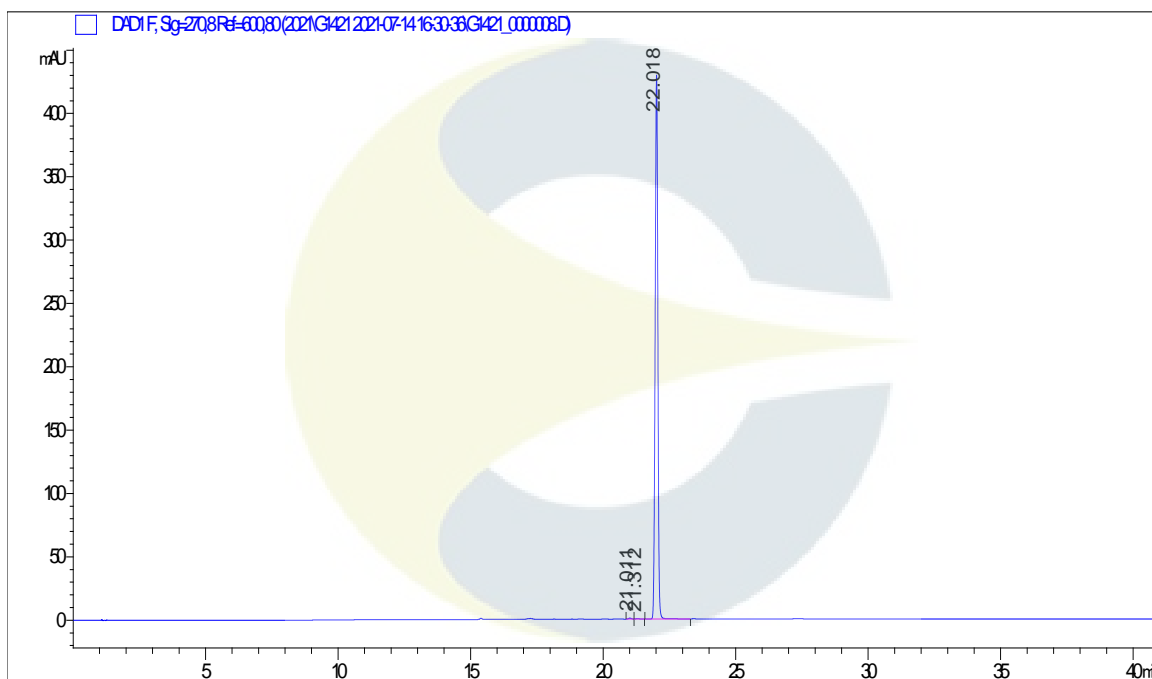
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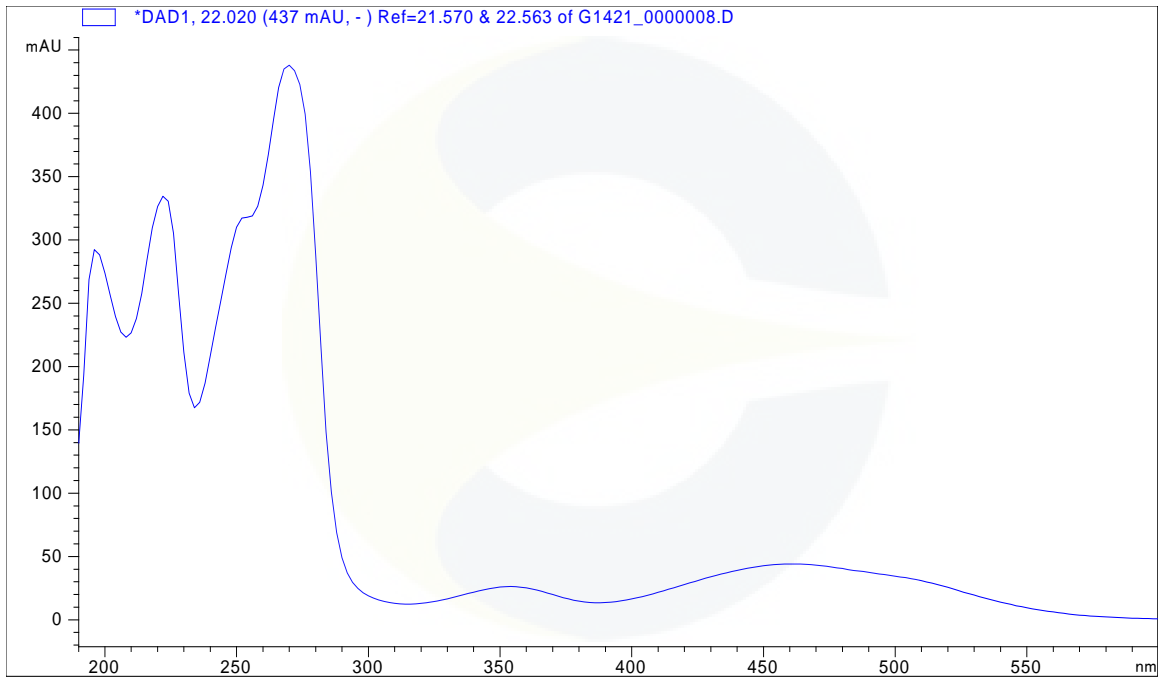
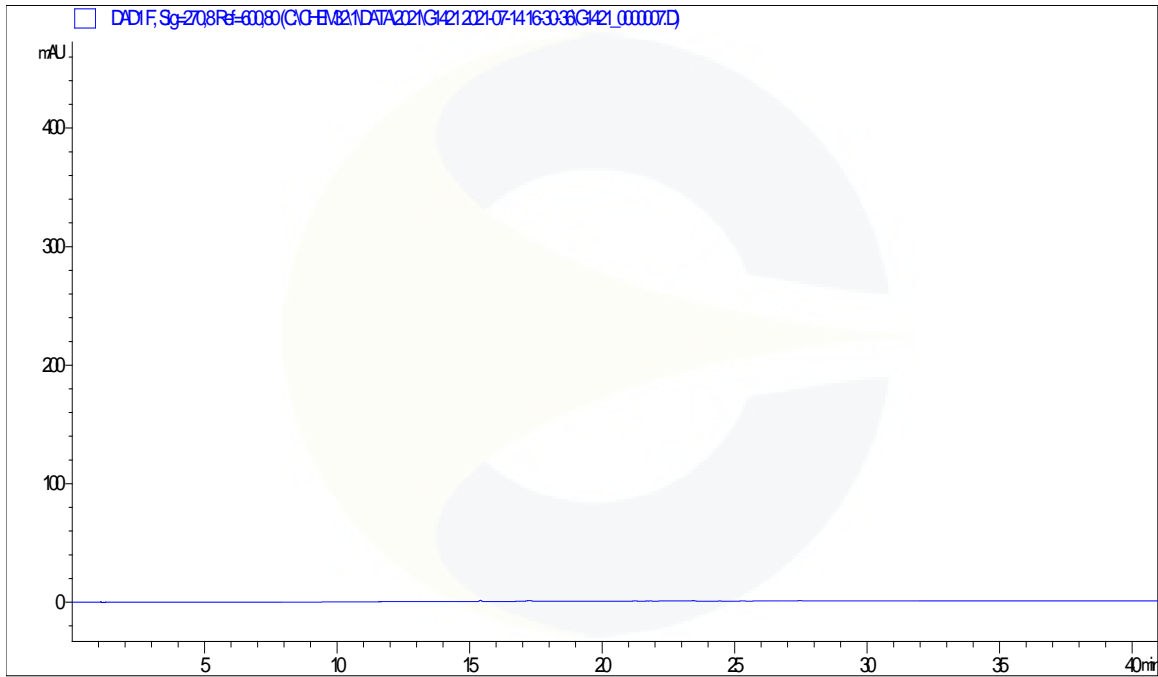
ANALYTICAL CONDITIONS

INSTRUMENT	AGILENT 1260 HPLC UV-VIS (DAD); AGILENT 1100 ION TRAP
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.	0.2 µL
INJECTION CONC.	0.97 mg/mL in Methanol
DETECTION	270 ± 4 nm

HPLC CHROMATOGRAM OF TANSHINONE II A (CDXA-16-012195)



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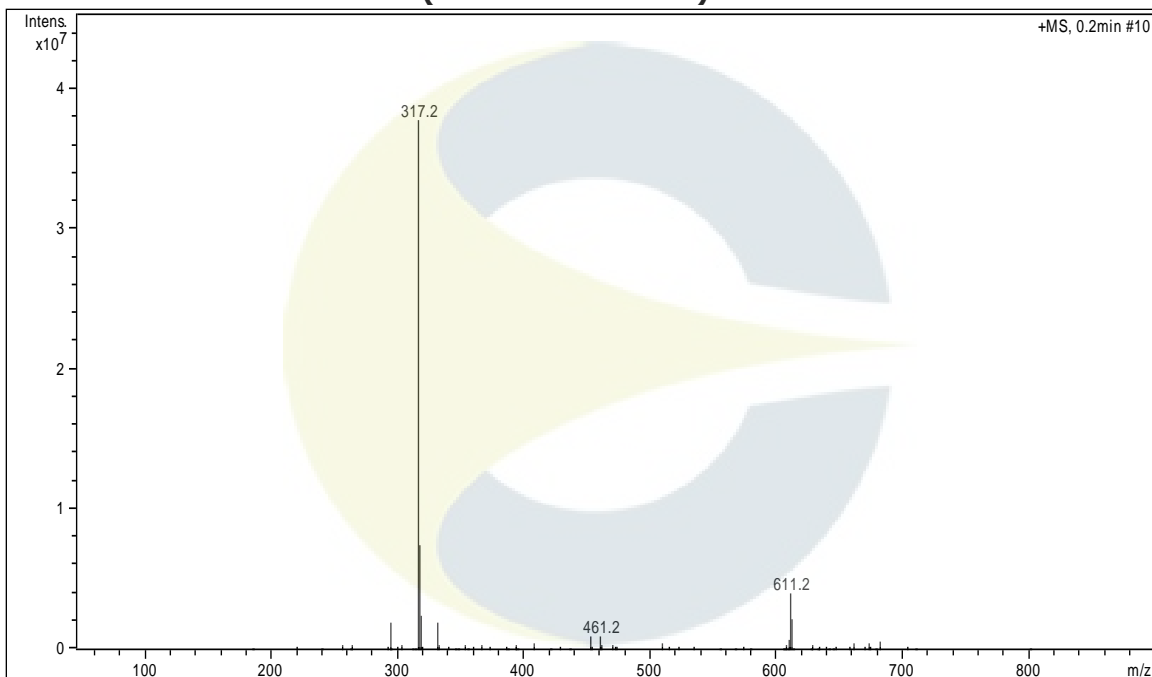
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UV SPECTRUM AT 22.0 MINUTES

HPLC CHROMATOGRAM OF METHANOL BLANK


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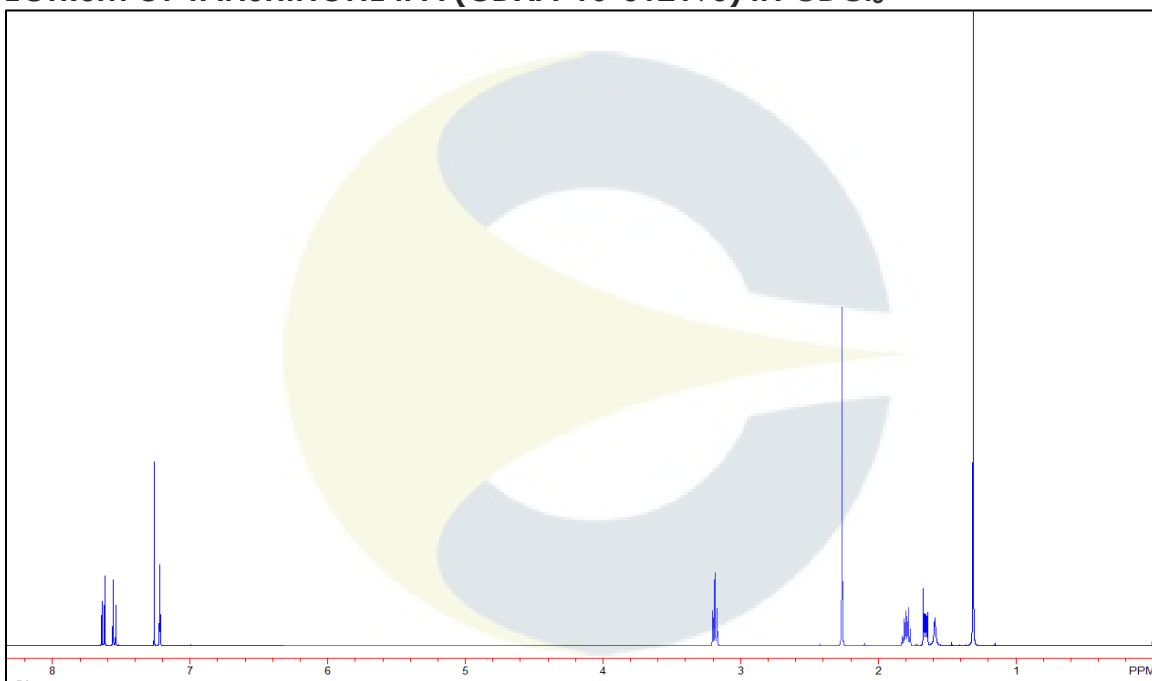
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 Email: customerservice@lifetechindia.com Website: www.lifetechindia.com

MASS SPECTRUM OF TANSHINONE II A (CDXA-16-012195)



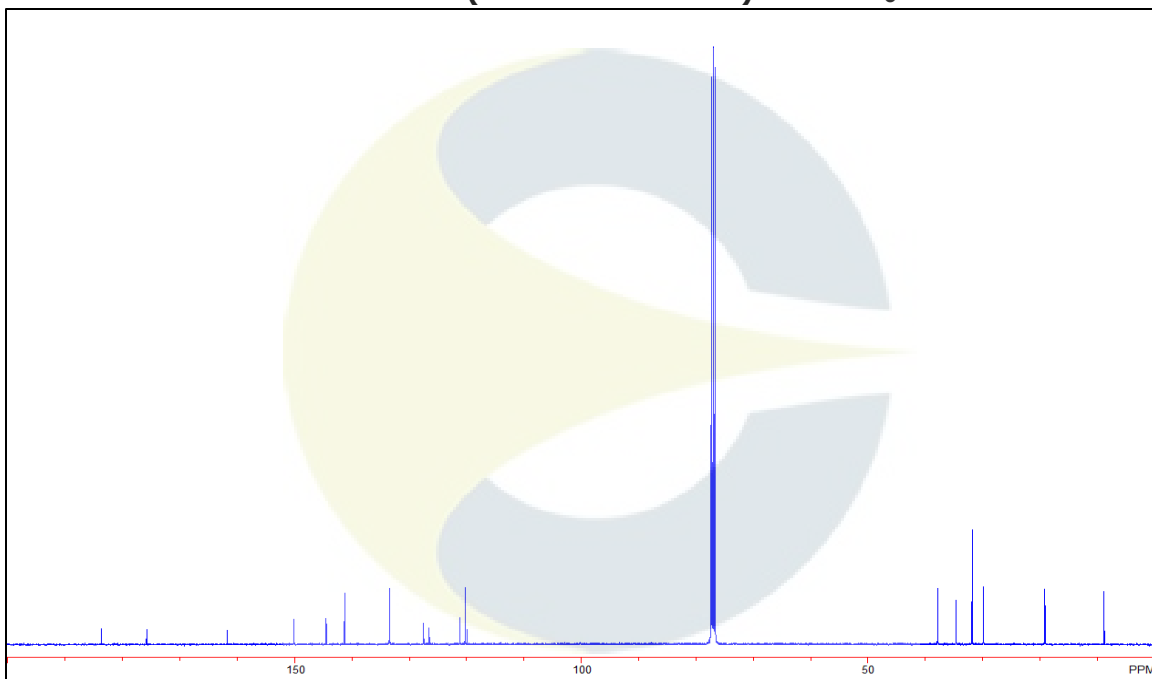
¹H-NMR SPECTRUM OF TANSHINONE II A (CDXA-16-012195) IN CDCl₃



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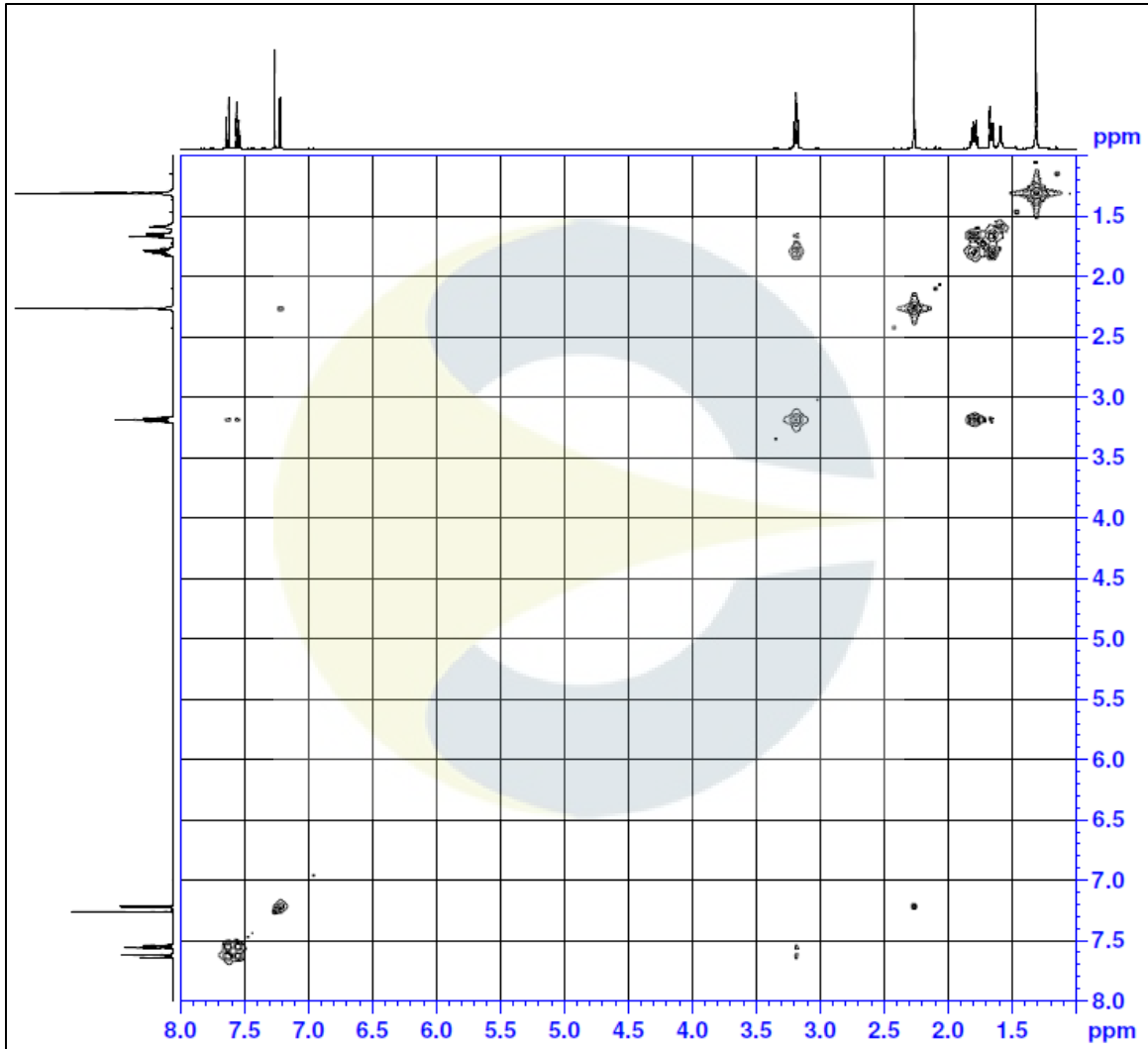
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¹³C-NMR SPECTRUM OF TANSHINONE II A (CDXA-16-012195) IN CDCl₃

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COSY-NMR SPECTRUM OF TANSHINONE II A (CDXA-16-012195) IN CDCl₃

REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	10/17/2016	New report
01	07/23/2021	Passed re-evaluation by HPLC, KF. Updated expiration date, analytical results, analytical conditions, and chromatograms. Removed melting point.

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