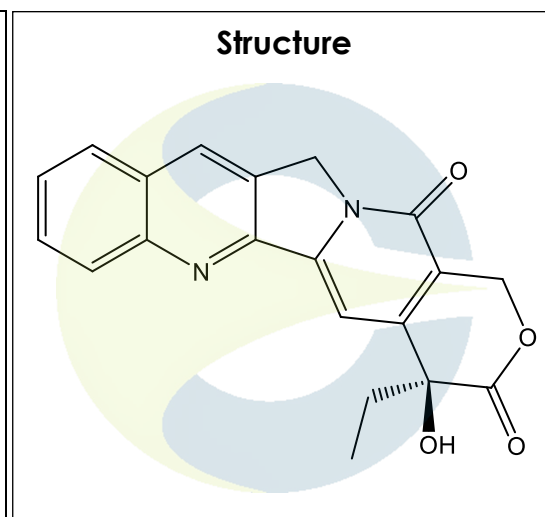


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PRODUCT NAME	Camptothecin
PART NUMBER	00003085
STANDARD TYPE	Primary (P)
LOT NUMBER	00003085-415
REPORT NUMBER	CDXA-RSS-3071-02
SAMPLE NUMBER	CDXA-08-1996
DATE OF SAMPLE	08/26/2008
DATE OF RE-EVALUATION	05/24/2013 (1 st); 05/14/2018 (2 nd); 04/05/2022 (3 rd)
DATE OF REPORT	05/04/2022



CHEMICAL NAMES	(S)-4-Ethyl-4-hydroxy-1H-pyrano(3',4':6,7)indolizino(1,2-b)quinoline-3,14(4H,12H)-dione; (+)-Camptothecin; (S)-Camptothecin; 20(S)-Camptothecin
CHEMICAL FORMULA	C ₂₀ H ₁₆ N ₂ O ₄
MOLECULAR WEIGHT (MW)	348.35
CHEMICAL FAMILY	Alkaloids
CAS NUMBER	[7689-03-4]
EC#(EINECS)	444-280-6
RTECS	UQ0492000

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	97.9%
HPLC	0.700.10.2.METH22	≥ 90%	97.9%
NMR	0.700.12.4	Conforms to structure	Conforms to structure
Mass Spectrum	Direct Infusion, ESI (-)	Conforms	Conforms
Residual Solvent	99.1-CD-2.0-000115	NA	ND
Water	0.700.12.37	NA	ND
Appearance	NA	NA	Off white powder

ADJUSTED PURITY: 97.9% IS BASED ON (100 - 0.0 SOLVENTS - 0.0 WATER) X 97.9% HPLC

STORAGE CONDITIONS

STORAGE	+4 °C in a dry place.
EXPIRATION DATE	04/2027 under the above conditions.

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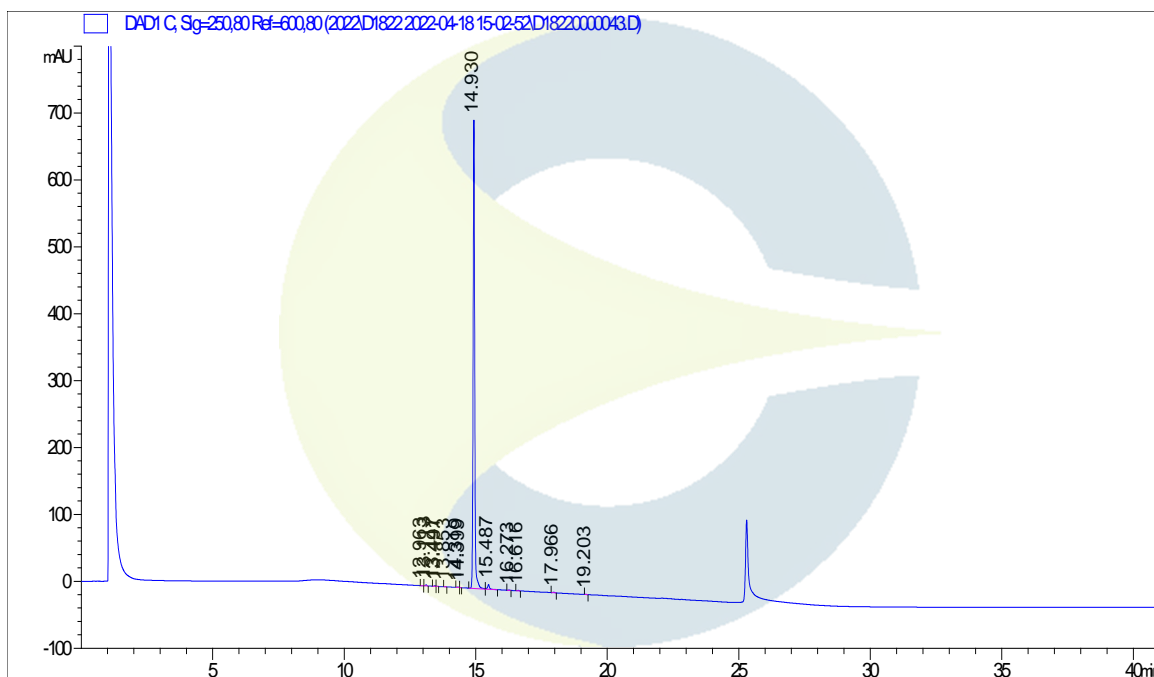
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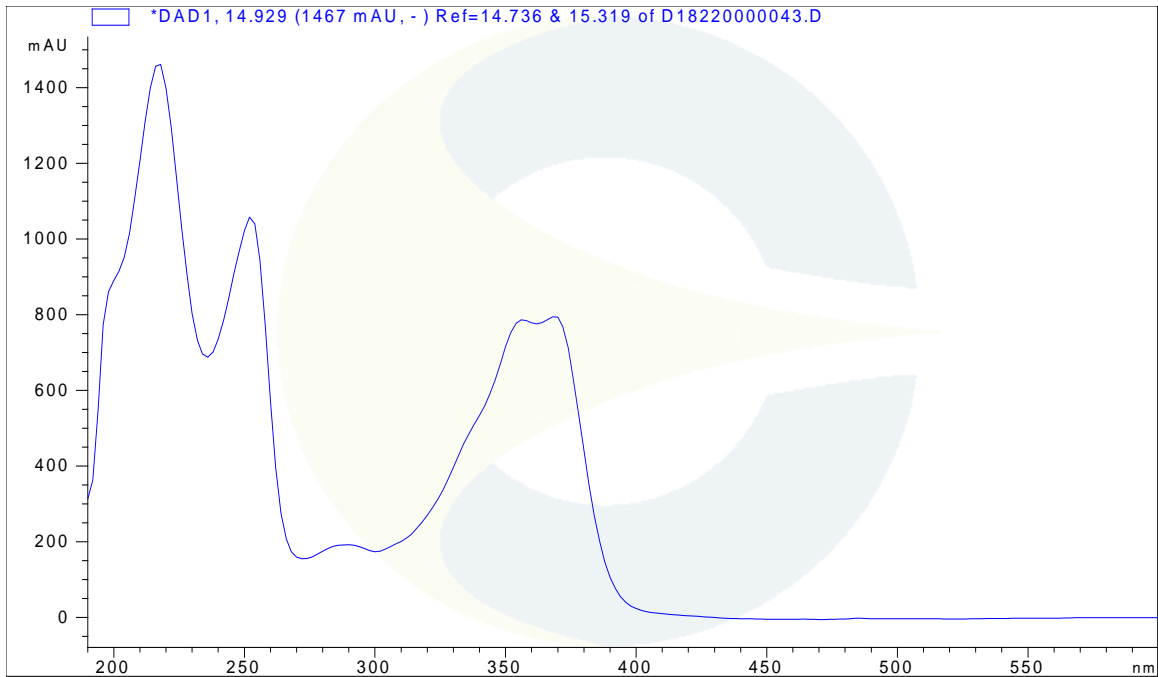
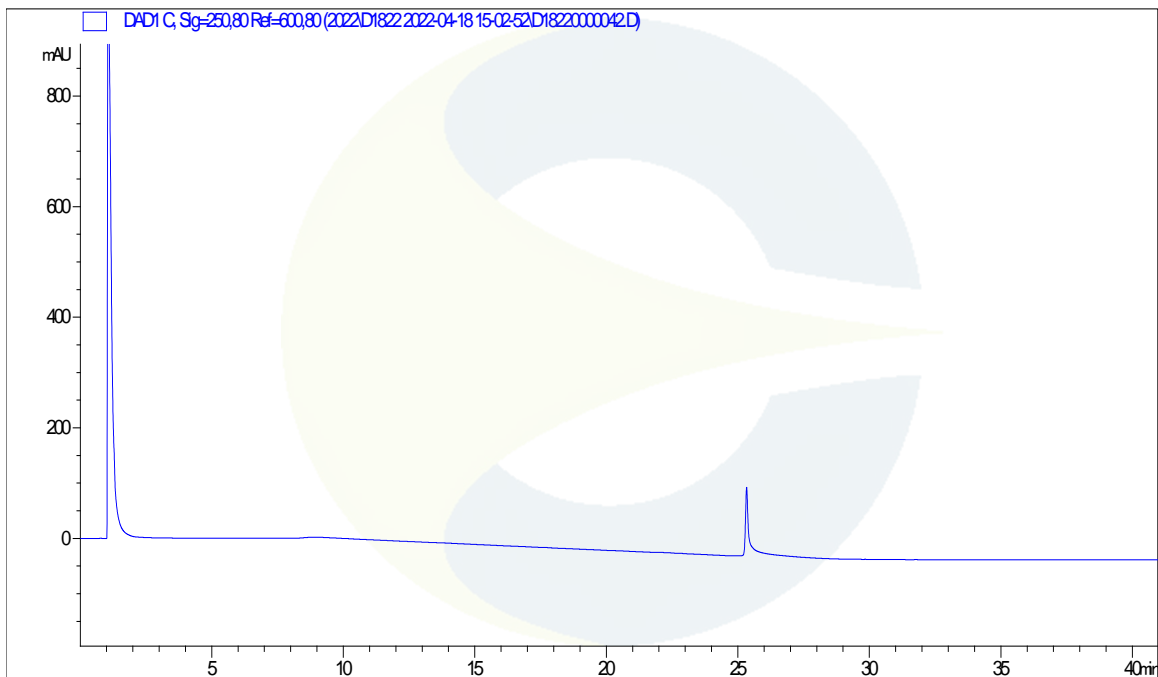
ANALYTICAL CONDITIONS

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, 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.	1.0 mg/mL in Dimethyl sulfoxide
DETECTION	250 ± 40 nm

HPLC CHROMATOGRAM OF CAMPTOTHECIN (CDXA-08-1996)



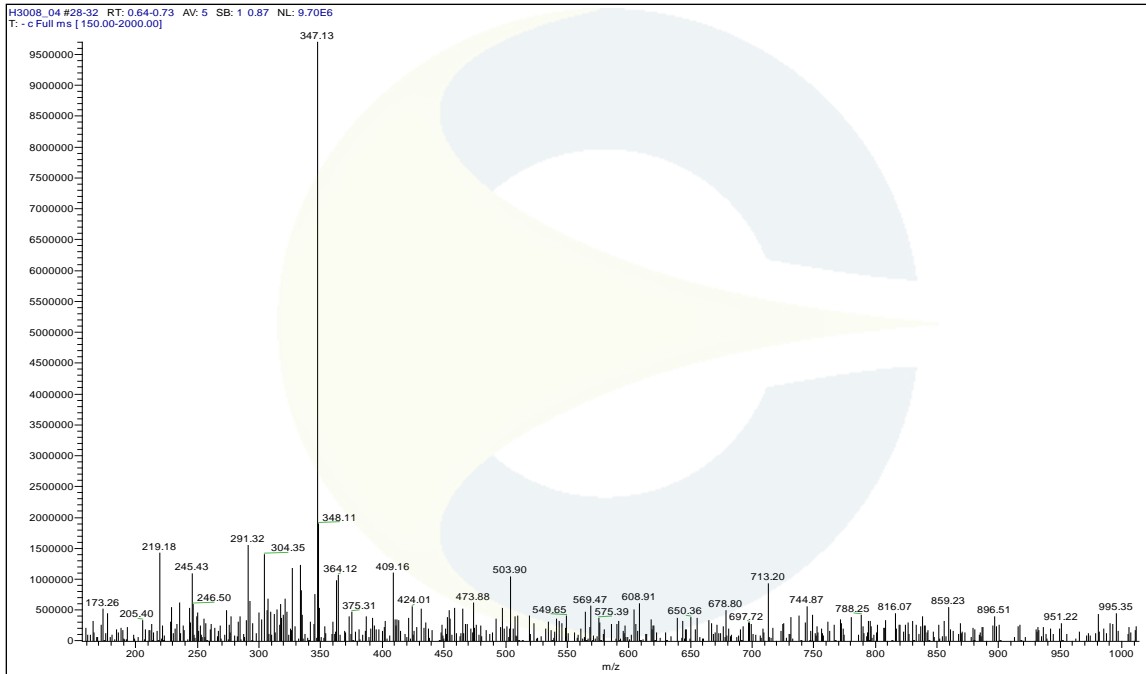
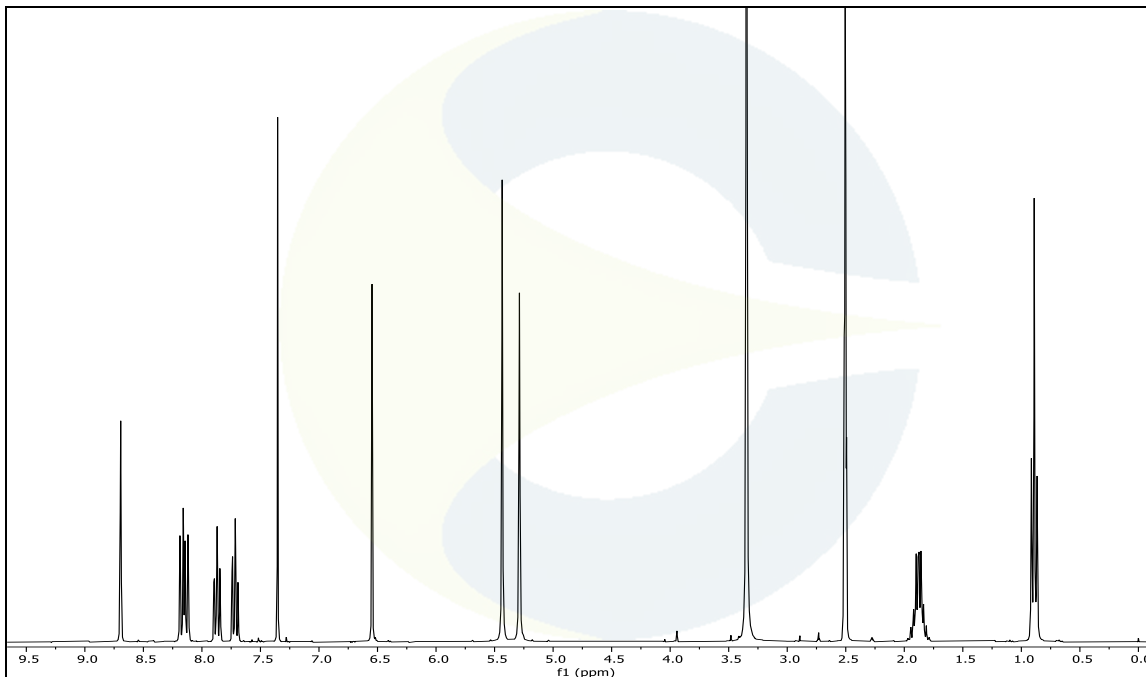
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UV SPECTRUM AT RT = 14.9 MINUTES

HPLC CHROMATOGRAM OF DILUENT BLANK


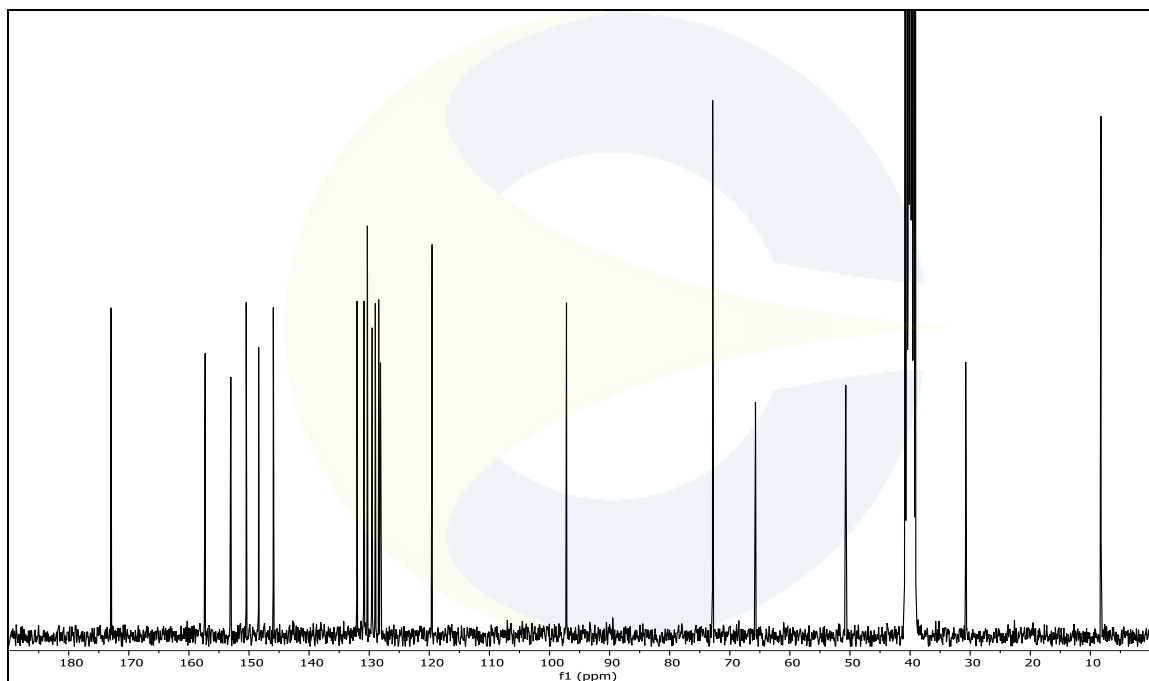
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MASS SPECTRUM OF CAMPTOTHECIN (CDXA-08-1996)

¹H-NMR SPECTRUM OF CAMPTOTHECIN (CDXA-08-1996) IN DMSO-d₆ + TMS


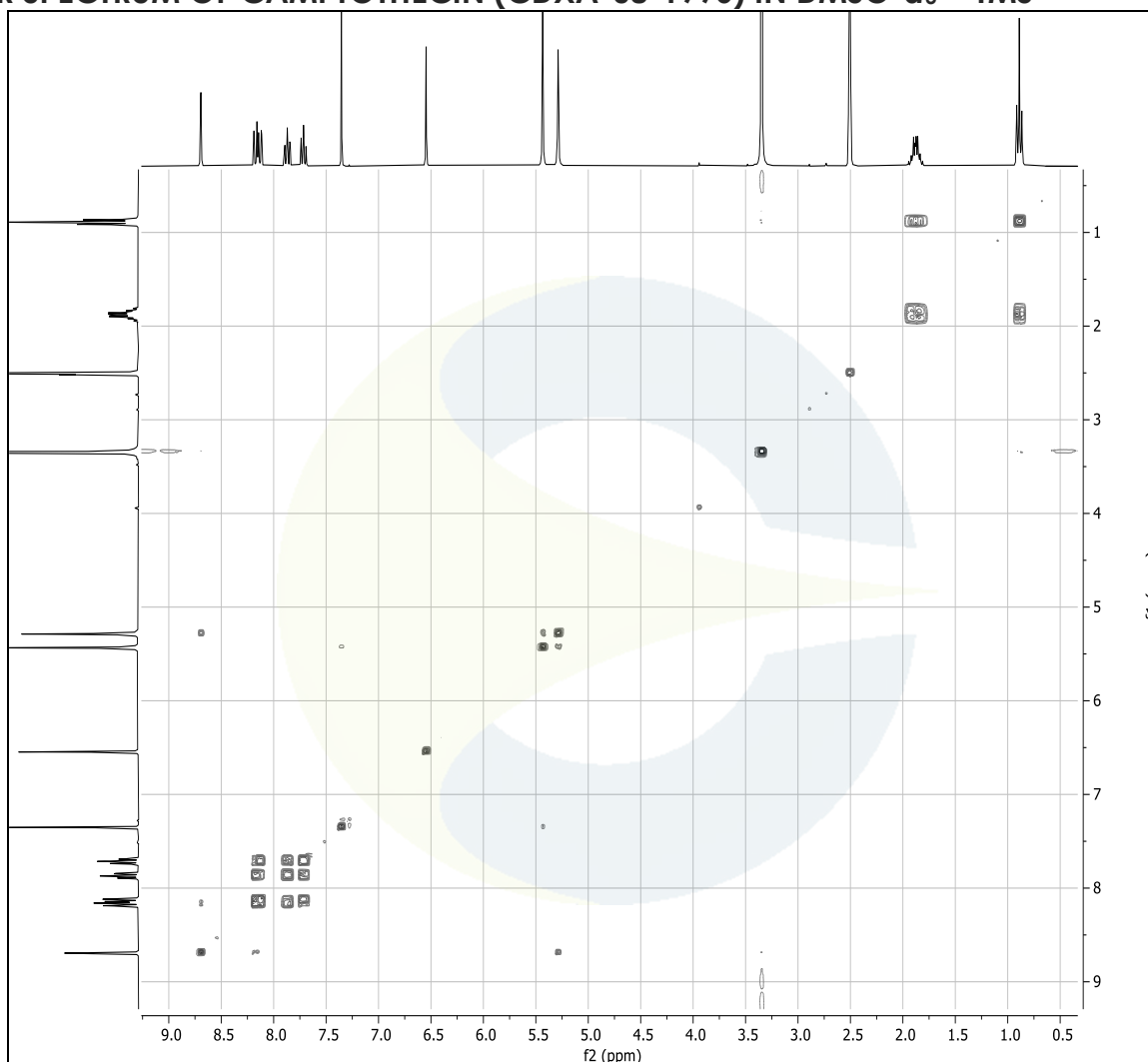
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¹³C-NMR SPECTRUM OF CAMPTOTHECIN (CDXA-08-1996) IN DMSO-d₆ + TMS

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COSY-NMR SPECTRUM OF CAMPTOTHECIN (CDXA-08-1996) IN DMSO-d₆ + TMS

REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	06/13/2013	New report; passed first re-evaluation by HPLC and KF.
01	06/08/2018	Passed second re-evaluation by HPLC and KF. Updated chemical structure format, expiration date, analytical conditions, results, and chromatograms. Removed melting point.
02	05/04/2022	Passed third re-evaluation by HPLC, NMR, and KF. Updated expiration date, analytical results, analytical conditions, and chromatograms.

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