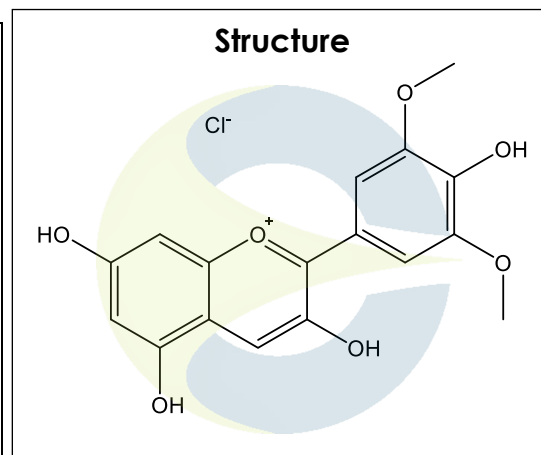


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PRODUCT NAME	Malvidin Chloride
PART NUMBER	00013071
STANDARD TYPE	Primary (P)
LOT NUMBER	00013071-704
REPORT NUMBER	CDXA-RSS-9828-00
SAMPLE NUMBER	CDXP-22-00491
DATE OF SAMPLE	05/27/2022
DATE OF REPORT	06/30/2022



CHEMICAL NAMES	3,4',5,7-Tetrahydroxy-3',5'-dimethoxyflavylium chloride; Malvinidol chloride; Oenidin; Primulidin; Syringidin chloride
CHEMICAL FORMULA	C ₁₇ H ₁₅ O ₇ .Cl
MOLECULAR WEIGHT (MW)	366.75
CHEMICAL FAMILY	Anthocyanidins
CAS NUMBER	[643-84-5]
EC#(EINECS)	211-403-8
RTECS	LK9900000

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	90.8%
HPLC	0.700.10.2.METH22	≥ 90%	99.1%
NMR	0.700.12.4	Conforms to structure	Conforms to structure
Mass Spectrum	0.700.12.27	Conforms	Conforms
Residual Solvent*	USP <467>	NA	Methanol – 84000 ppm
Water	0.700.12.37	NA	ND
Appearance	NA	NA	Brown powder

*Testing performed at an ISO 17025 accredited subcontracted laboratory.

ADJUSTED PURITY: 90.8% IS BASED ON (100 - 8.4 SOLVENTS - 0.0 WATER) X 99.1% HPLC

STORAGE CONDITIONS

STORAGE	-20 °C in a dry place.
EXPIRATION DATE	05/2027 under the above conditions.

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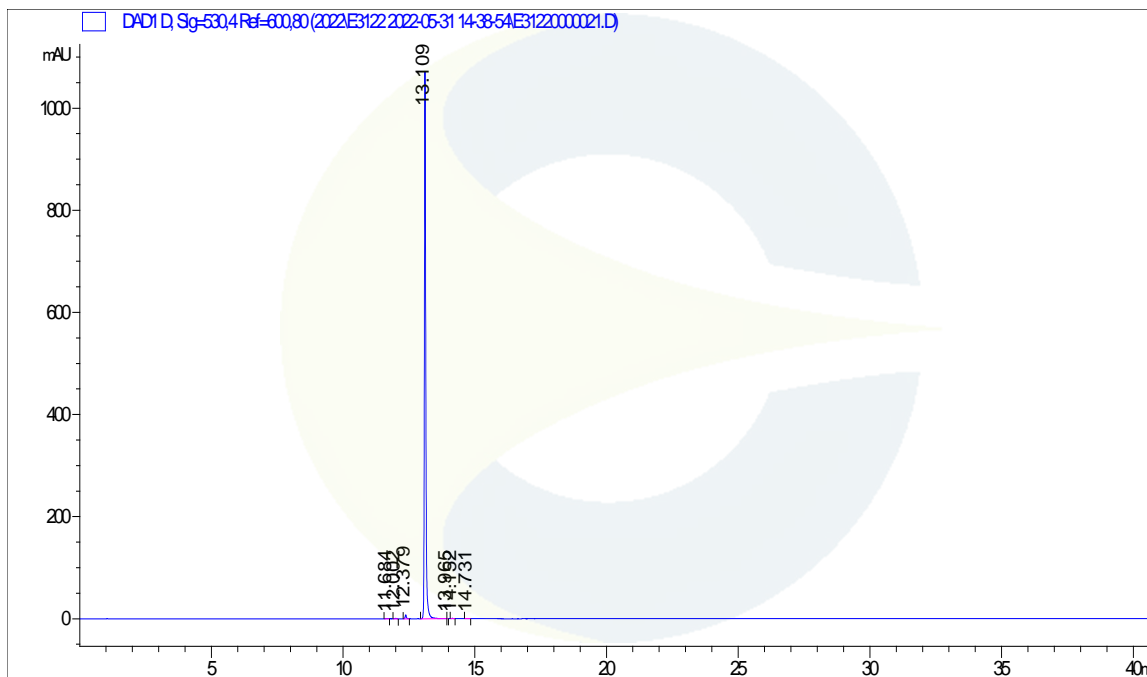
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ANALYTICAL CONDITIONS

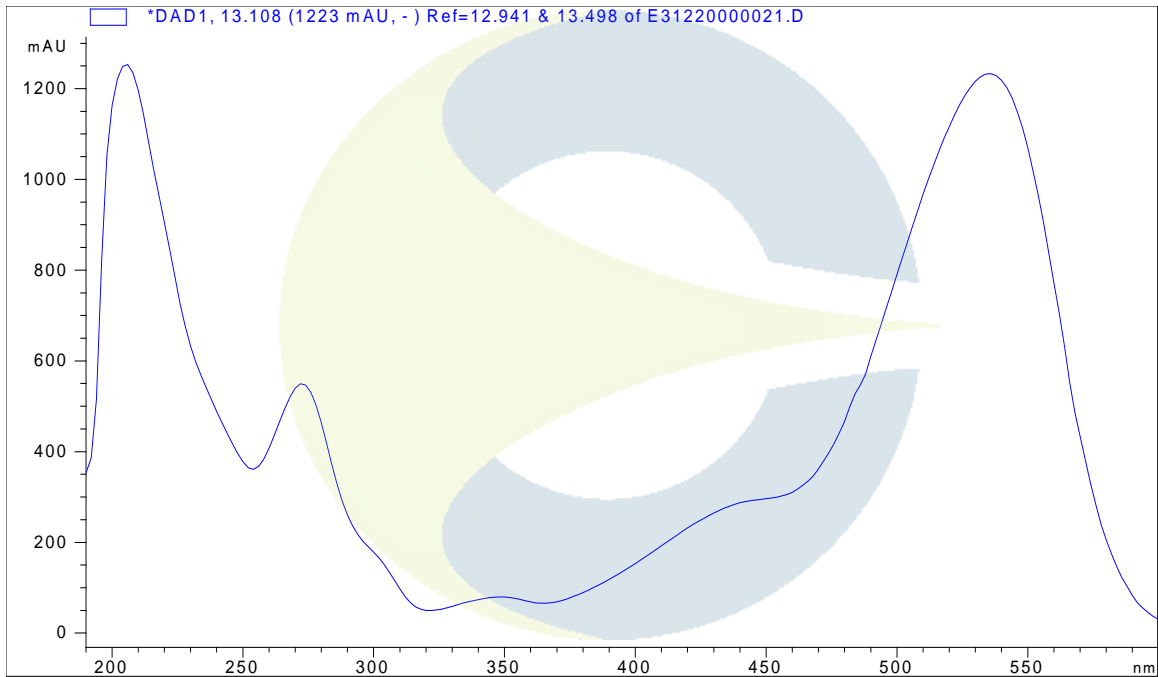
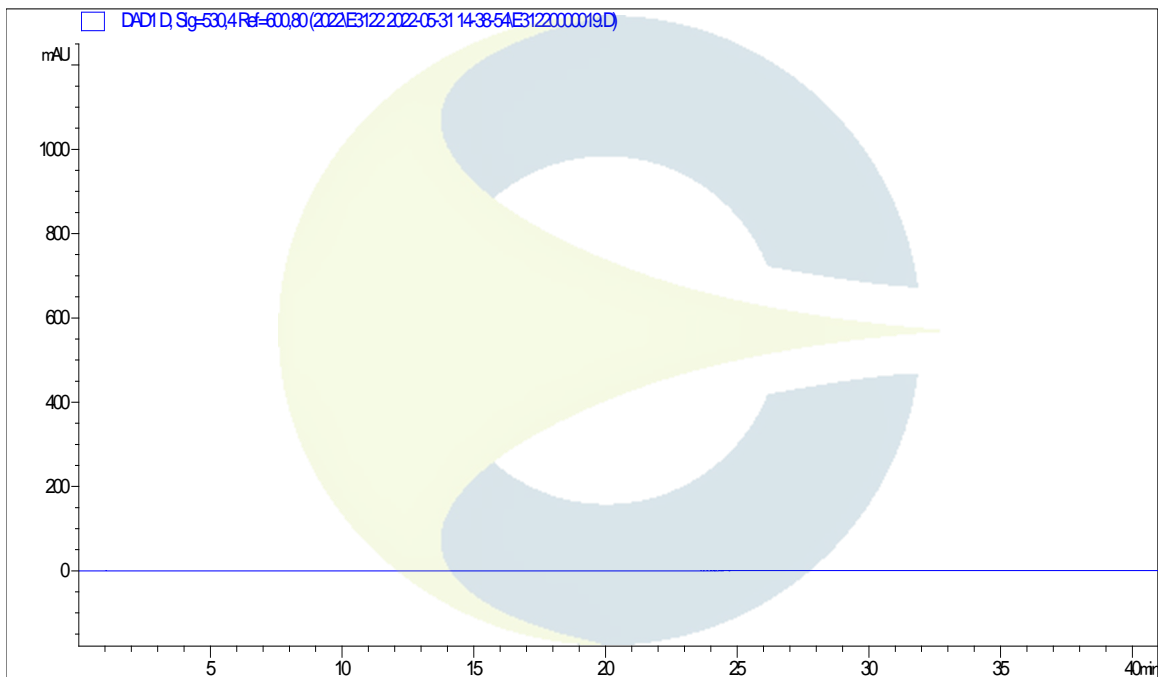
INSTRUMENT	AGILENT 1260 HPLC UV-VIS (DAD); AB-SCIEX 6600 TRIPLE TOF
COLUMN	Phenomenex Luna C18(2) 150 x 2.00 mm, 5 µm particle size
MOBILE PHASE	A - 0.1% Trifluoroacetic acid in Ultrapure water, B - Acetonitrile; Isocratic 5% B for 5 minutes, then increasing to 95% B over 20 minutes. Hold at 95% B for 15 minutes, then decreasing to 5% B over 1 minute.
COLUMN TEMP.	60 °C
FLOW RATE	0.4 mL/minute
INJECTION VOL.	0.4 µL
INJECTION CONC.	1.0 mg/mL in DMSO
DETECTION	530 ± 2 nm

HPLC CHROMATOGRAM OF MALVIDIN CHLORIDE (CDXP-22-00491)



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UV SPECTRUM AT RT = 13.1 MINUTES

HPLC CHROMATOGRAM OF DILUENT BLANK


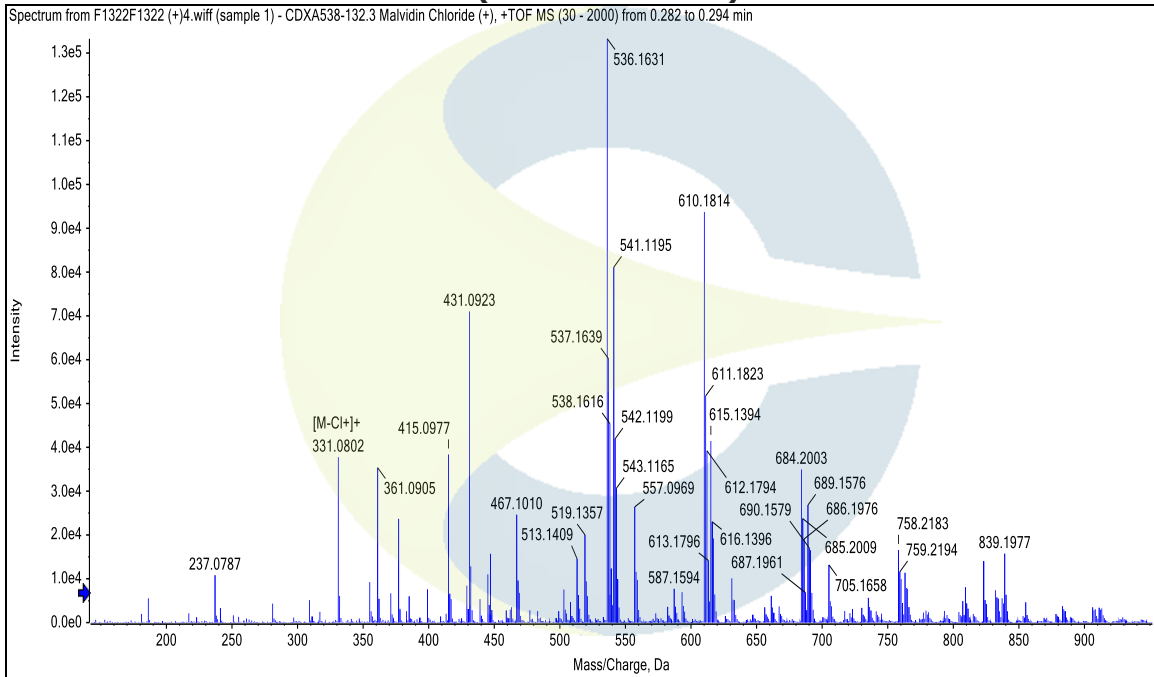
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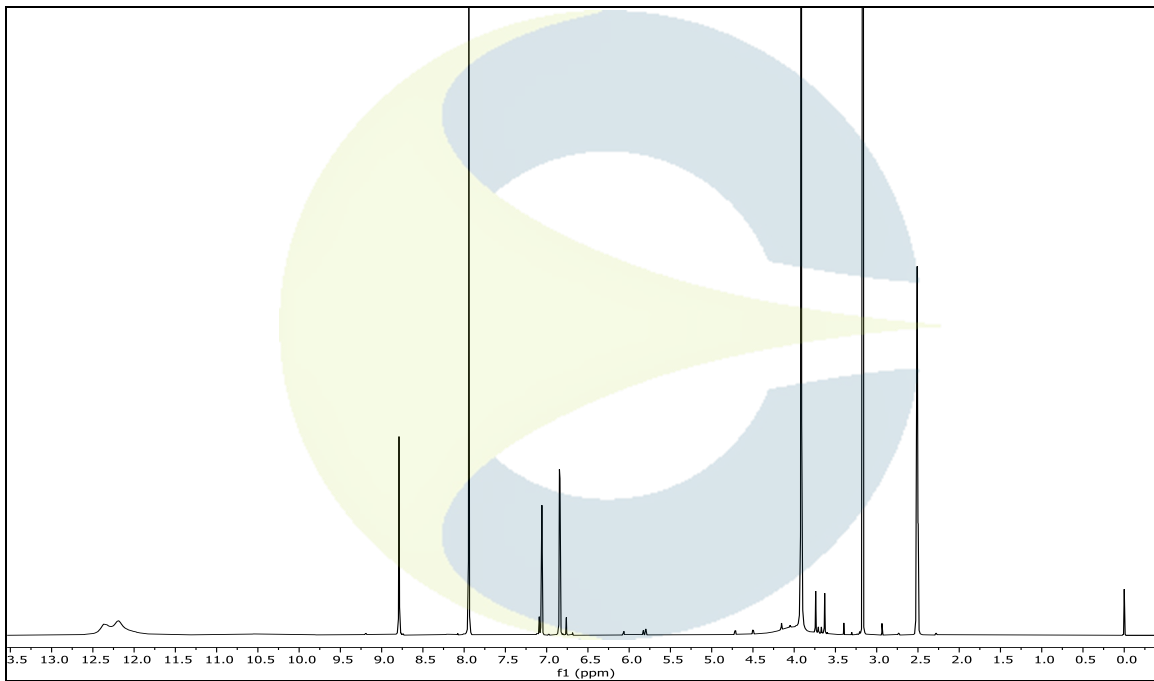
India Contact:
 Life Technologies (India) Pvt. Ltd.
 306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444
 Email: customerservice@lifetechindia.com Website: www.lifetechindia.com

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MASS SPECTRUM OF MALVIDIN CHLORIDE (CDXP-22-00491)



¹H-NMR SPECTRUM OF MALVIDIN CHLORIDE (CDXP-22-00491) IN DMSO-d₆ + TMS

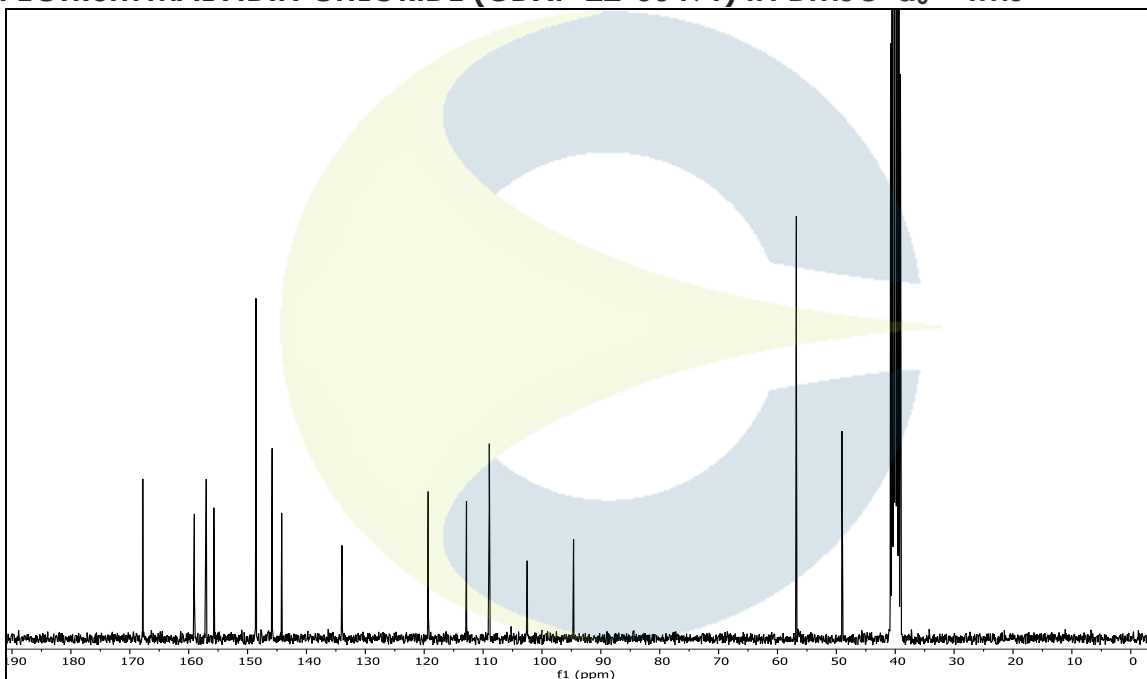


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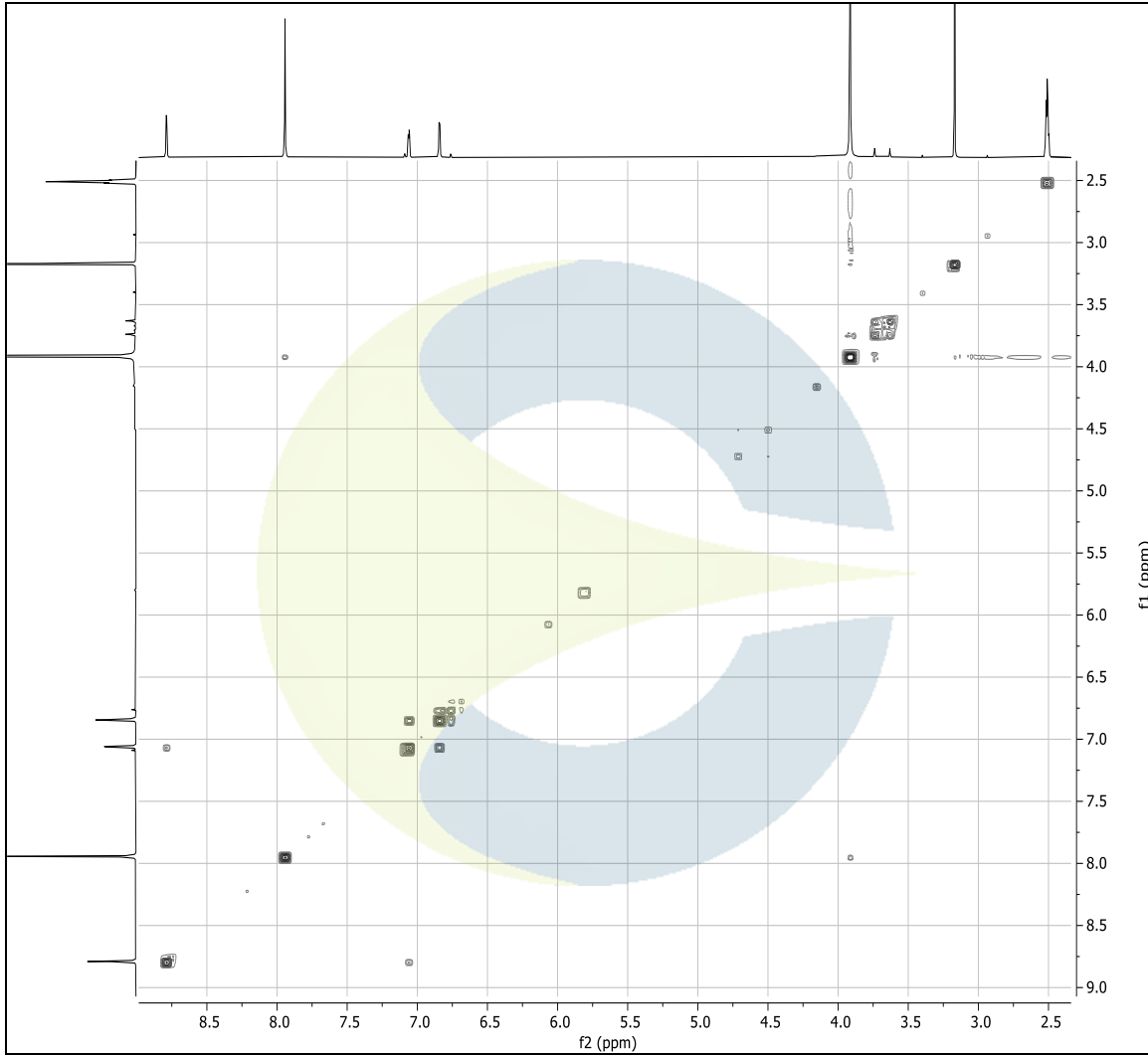
¹³C-NMR SPECTRUM MALVIDIN CHLORIDE (CDXP-22-00491) IN DMSO-d₆ + TMS



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COSY-NMR SPECTRUM OF MALVIDIN CHLORIDE (CDXP-22-00491) IN DMSO-d₆ + TMS

REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	06/30/2022	New report

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