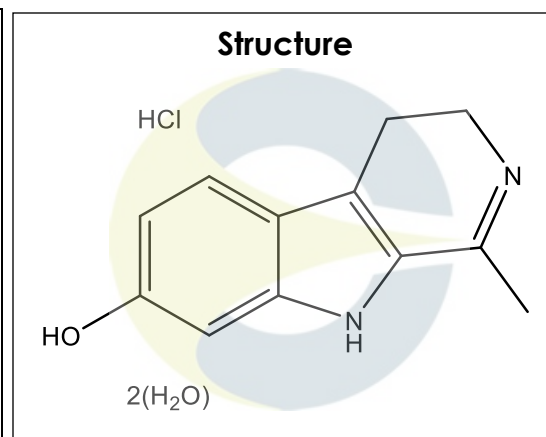


**Certificate of Analysis**
*For Laboratory Use Only*

<b>PRODUCT NAME</b>	Harmalol HCl Dihydrate
<b>PART NUMBER</b>	00008042
<b>STANDARD TYPE</b>	Analytical Standard (AS)
<b>LOT NUMBER</b>	00008042-162
<b>REPORT NUMBER</b>	CDXA-RSS-9101-00
<b>SAMPLE NUMBER</b>	CDXP-20-00570
<b>DATE OF SAMPLE</b>	07/28/2020
<b>DATE OF REPORT</b>	08/19/2020



<b>CHEMICAL NAMES</b>	4,9-Dihydro-1-methyl-3H-pyrido(3,4-b)indol-7-ol monohydrochloride dihydrate
<b>CHEMICAL FORMULA</b>	$C_{12}H_{12}N_2O \cdot HCl \cdot 2(H_2O)$
<b>MOLECULAR WEIGHT (MW)</b>	272.7
<b>CHEMICAL FAMILY</b>	Alkaloids
<b>CAS NUMBER</b>	[6028-00-8]
<b>EC#(EINECS)</b>	N/A
<b>RTECS</b>	N/A

**ANALYTICAL RESULTS**

TEST	METHOD	SPECIFICATION	RESULT
HPLC	0.700.10.2.METH22	NA	97.4%
Mass Spectrum	0.700.12.27	Conforms	Conforms
Appearance	NA	NA	Yellow powder

**STORAGE CONDITIONS**

<b>STORAGE</b>	+4 °C in a dry place.
<b>EXPIRATION DATE</b>	07/2025 under the above conditions.

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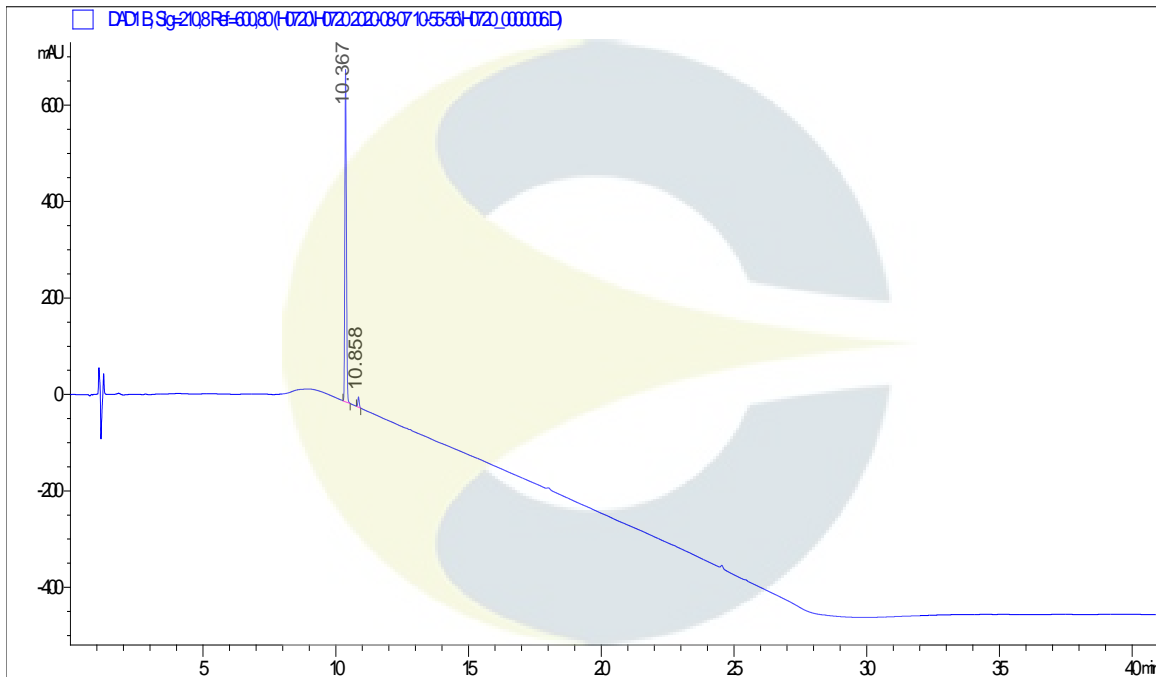
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## ANALYTICAL CONDITIONS

INSTRUMENT	AGILENT 1260 HPLC UV-VIS (DAD); AB-SCIEX 6600 TRIPLE TOF
COLUMN	Phenomenex Luna C18(2) 150 x 2.00 mm, 5 $\mu$ m 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 $^{\circ}$ C
FLOW RATE	0.4 mL/minute
INJECTION VOL.	0.2 $\mu$ L
INJECTION CONC.	1.3 mg/mL in Methanol
DETECTION	210 $\pm$ 4 nm

## HPLC CHROMATOGRAM OF HARMALOL HCL DIHYDRATE (CDXP-20-00570)

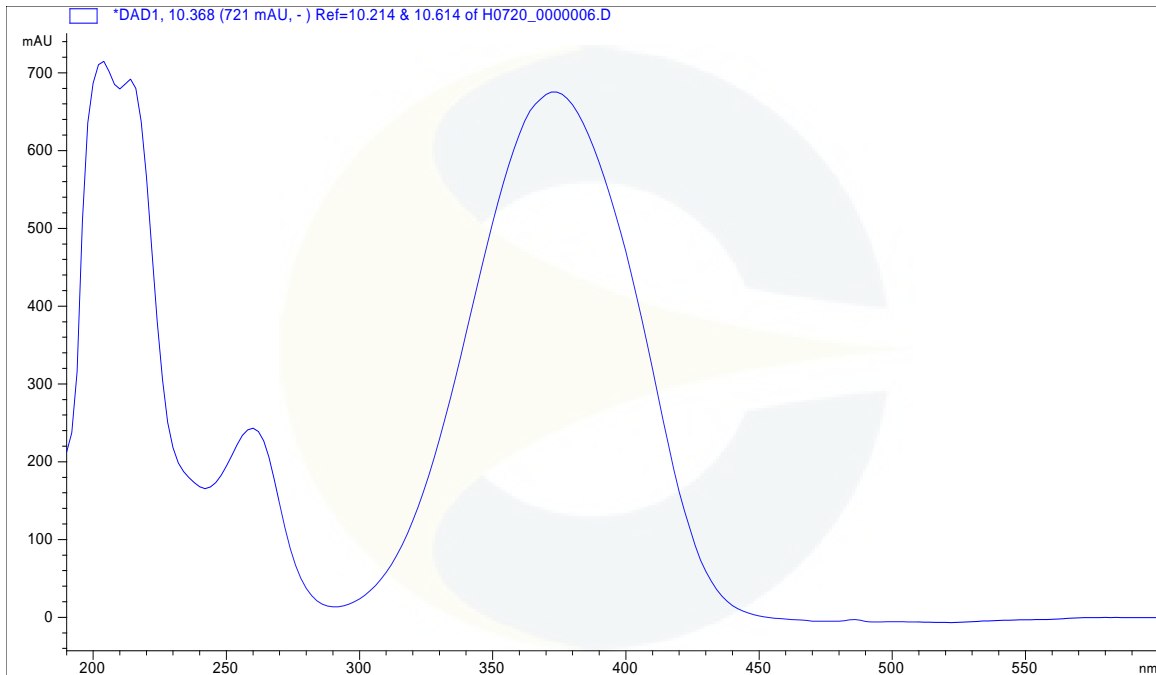


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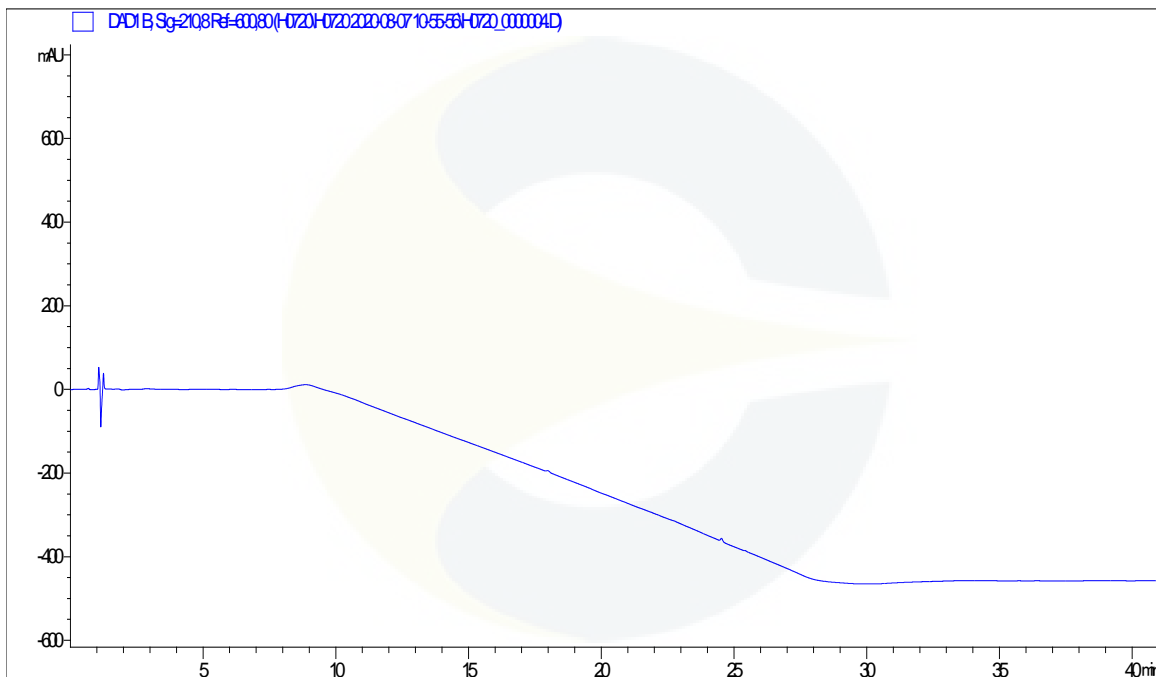
## Certificate of Analysis

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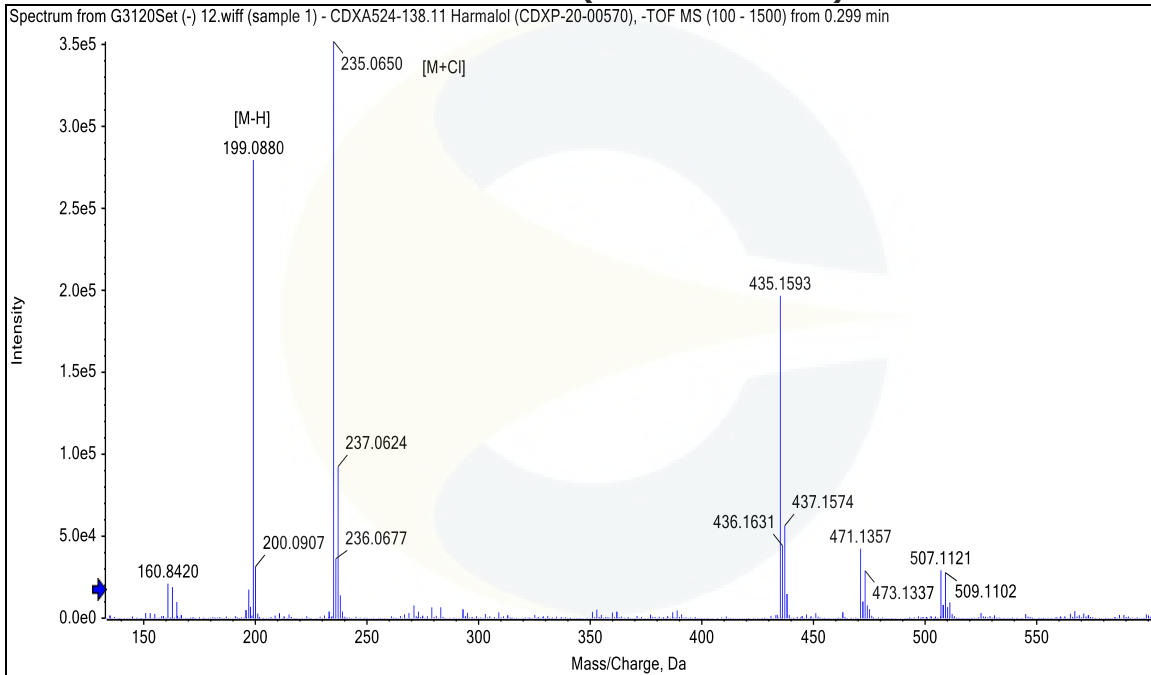
## UV SPECTRUM AT RT 10.4 MINUTES



## HPLC CHROMATOGRAM OF DILUENT BLANK



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**MASS SPECTRUM OF HARMALOL HCL DIHYDRATE (CDXP-20-00570)**

**REVISION HISTORY**

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	08/19/2020	New report

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