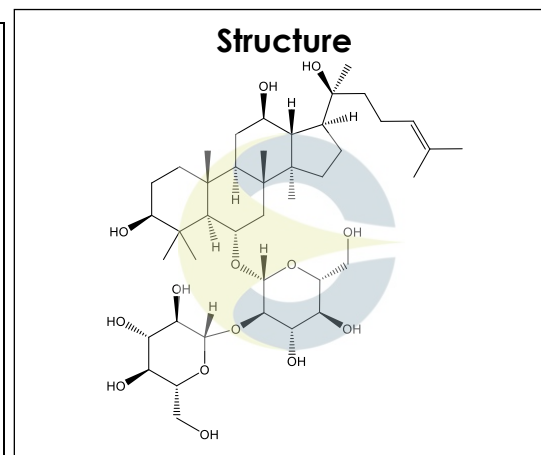


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<b>PRODUCT NAME</b>	Ginsenoside Rf
<b>PART NUMBER</b>	00007215
<b>STANDARD TYPE</b>	Primary (P)
<b>LOT NUMBER</b>	00007215-101
<b>REPORT NUMBER</b>	CDXA-RSS-8516-00
<b>SAMPLE NUMBER</b>	CDXP-19-00091
<b>DATE OF SAMPLE</b>	02/04/2019
<b>DATE OF REPORT</b>	02/28/2019



<b>CHEMICAL NAMES</b>	(3β,6α,12β)-3,12,20-Trihydroxydammar-24-en-6-yl-2-O-β-D-glucopyranosyl-β-D-glucopyranoside; Panaxoside Rf
<b>CHEMICAL FORMULA</b>	C <sub>42</sub> H <sub>72</sub> O <sub>14</sub>
<b>MOLECULAR WEIGHT (MW)</b>	801.01
<b>CHEMICAL FAMILY</b>	Saponins
<b>CAS NUMBER</b>	[52286-58-5]
<b>EC#(EINECS)</b>	634-870-3
<b>RTECS</b>	LY9536900

## ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	NA	86.8%
HPLC	99.1-04-5.0-000190	NA	92.0%
NMR	30.1-04-1.0-000733	Conforms to structure	Conforms to structure
Mass Spectrum	99.1-04-3.0-000126	Conforms	Conforms
Residual Solvent	99.1-CDXA-3.0-000621	NA	MeOH – 0.1%; Acetone < 0.1%; MeOAc < 0.1%; EtOAc < 0.1%
Water	99.1-04-10.0-000094	NA	5.6%
Appearance	NA	NA	White powder

ADJUSTED PURITY: 86.8% IS BASED ON (100 - 0.1 SOLVENTS - 5.6 WATER) X 92.0% HPLC

## STORAGE CONDITIONS

<b>STORAGE</b>	Room Temperature in a dry place.
<b>EXPIRATION DATE</b>	02/2024 under the above conditions.

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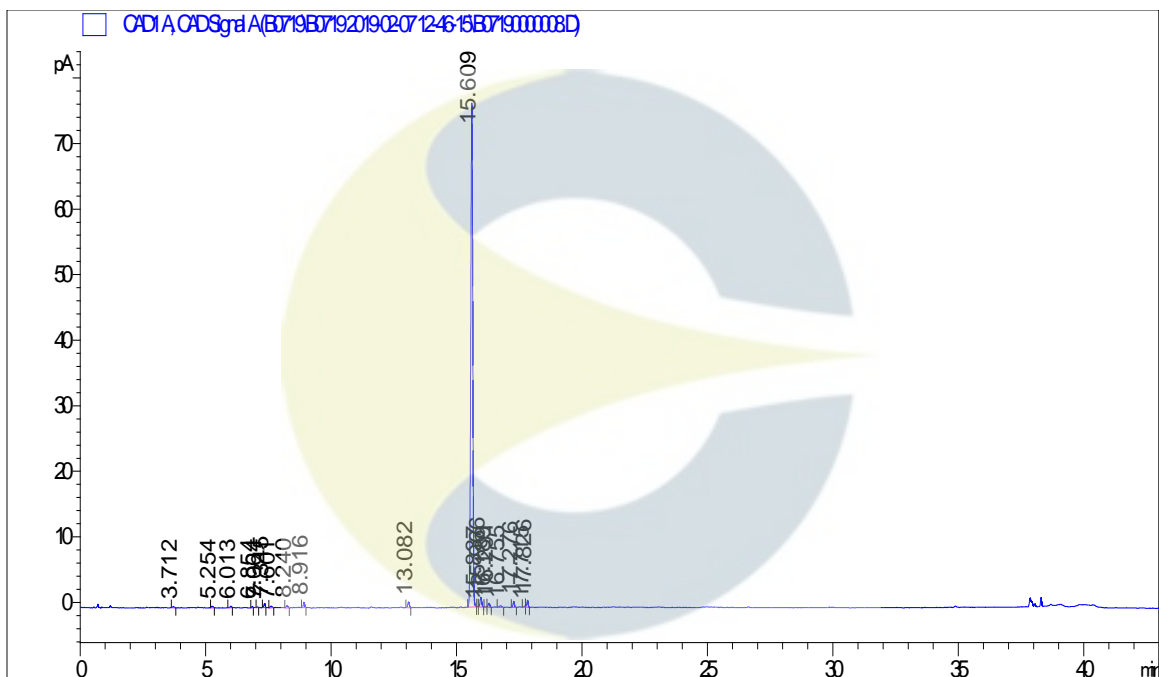
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## ANALYTICAL CONDITIONS

<b>INSTRUMENT</b>	AGILENT 1260 HPLC CONNECTED TO DIONEX CORONA VEO CHARGED AEROSOL DETECTOR (CAD); AB-SCIEX 6600 TRIPLE TOF
<b>COLUMN</b>	Phenomenex Kinetex C18 150 x 4.6 mm, 2.6 µm particle size
<b>MOBILE PHASE</b>	A – High-purity water, B - Acetonitrile 15% B increasing to 30% B over 15 minutes, then increasing to 32% B over 1 minute, then increasing to 38% B over 3 minutes, then increasing to 43% B over 5 minutes, then increasing to 55% B over 3 minutes, then increasing to 65% B over 4 minutes, then increasing to 70% B over 4 minutes, then increasing to 90% B over 3 minutes. Re-equilibrate to 15% B over 1 minute and hold at 15% B for 4 minutes.
<b>COLUMN TEMP.</b>	40 °C
<b>FLOW RATE</b>	2.0 mL/minute
<b>INJECTION VOL.</b>	5.0 µL
<b>INJECTION CONC.</b>	1.2 mg/mL in Methanol
<b>DETECTION</b>	CAD

## HPLC CHROMATOGRAM OF GINSENOSEIDE RF (CDXP-19-00091)

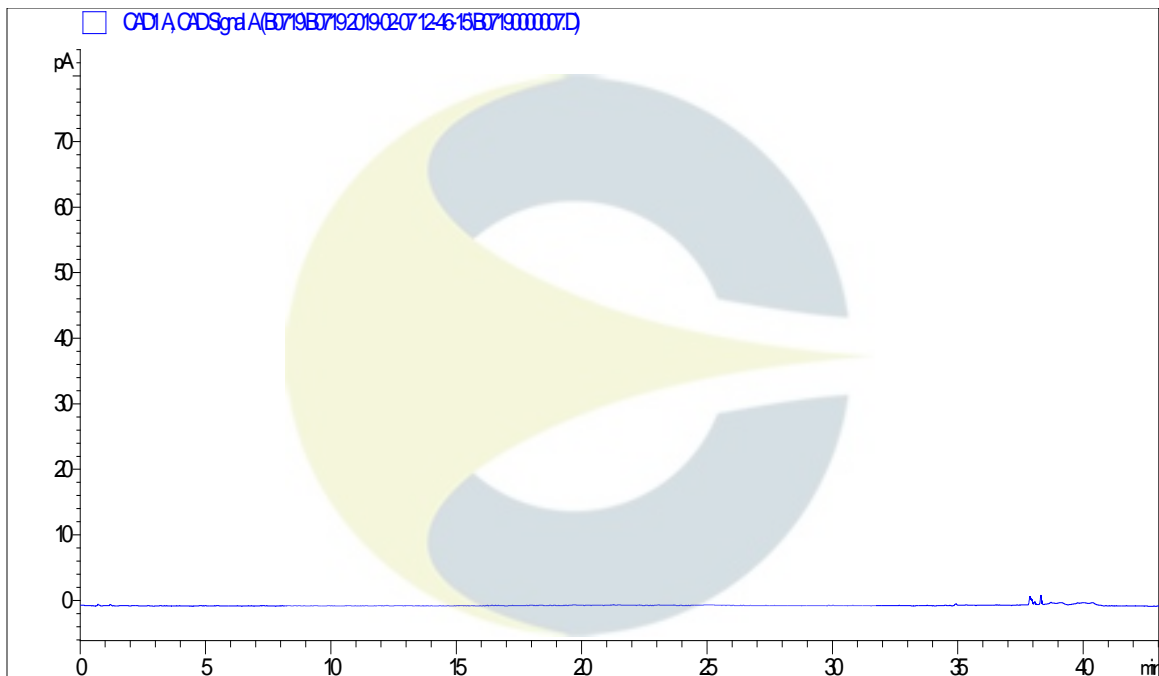


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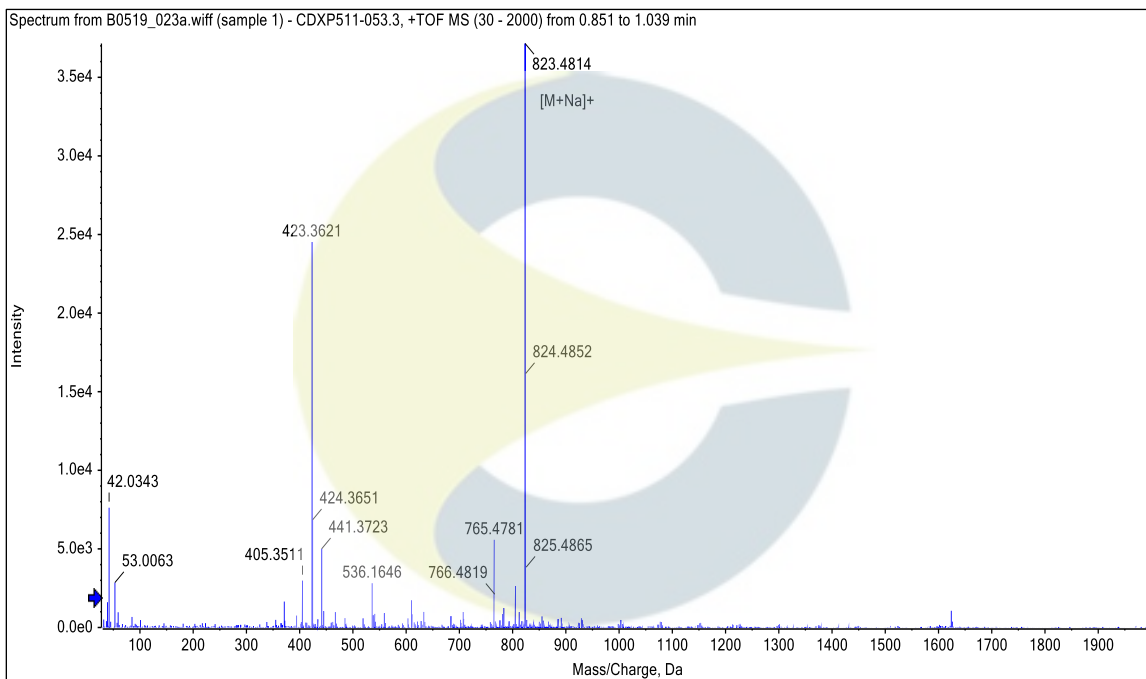
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## HPLC CHROMATOGRAM OF DILUENT BLANK



## MASS SPECTRUM OF GINSENOSIDE RF (CDXP-19-00091)

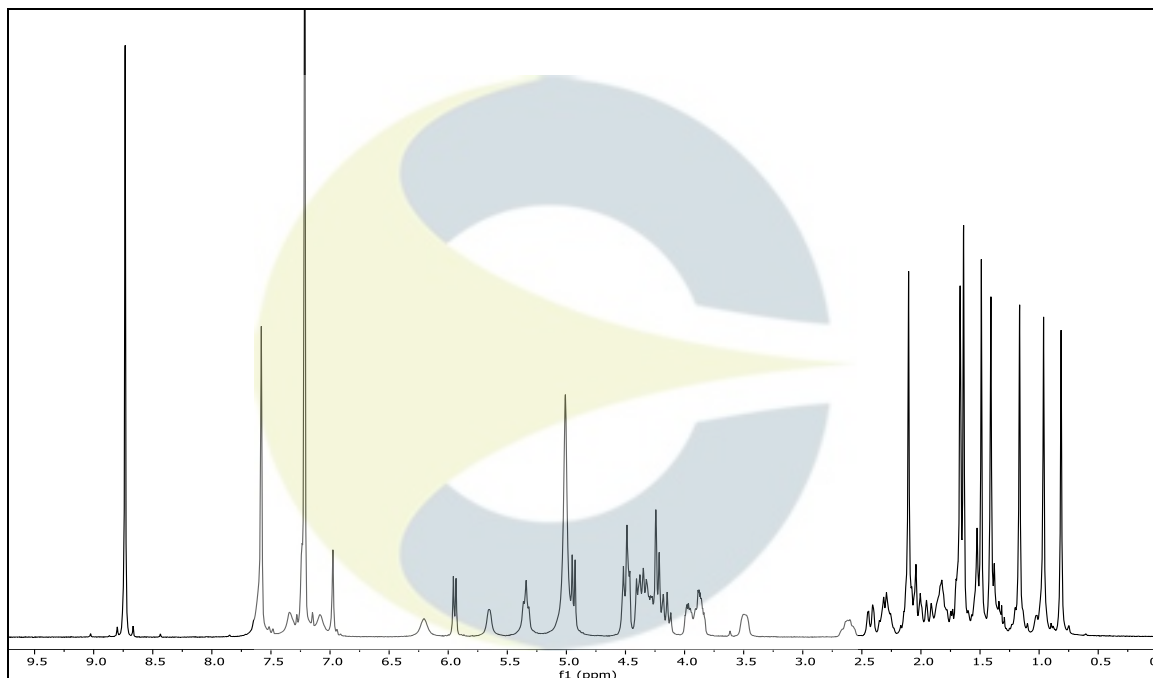


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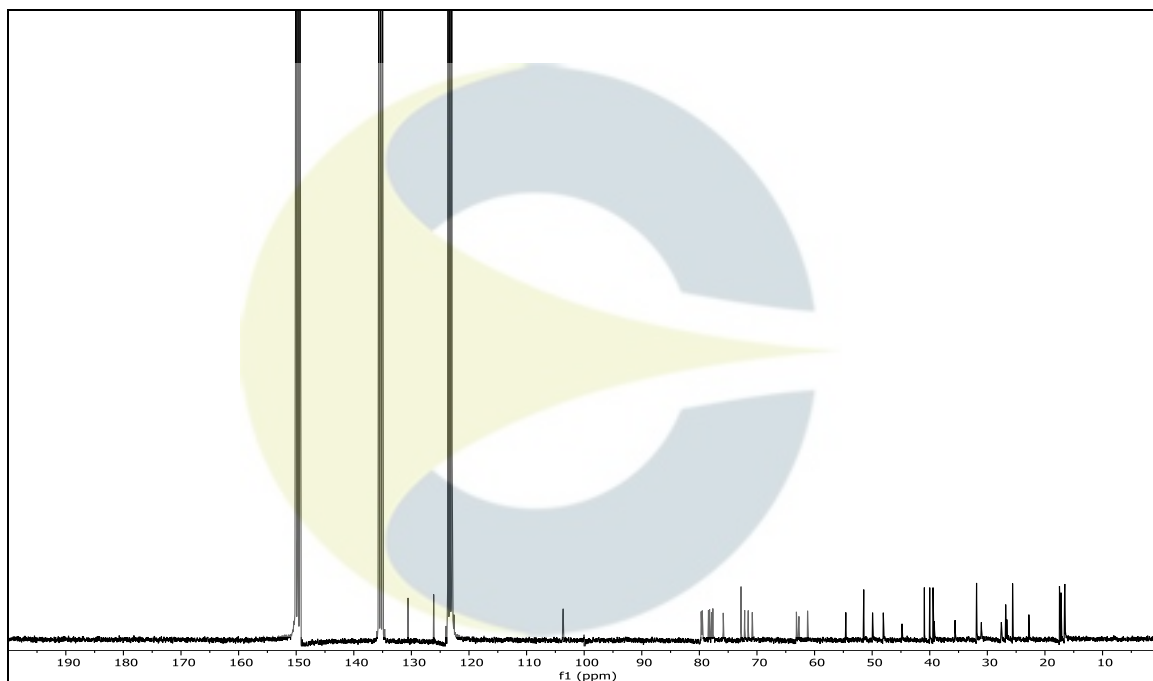
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**<sup>1</sup>H-NMR SPECTRUM OF GINSENOSIDE RF (CDXP-19-00091) IN PYRIDINE-*d*<sub>5</sub>**



**<sup>13</sup>C-NMR SPECTRUM GINSENOSIDE RF (CDXP-19-00091) IN PYRIDINE-*d*<sub>5</sub>**

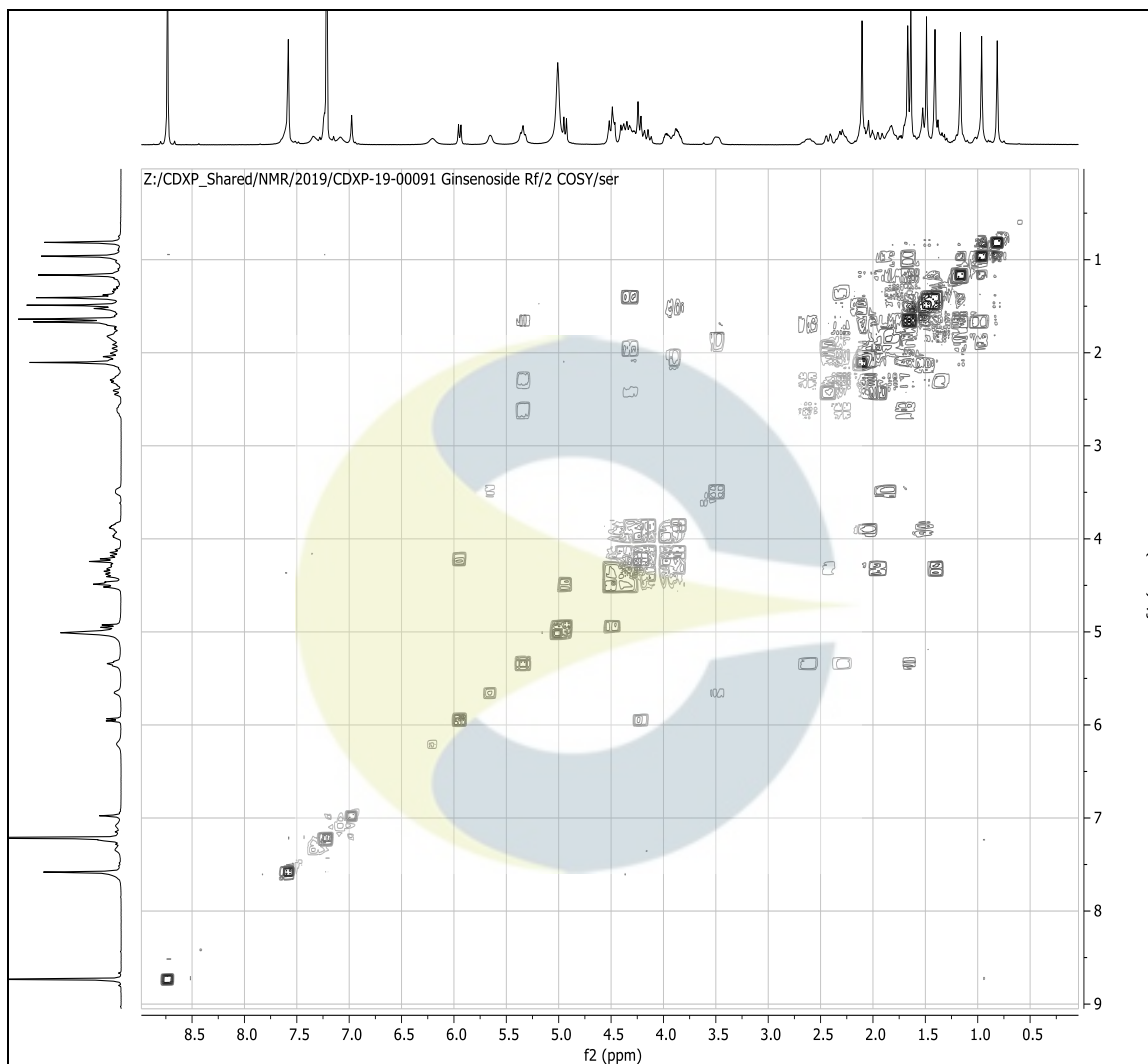


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## COSY-NMR SPECTRUM OF GINSENOSIDE RF (CDXP-19-00091) IN PYRIDINE-*d*<sub>5</sub>



## REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	02/28/2019	New report

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