

Supplementary Material

Method development for isolation and purification of Z-Guggulsterone, Dihydroguggulsterone, and Progesterone from guggul resin using RP-HPLC

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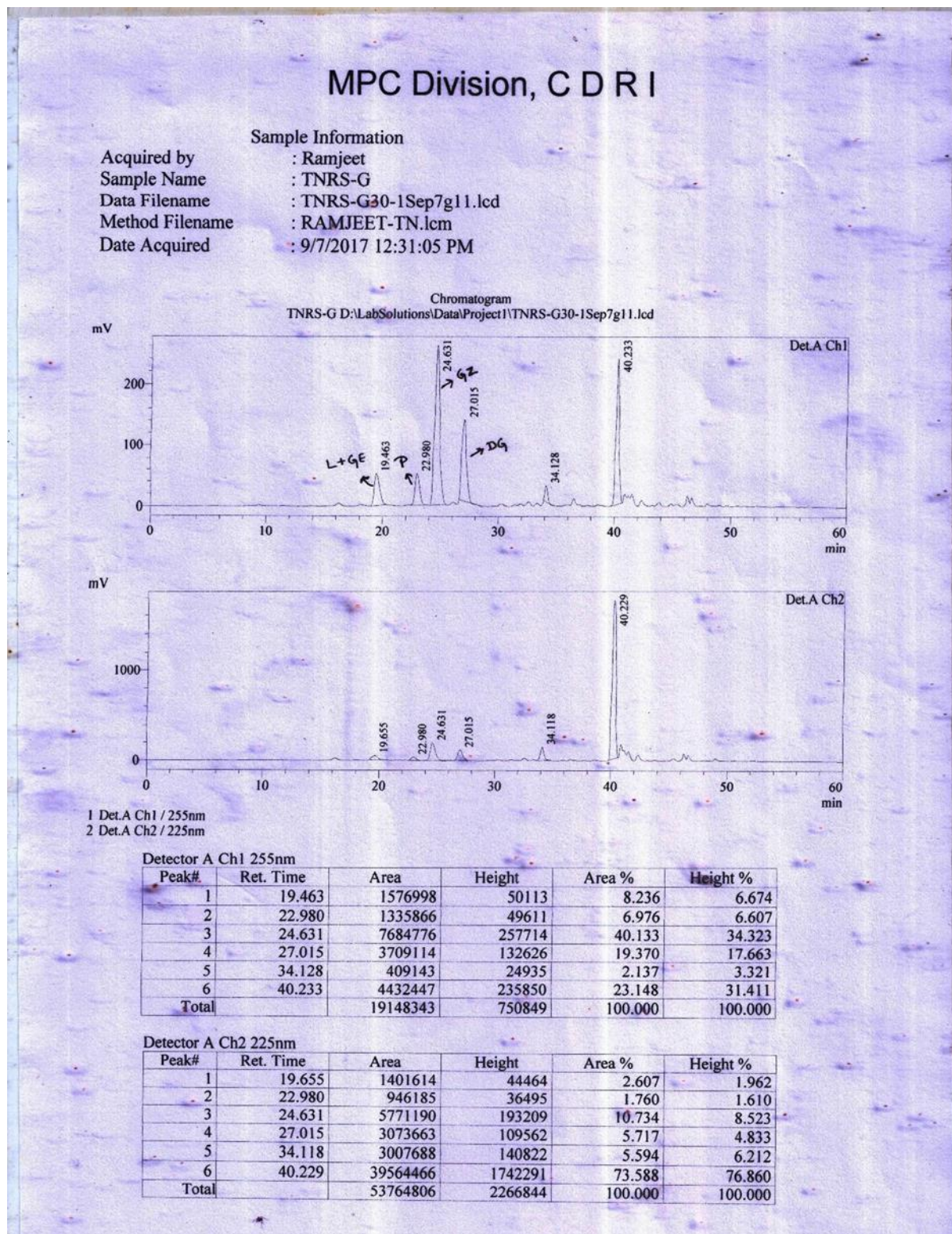
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^dChemistry Innovation Research Center, Jubilant Biosys Ltd, Greater Noida, Uttar Pradesh-201310, India

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Table of Contents

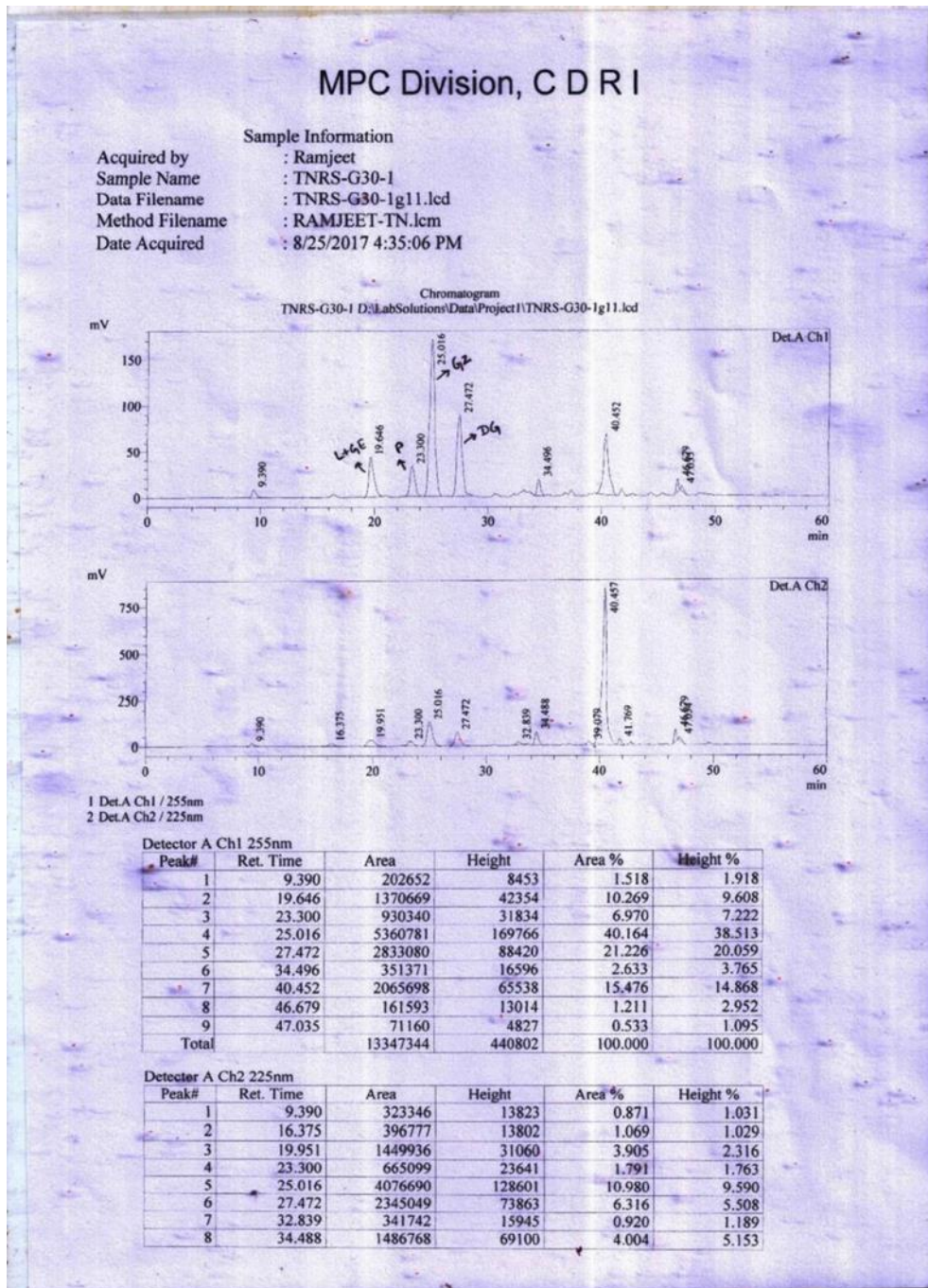
NMR and LCMS spectra of the isolated compounds	S2
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HPLC chromatogram of Enriched fraction (Batch 1st)

(Note: L+GE: 3',3''-dimethoxysesamin and *E*-Guggulsterone isomer; P: Progesterone; GZ: *Z*-Guggulsterone isomer; DG: Dihydroguggulsterone)

1



2

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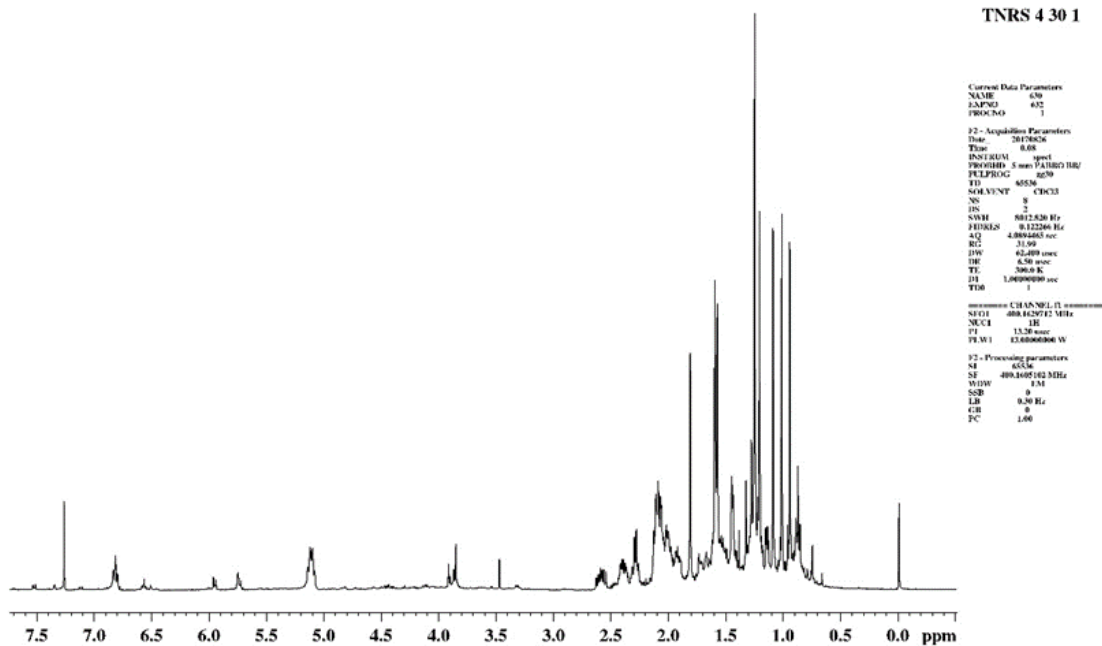
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HPLC chromatogram of Enriched fraction (Batch 2nd)

(Note: L+GE: 3',3''-dimethoxysesamin and E-Guggulsterone isomer; P: Progesterone; GZ: Z-Guggulsterone isomer; DG: Dihydroguggulsterone)

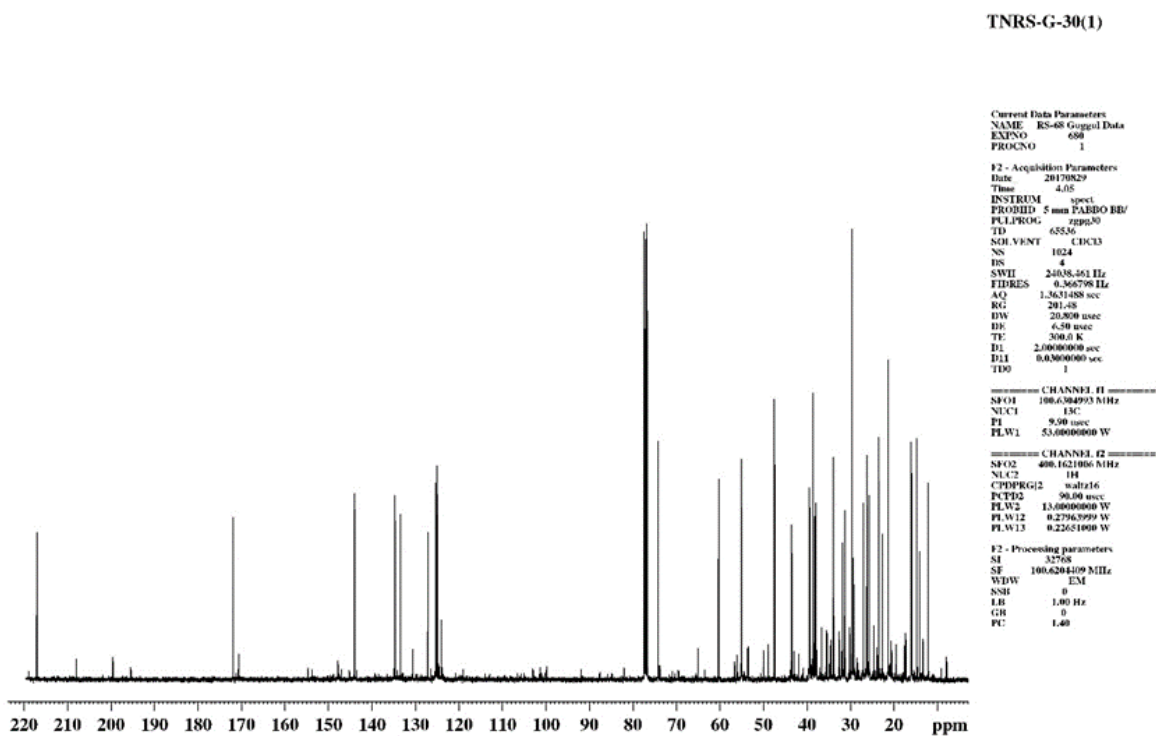
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¹H-NMR Spectra of Enriched Fraction (CDCl₃, 400 MHz)

7

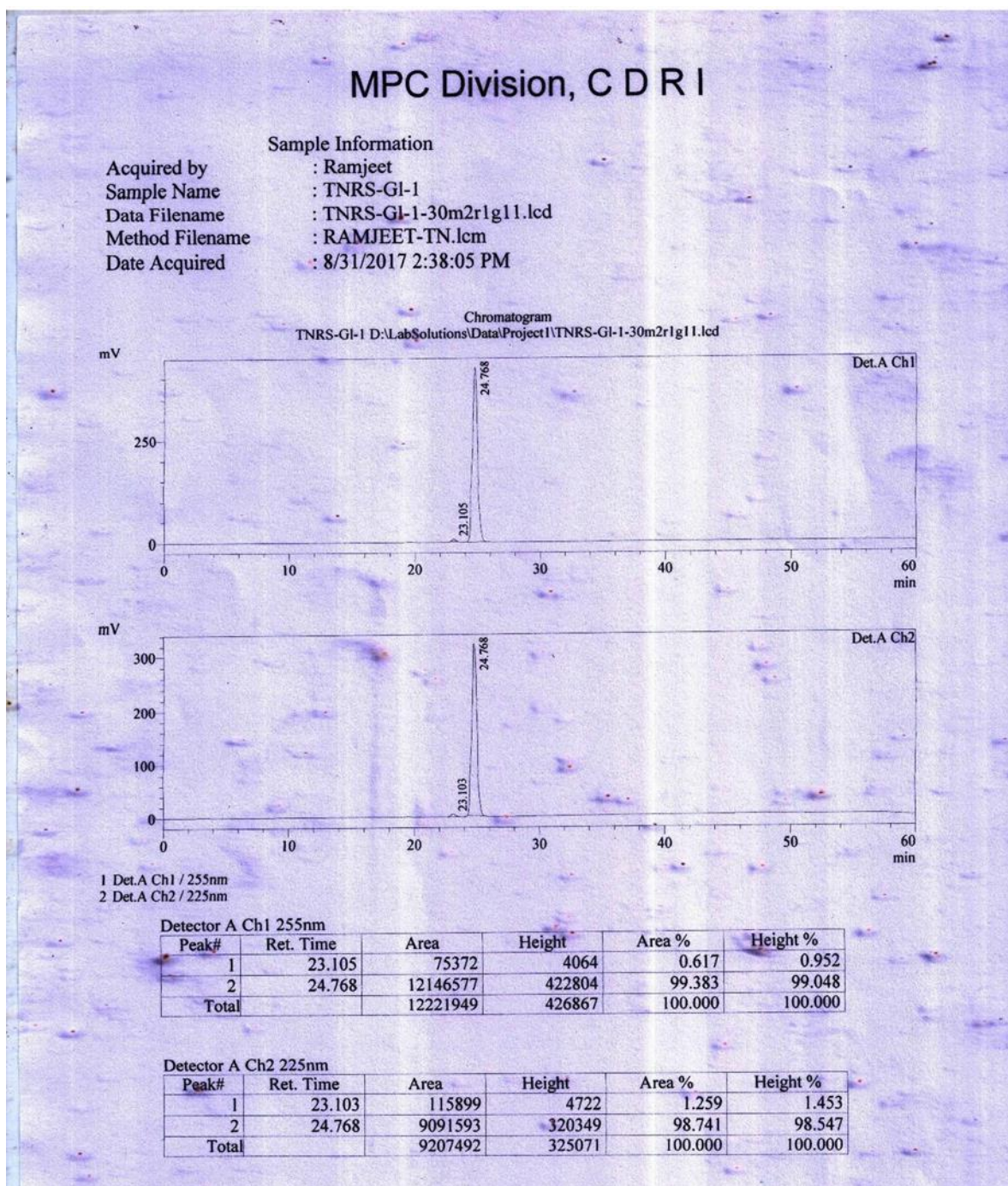
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9

¹³C-NMR Spectra of Enriched Fraction (CDCl₃, 100 MHz)

10

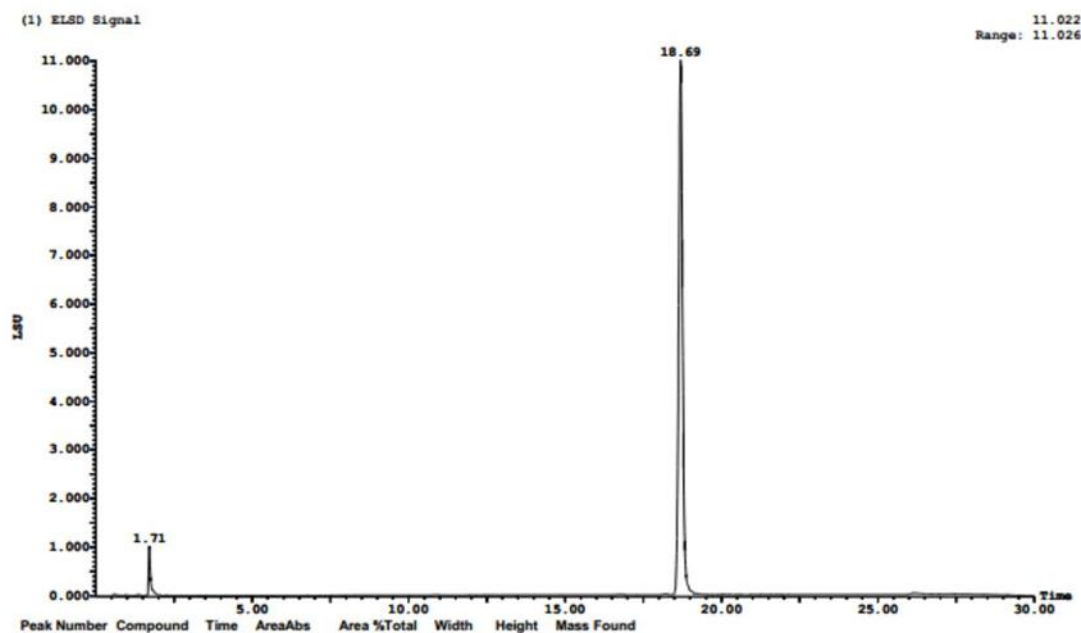
11



HPLC chromatogram of Z-Guggulsterone isomer

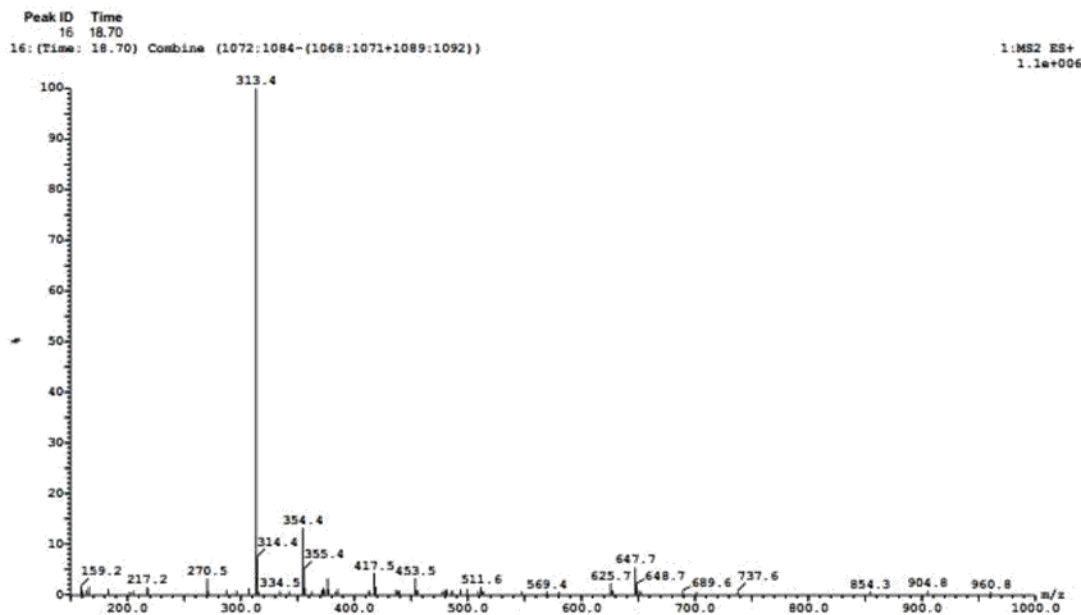
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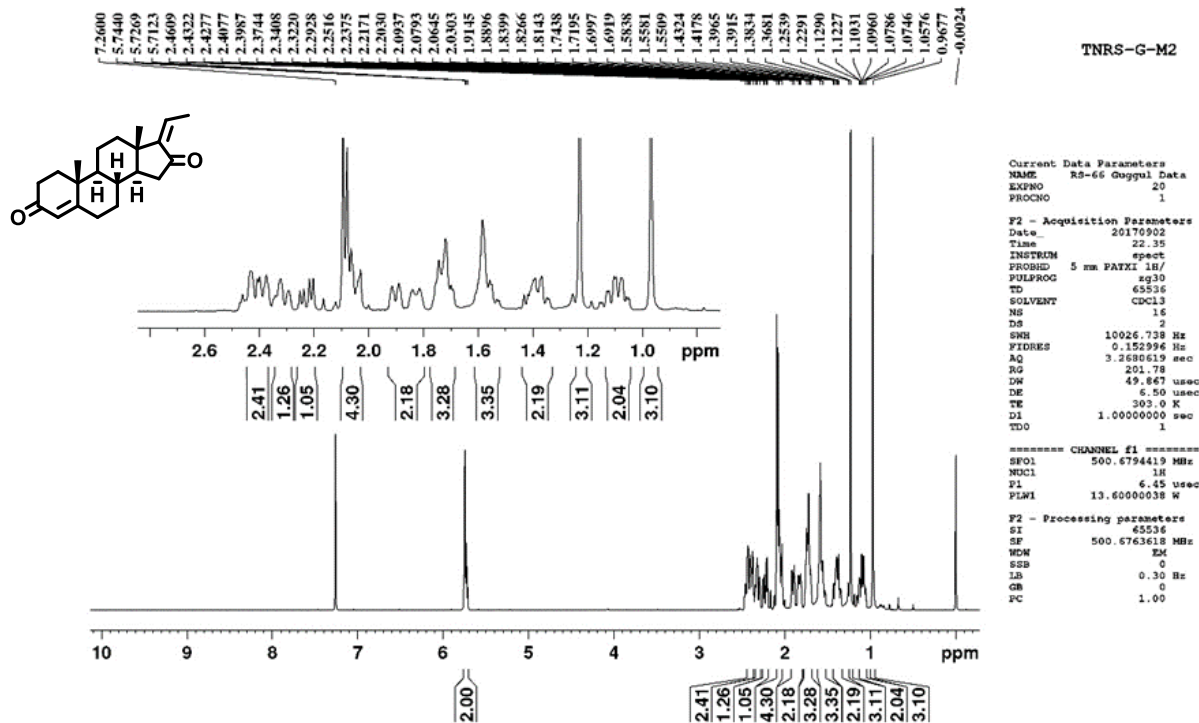


LC-MS chromatogram of Z-Guggulsterone isomer

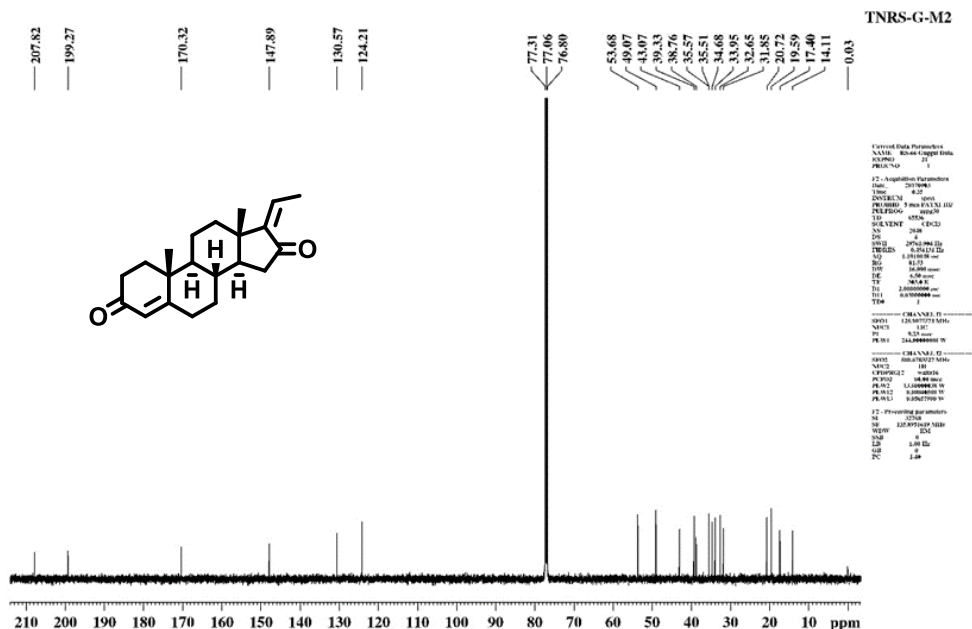
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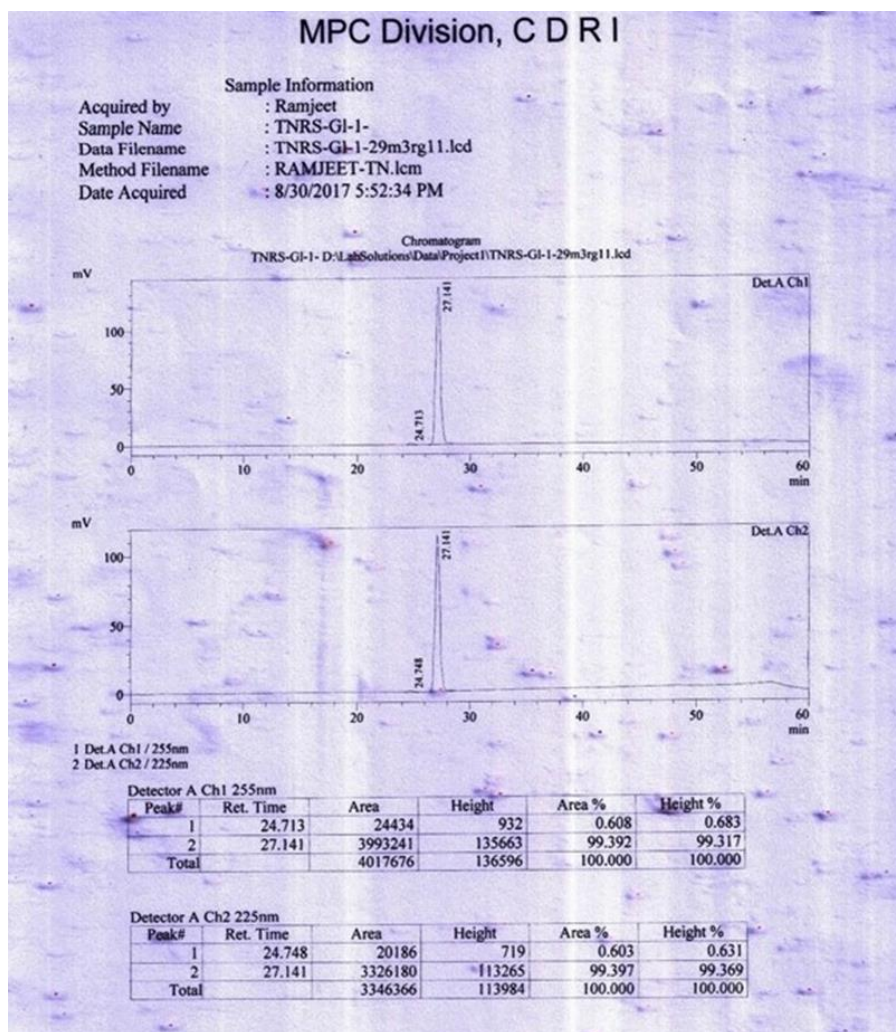
LC-MS chromatogram of Z-Guggulsterone isomer



¹H-NMR Spectra of Z-Guggulsterone (CDCl₃, 501 MHz)



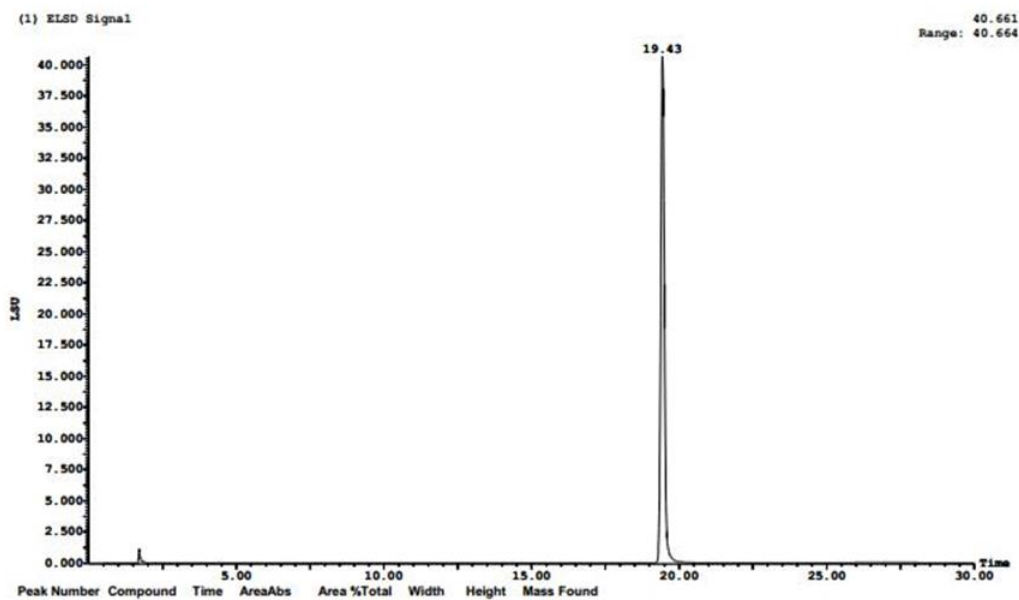
¹³C-NMR Spectra of Z-Guggulsterone (CDCl₃, 126 MHz)



HPLC Chromatogram of Dihydroguggulsterone

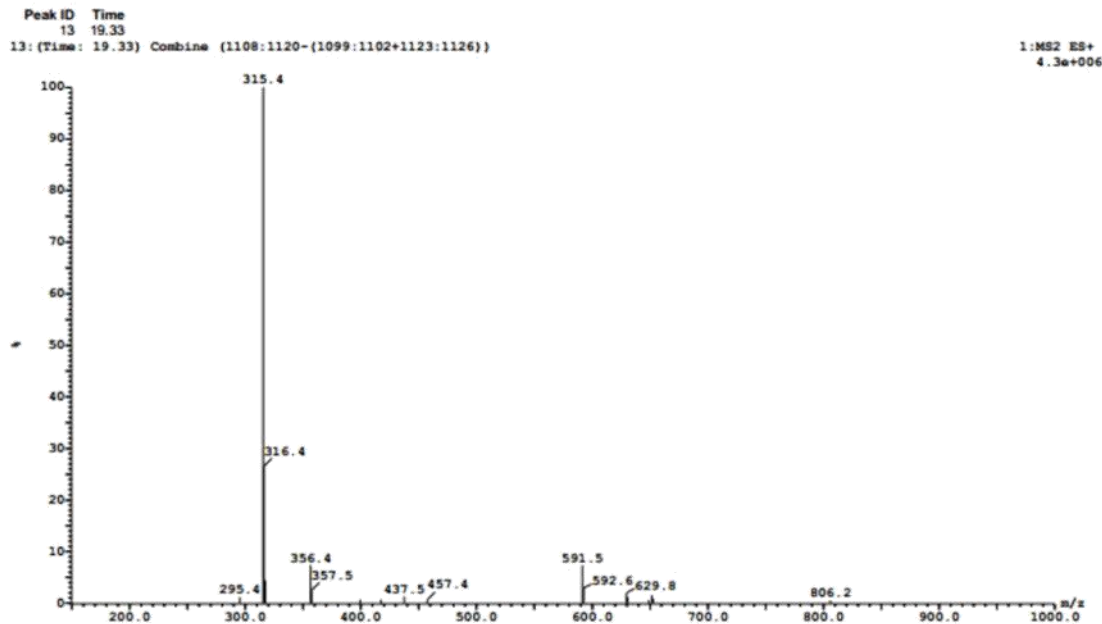
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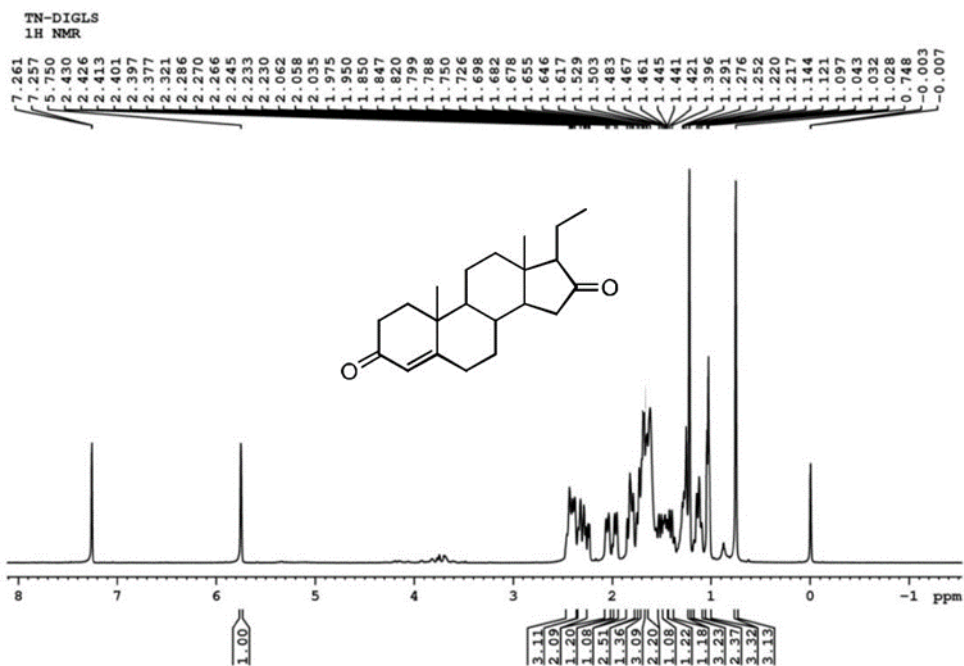
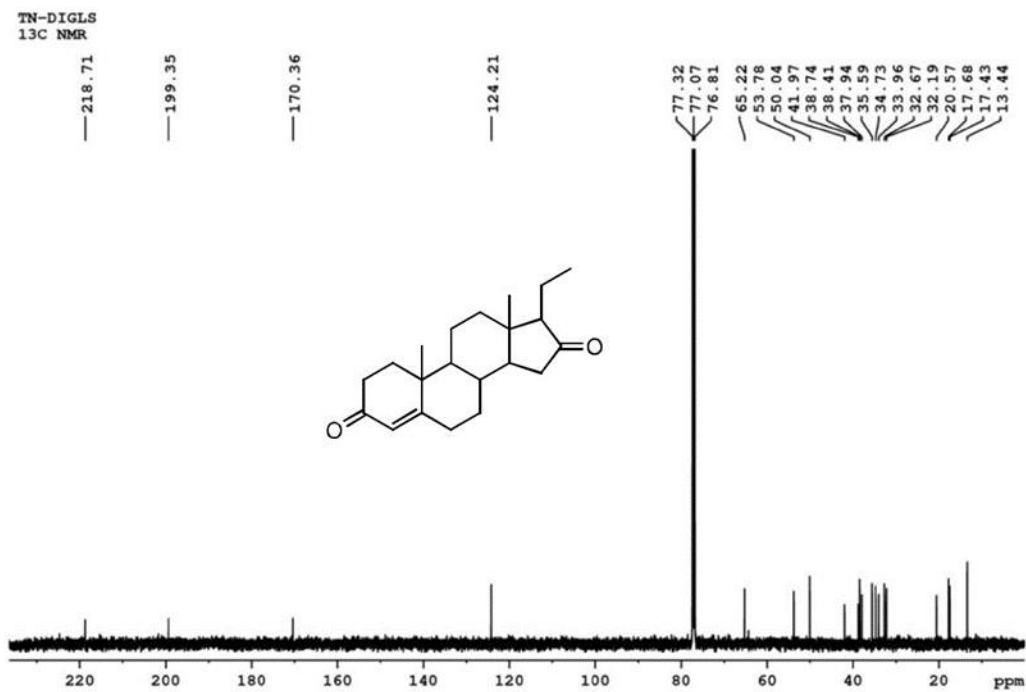


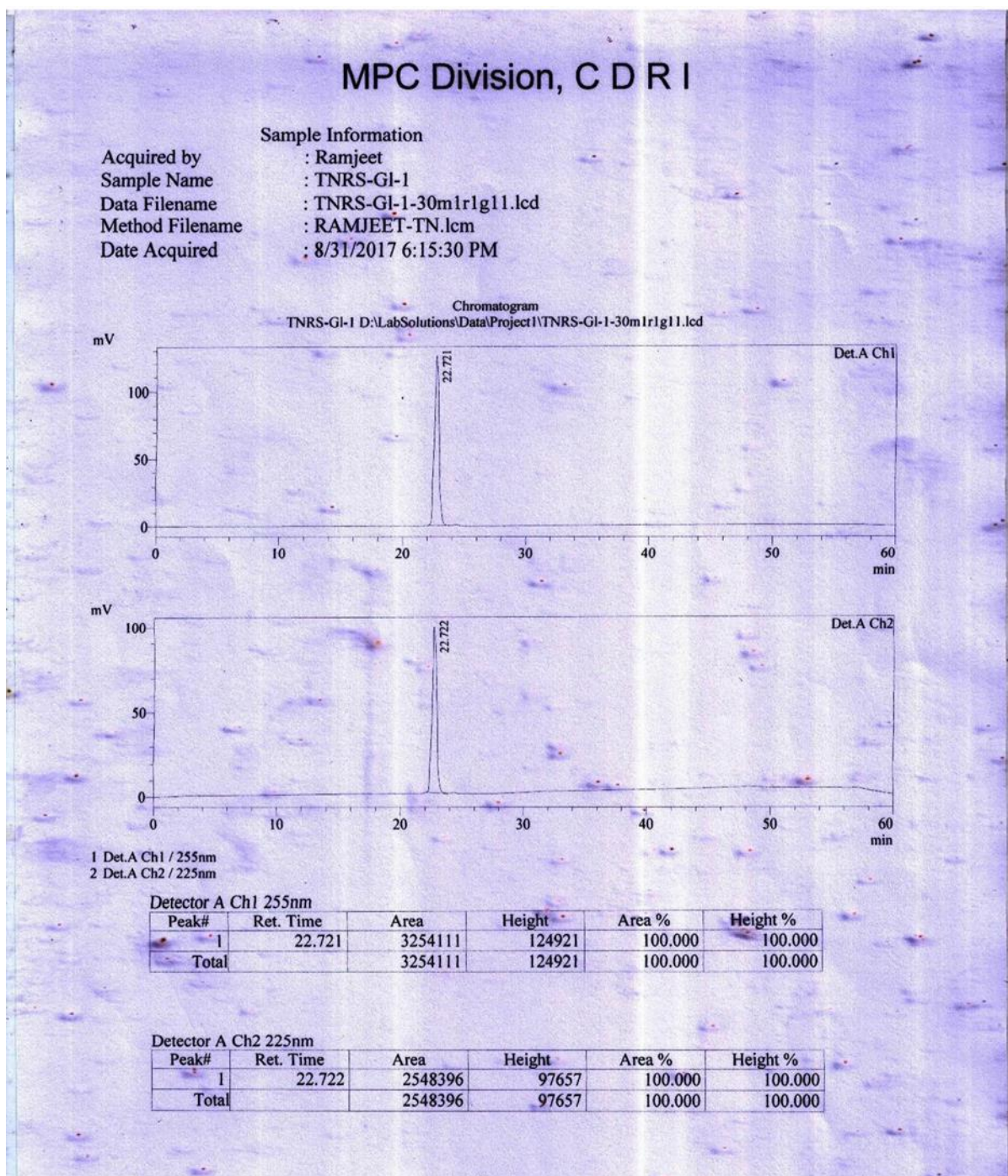
LC-MS chromatogram of Dihydroguggulsterone

Openlynx Report SAIF, CSIR-CDRI, Lucknow
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LC-MS chromatogram of Dihydroguggulsterone

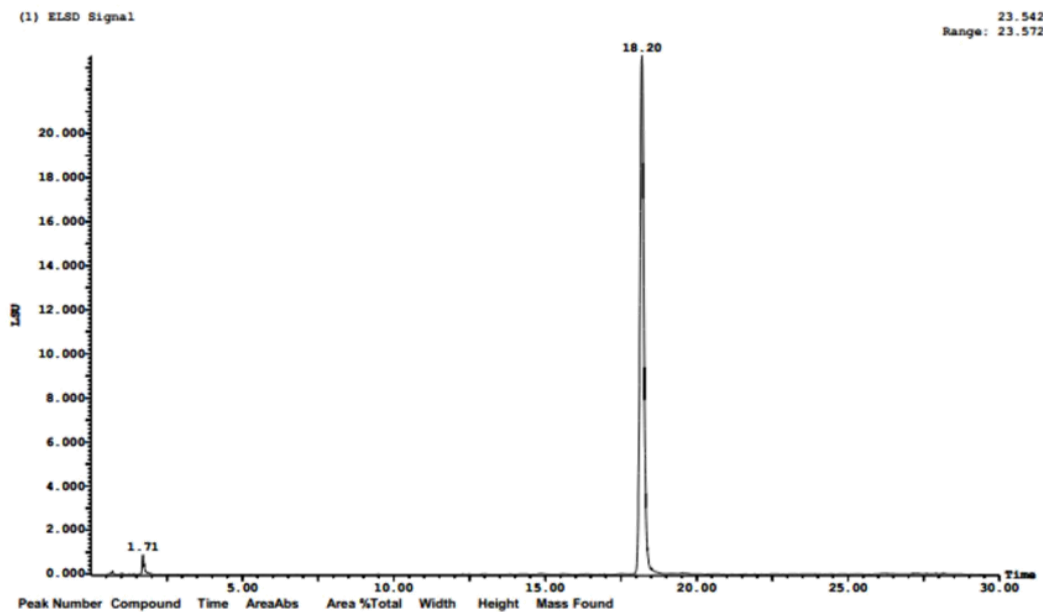
¹H NMR Spectra of Dihydroguggulsterone (CDCl₃)¹³C NMR Spectra of Dihydroguggulsterone (CDCl₃)



HPLC chromatogram of Progesterone

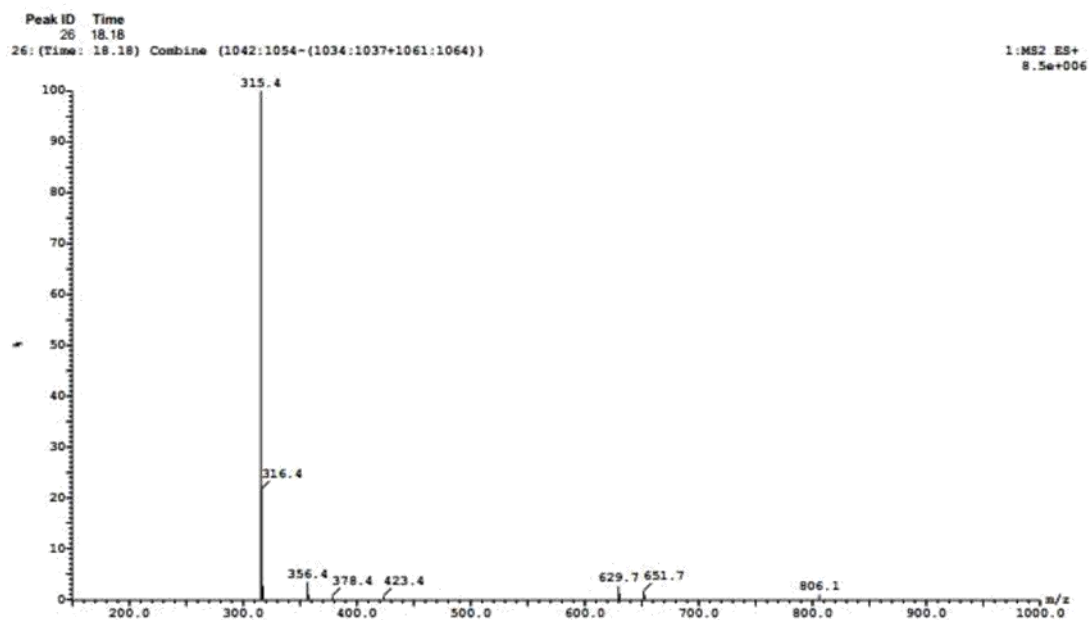
32
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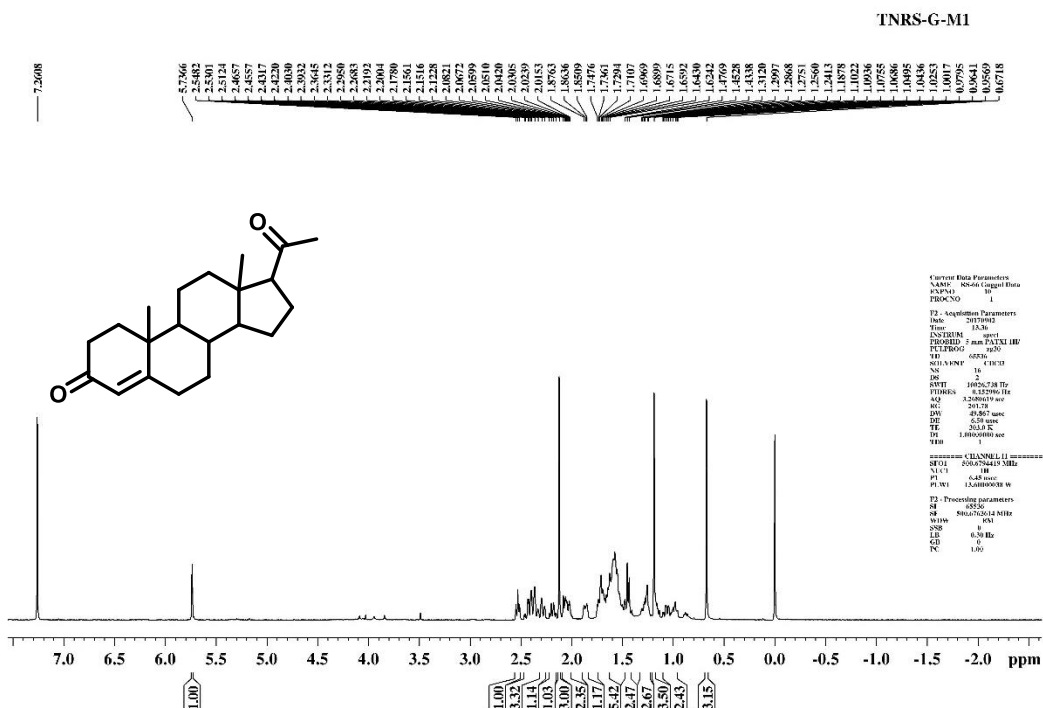


LC-MS chromatogram of Progesterone

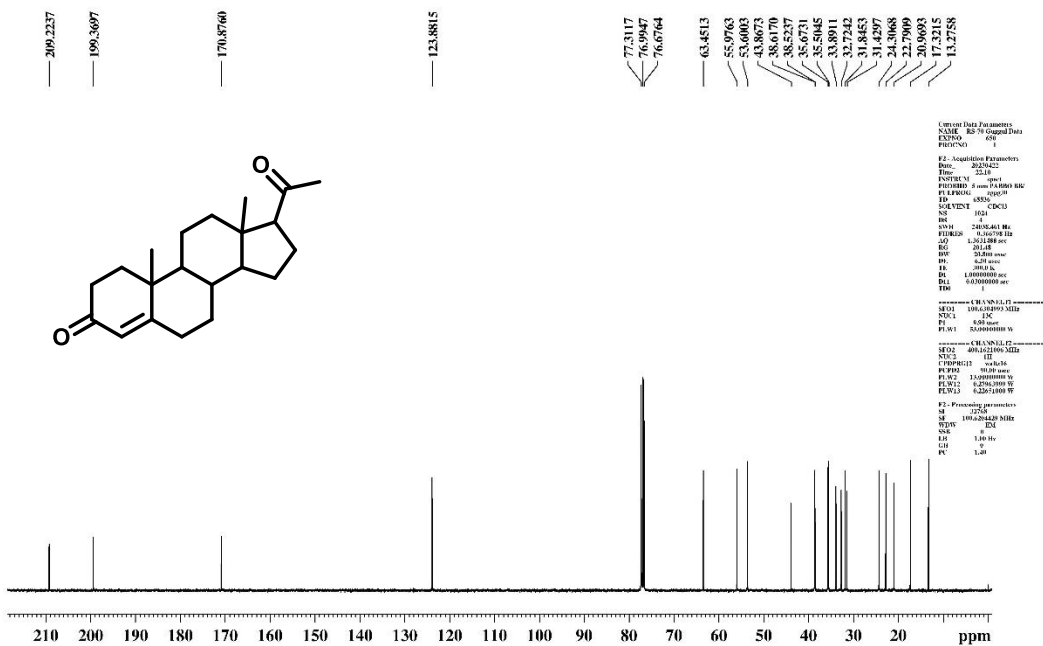
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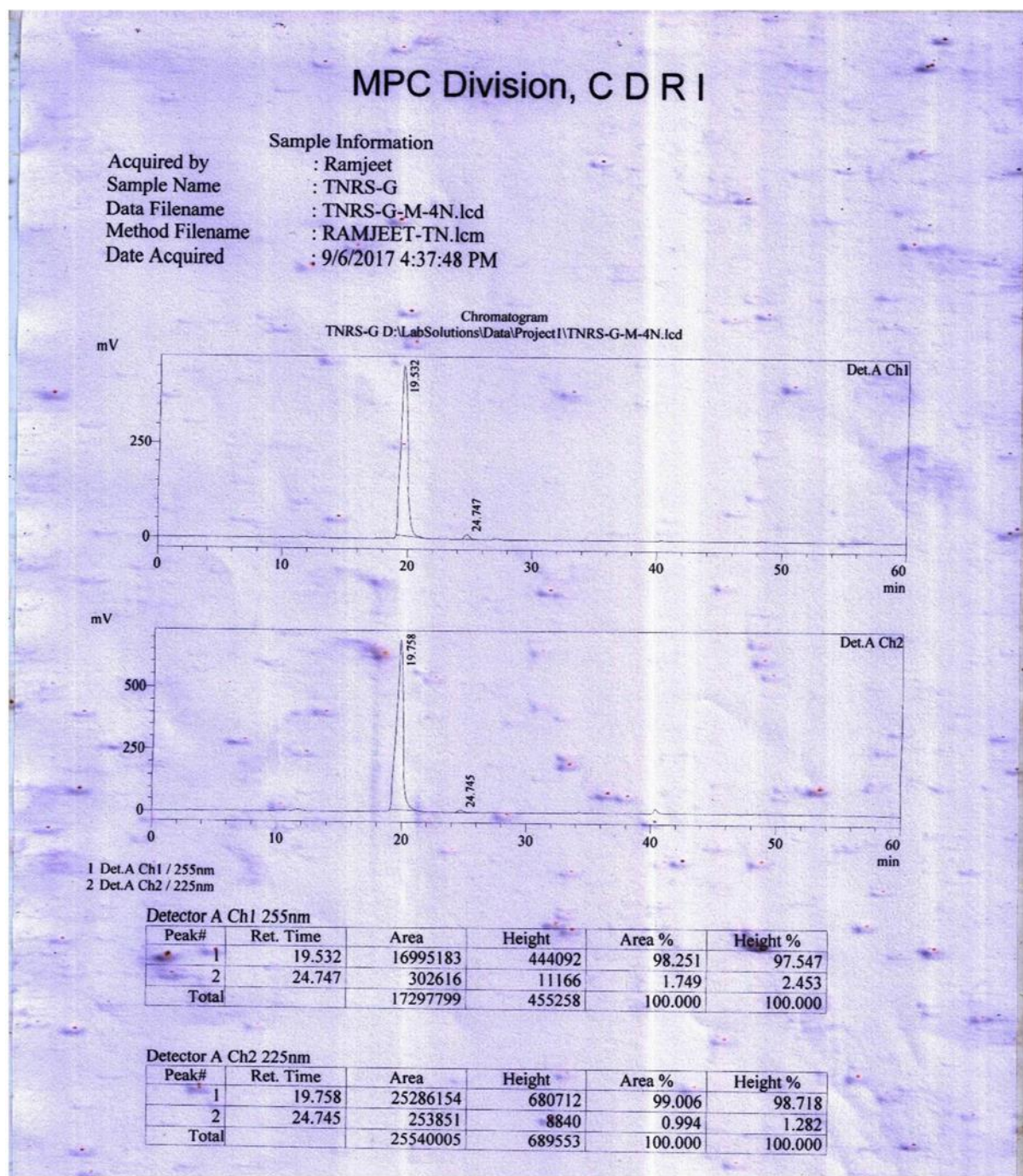
LC-MS chromatogram of Progesterone



¹H NMR Spectra of Progesterone (CDCl₃)

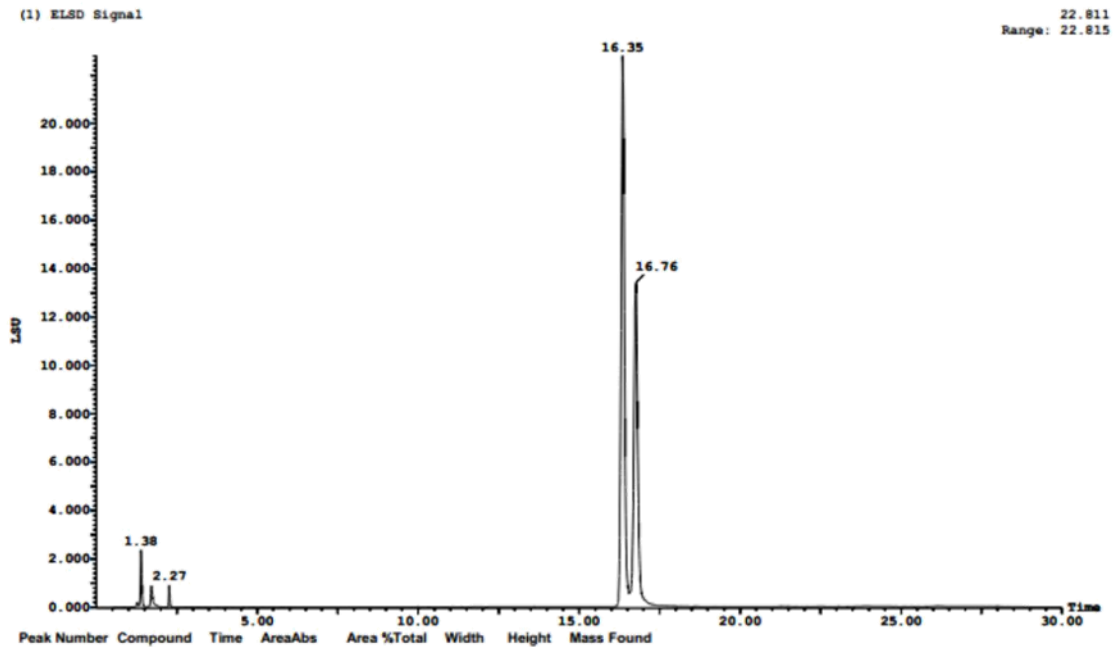


¹³C NMR Spectra of Progesterone (CDCl₃)



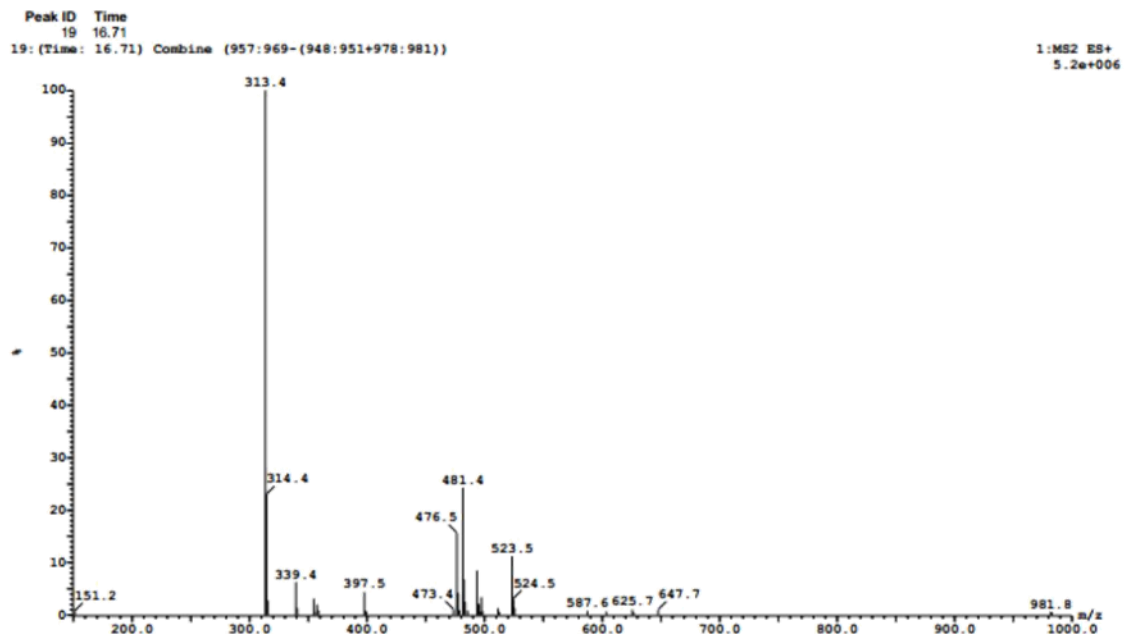
HPLC chromatogram of *E*-Guggulsterone isomer and 3',3''-dimethoxysesamin mixture

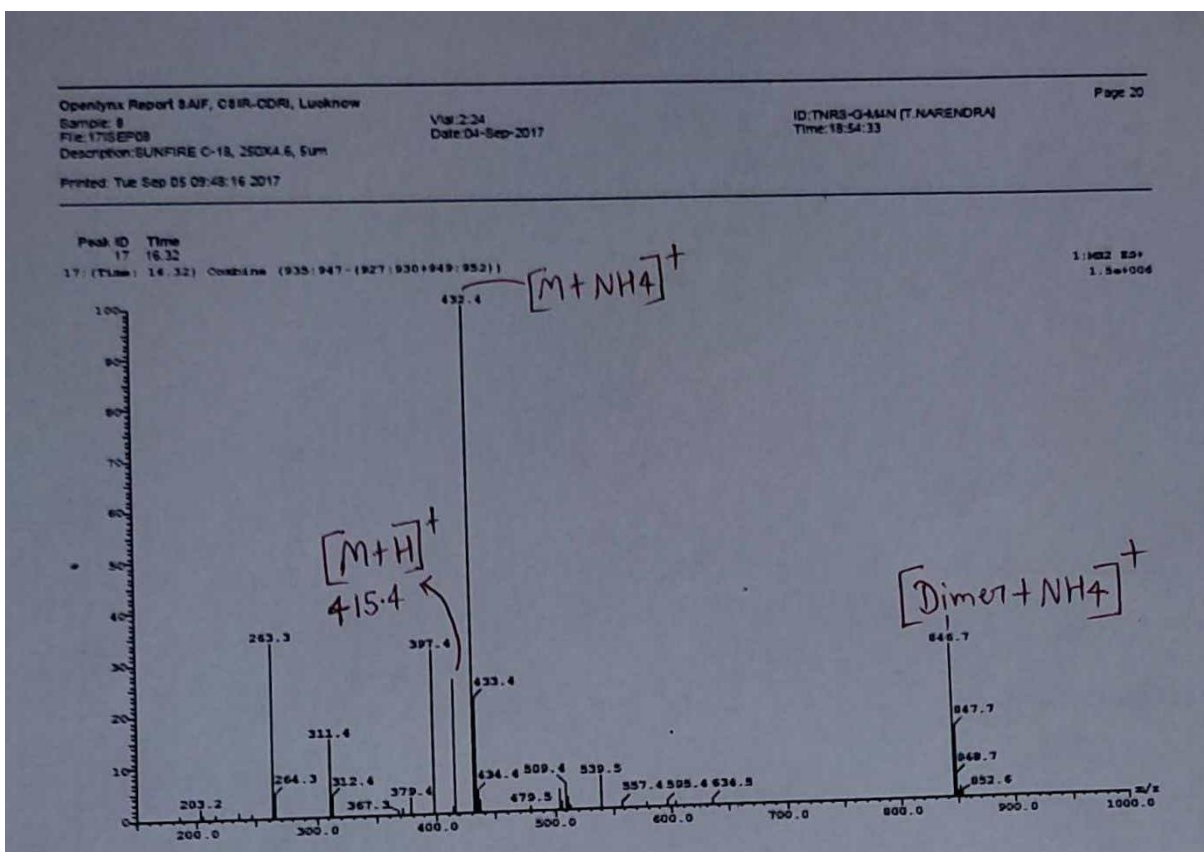
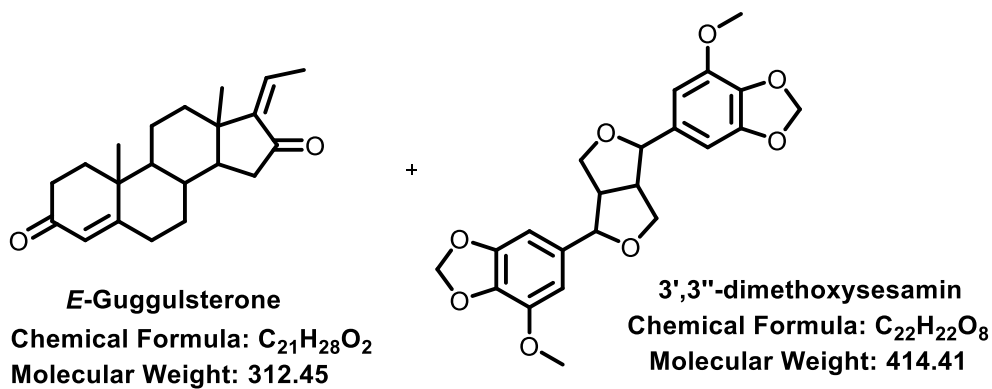
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 Date:04-Sep-2017
 ID:TNR5-G-AMN [T.NARENDRA]
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 Page 1
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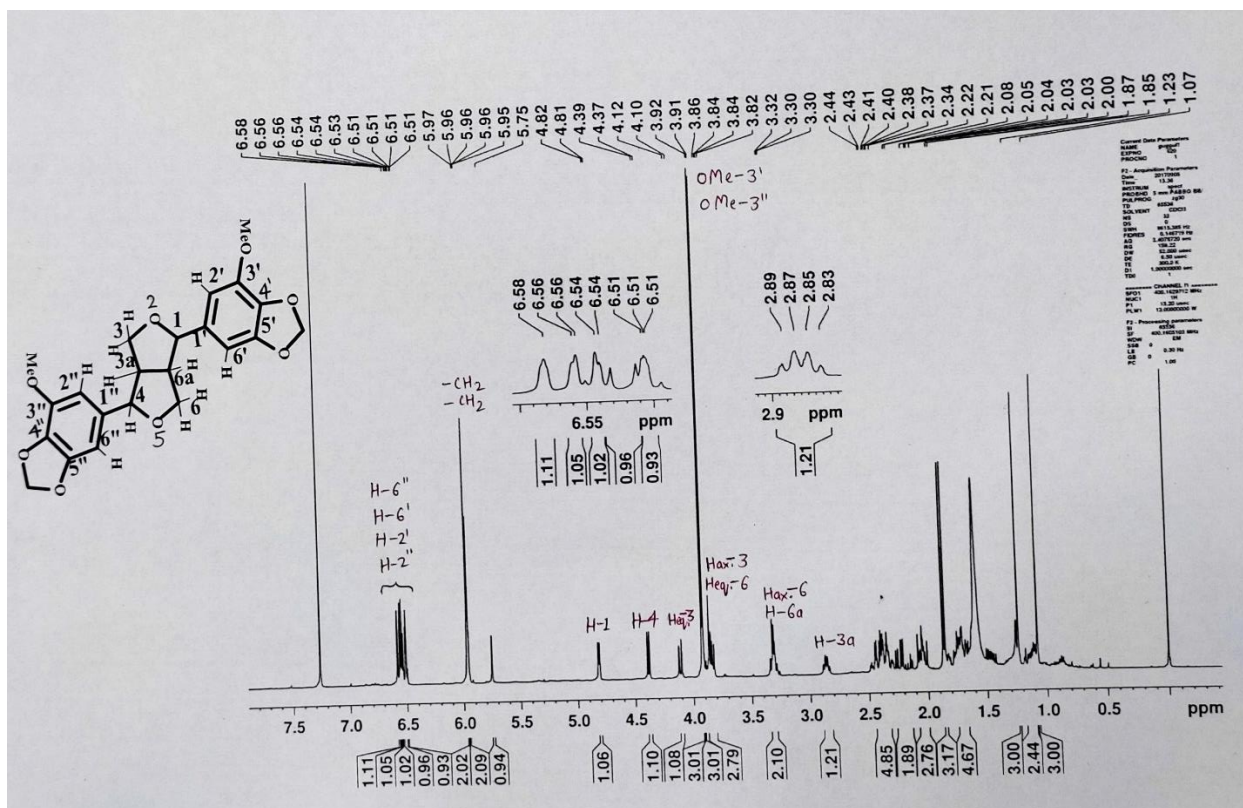


LC-MS of *E*-Guggulsterone and 3',3''-dimethoxysesamin mixture

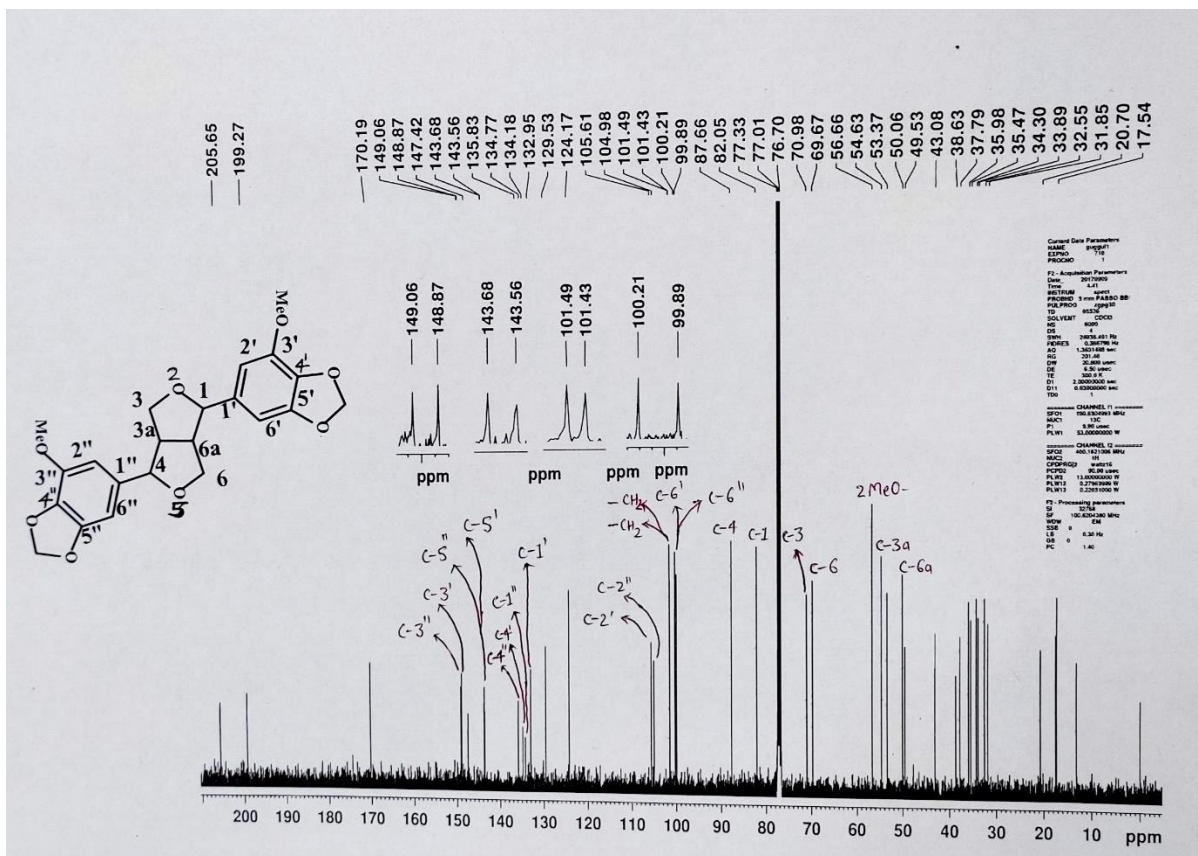
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 Page 22
 Printed: Tue Sep 05 09:48:16 2017



LC-MS of *E*-Guggulsterone and 3',3''-dimethoxysesamin mixture*E*-Guggulsterone and 3',3''-dimethoxysesamin mixture



¹H-NMR Spectra of *E*-Guggulsterone and 3',3''-dimethoxysesamin mixture (CDCl₃)



¹³C-NMR Spectra of *E*-Guggulsterone and 3',3''-dimethoxysesamin mixture (CDCl₃)