

Supporting Information

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An Undescribed Triterpenoid Saponin Isolated from *Zornia diphylla*

Jiahui Li¹, Mengfei Xue¹, Meng Wang¹, Peng Li³ and Zhenliang Sun²

¹ Anhui University of Science and Technology School of Medicine, Huainan, China

² Fengxian Hospital affiliated to Anhui University of Science and Technology, Shanghai, China

³ State Key Laboratory of Quality Research in Chinese Medicine, Institute of Chinese Medical Sciences, University of Macau, Macau 999078, China

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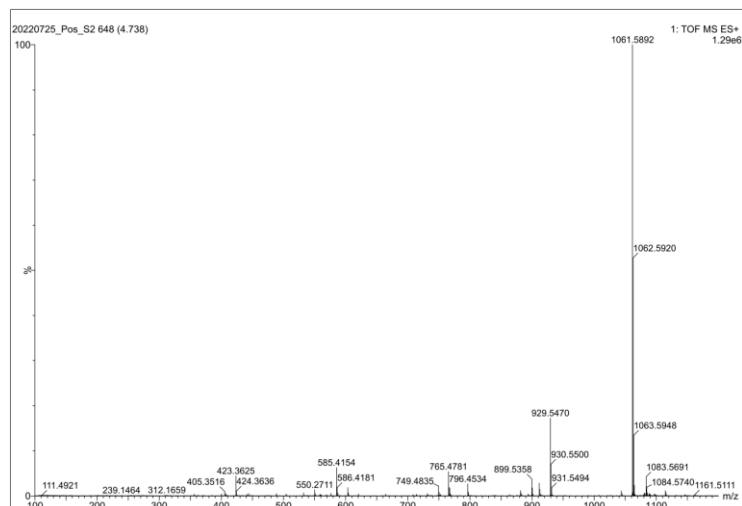


Figure S1: HRESIMS spectrum of zordiphyllaside I

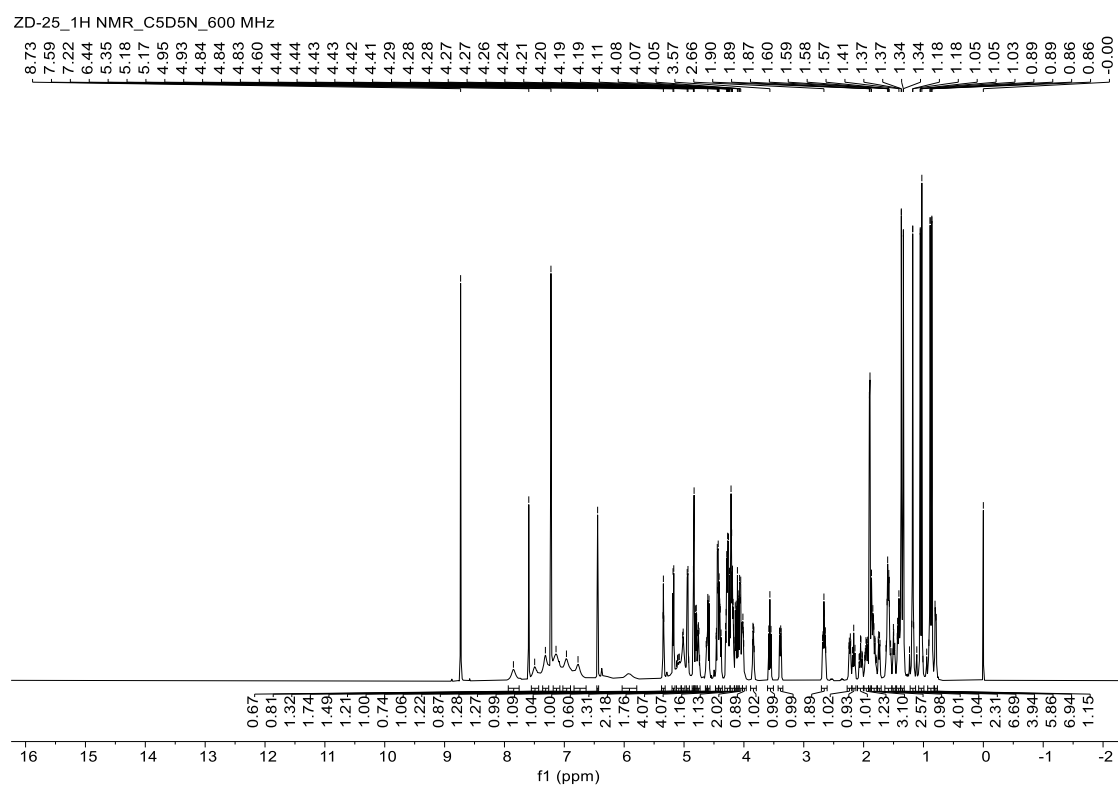


Figure S2: $^1\text{H-NMR}$ spectrum of zordiphyllaside I

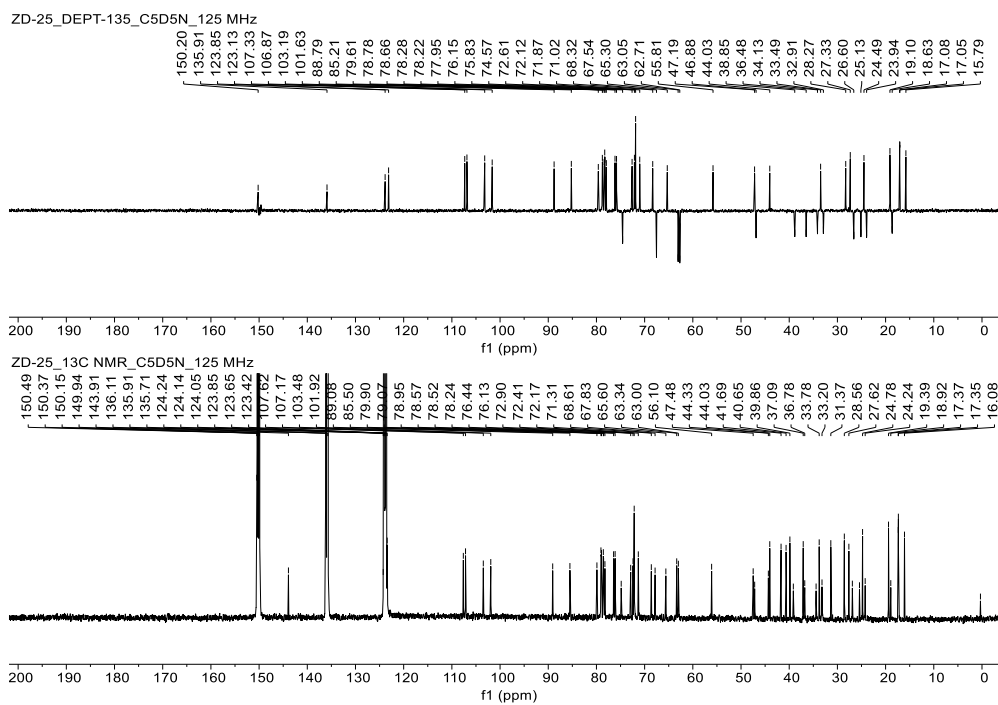


Figure S3: DEPT and ^{13}C NMR spectra of zordiphyllaside I

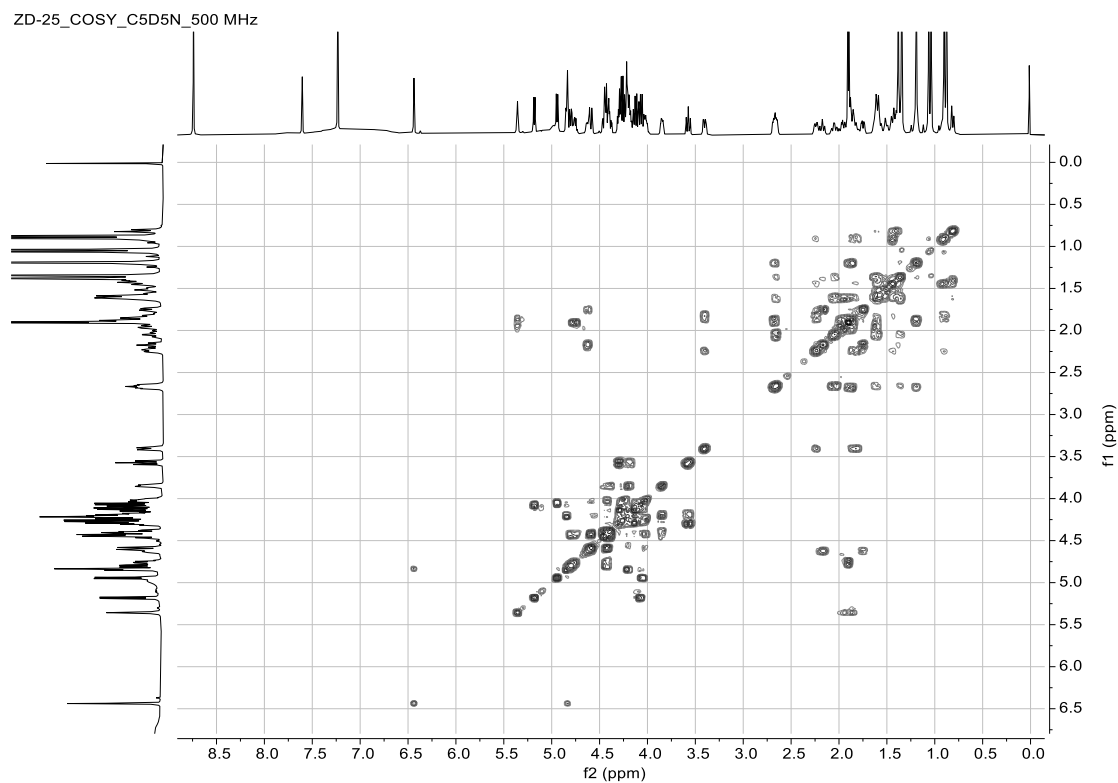


Figure S4: ^1H - ^1H COSY spectrum of zordiphyllaside I

ZD-25_HSQC_C5D5N

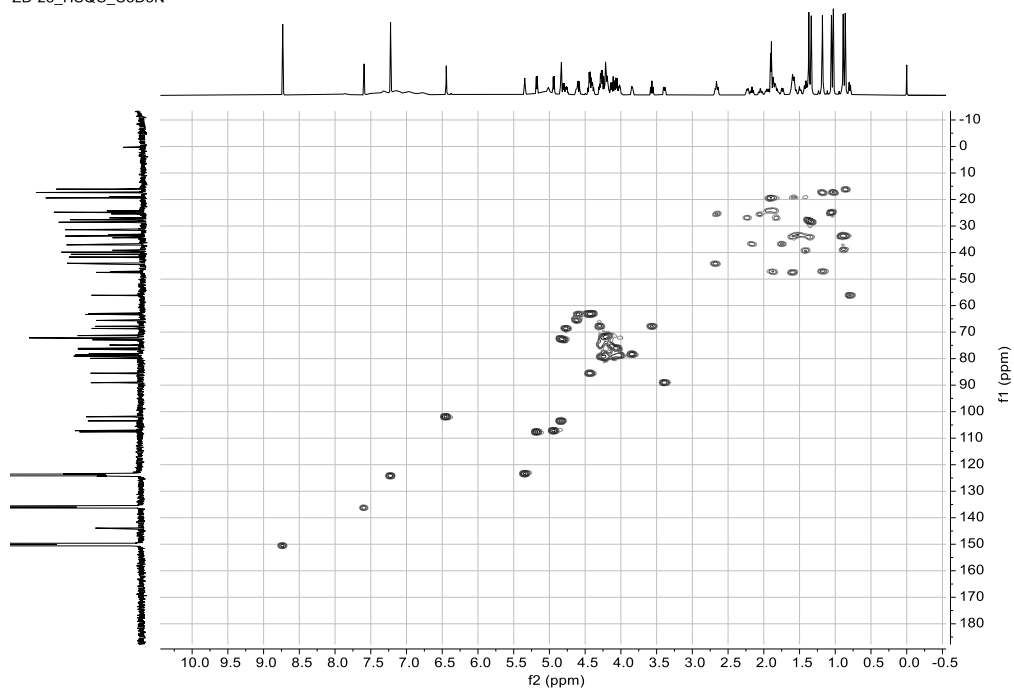


Figure S5: HSQC spectrum of zordiphyllaside I

ZD-25_HMBC_C5D5N

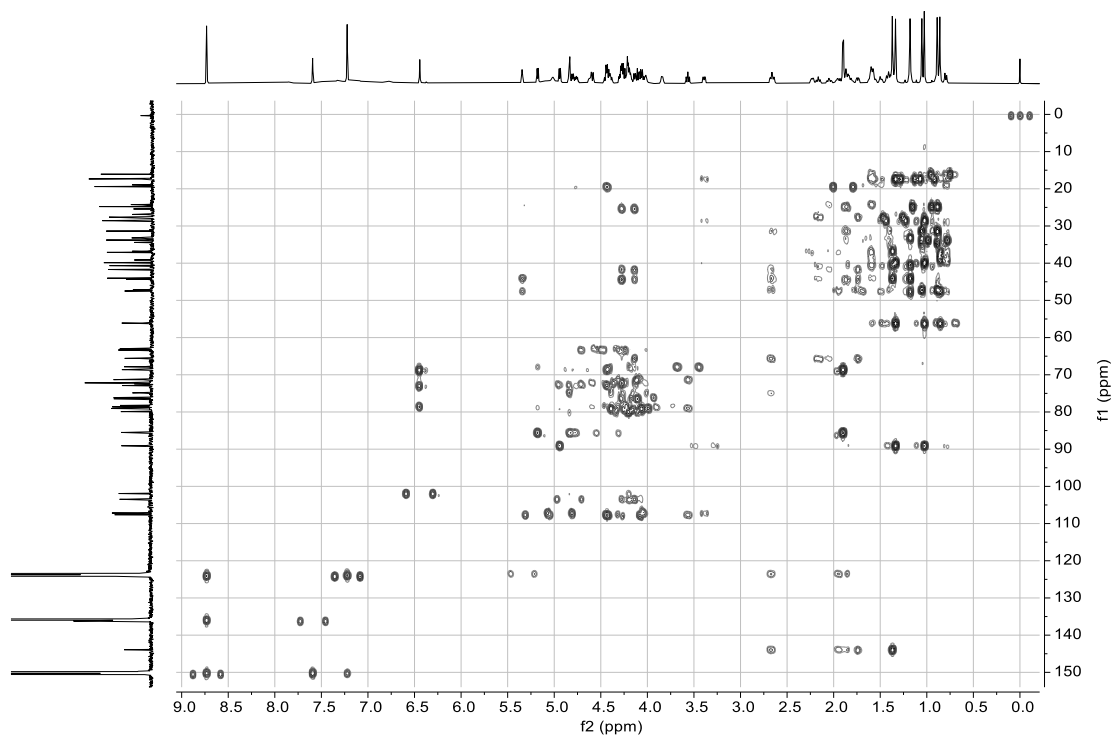


Figure S6: HMBC spectrum of zordiphyllaside I

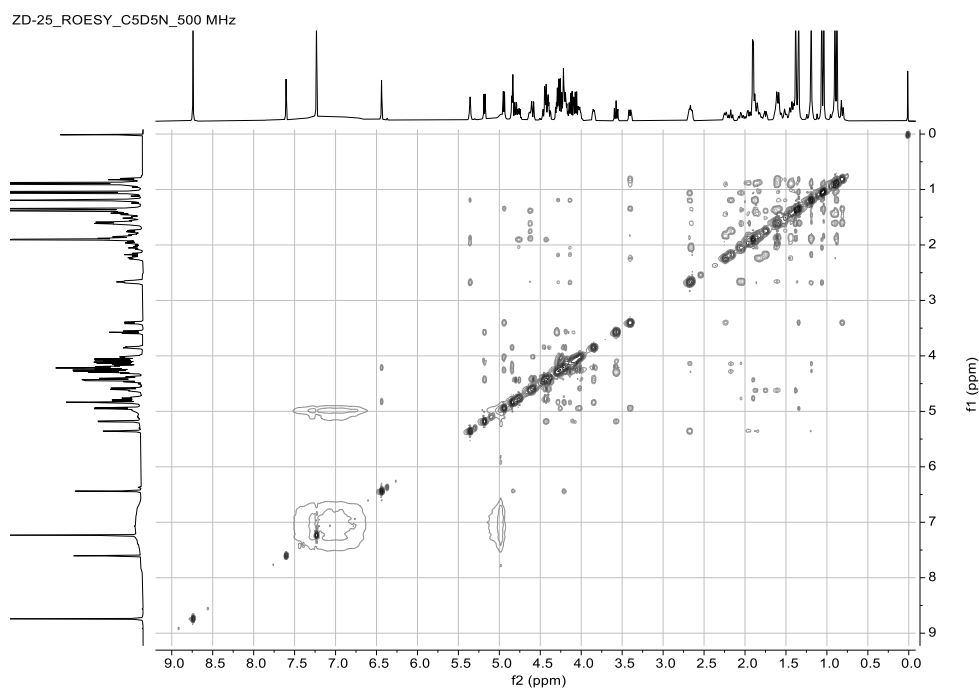


Figure S7: ROESY spectrum of zordiphyllloside I

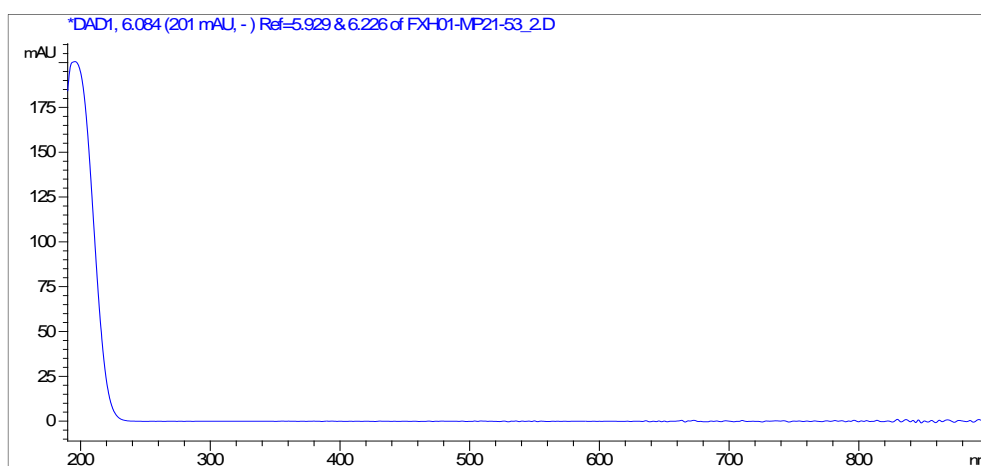


Figure S8: UV spectrum of zordiphyllloside I

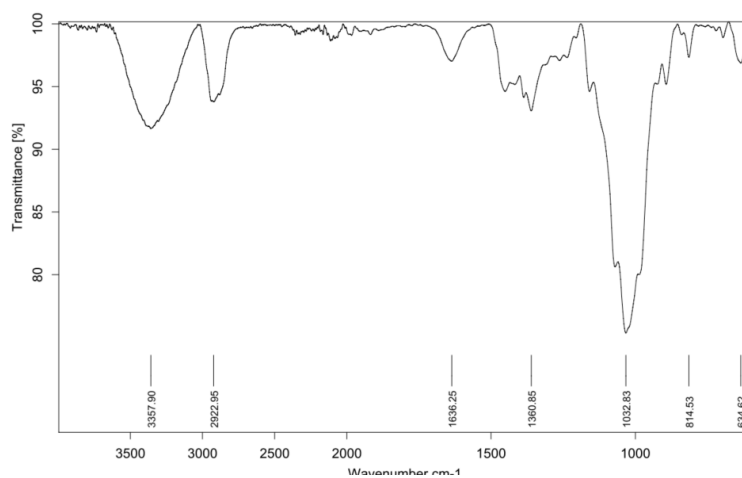


Figure S9: IR spectrum of zordiphyllloside I

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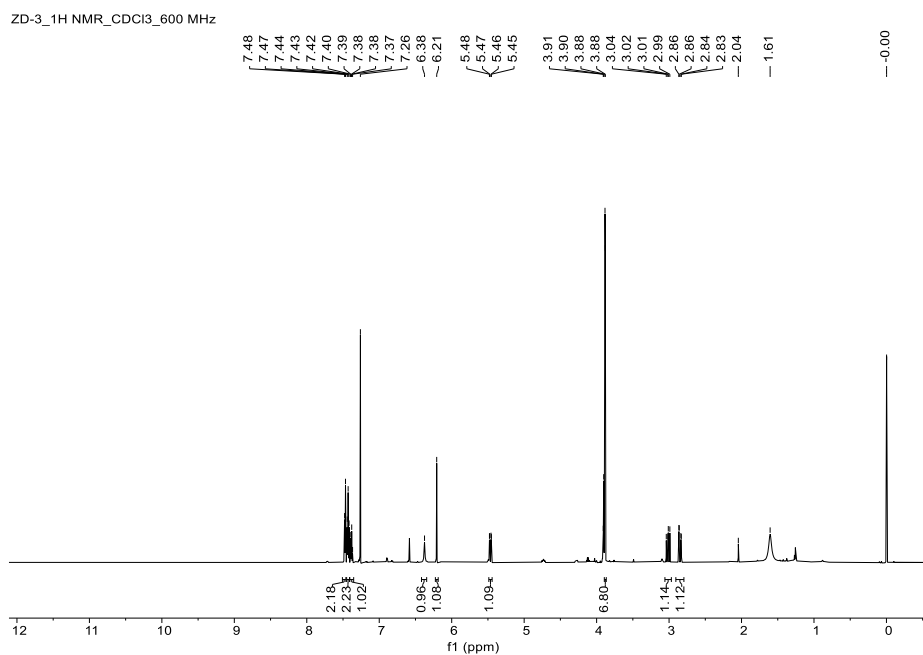


Figure S10: ^1H -NMR spectrum of compound **2**

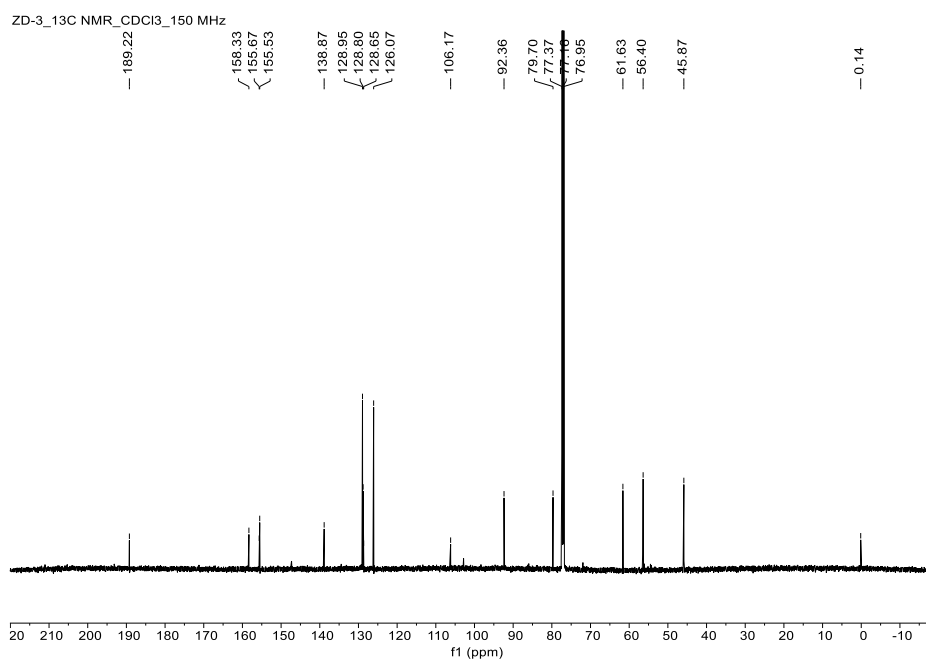


Figure S11: ^{13}C -NMR spectrum of compound **2**

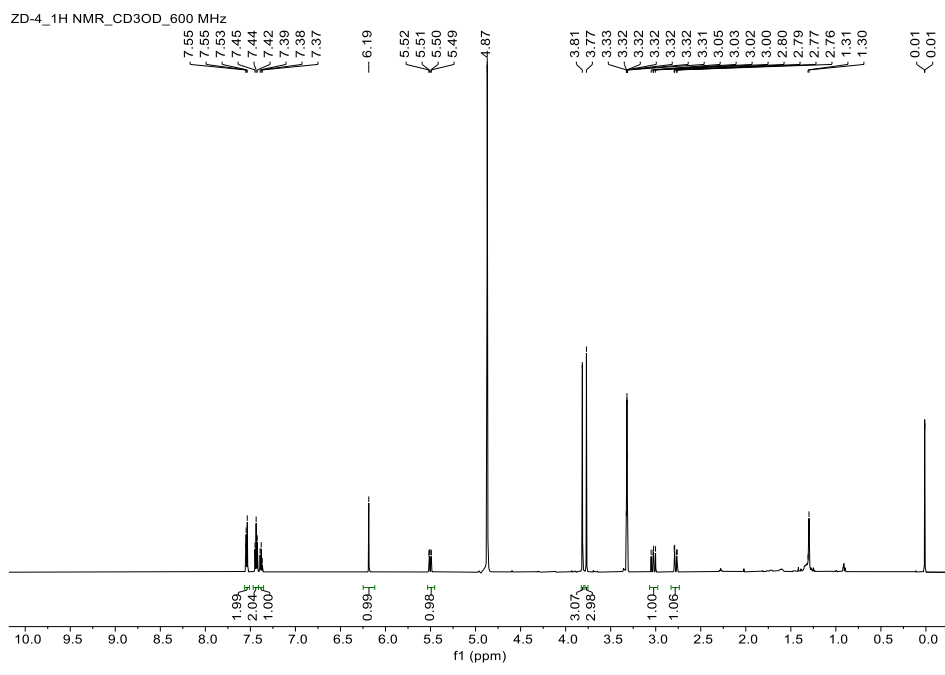


Figure S12: ¹H-NMR spectrum of compound **3**

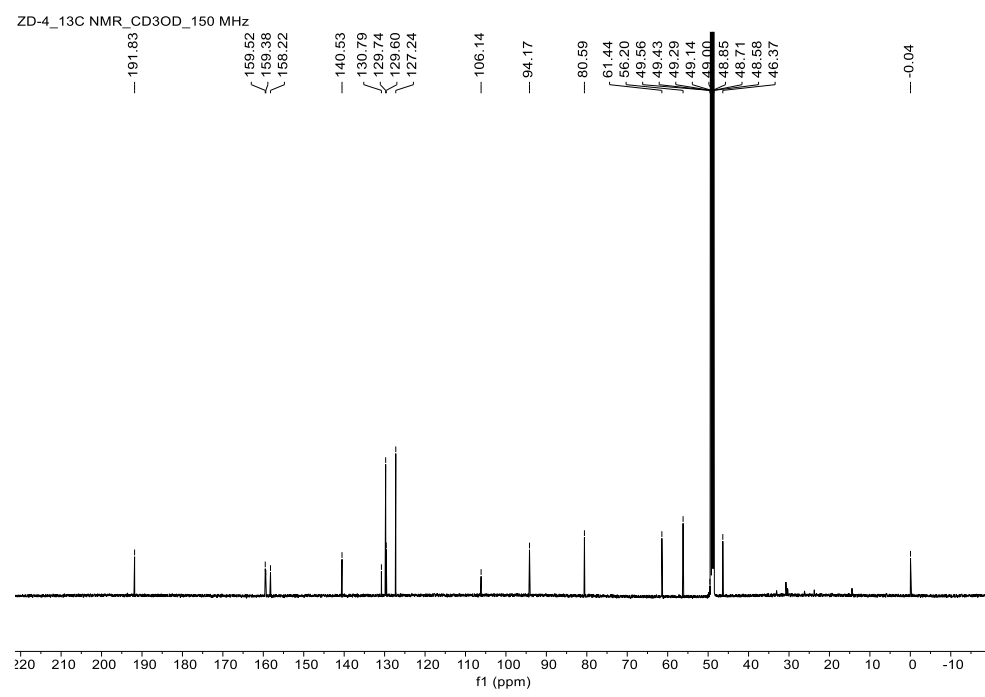


Figure S13: ¹³C-NMR spectrum of compound **3**

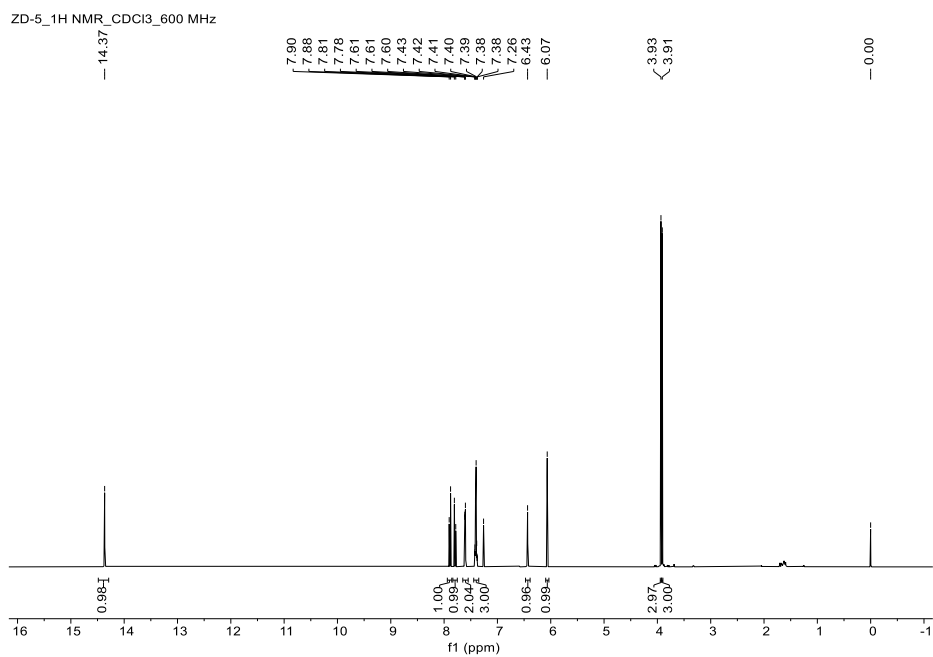


Figure S14: ^1H -NMR spectrum of compound **4**

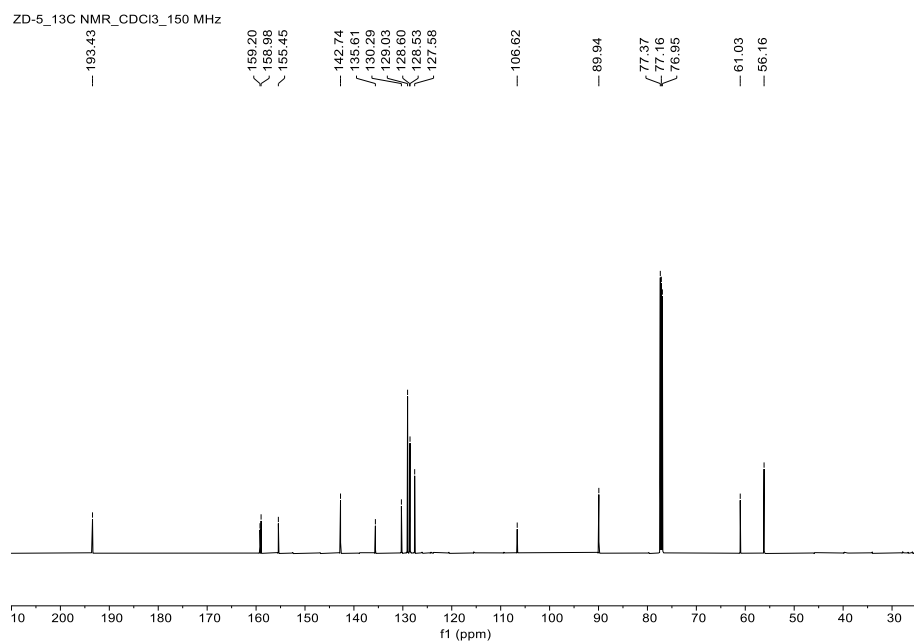


Figure S15: ^{13}C -NMR spectrum of compound **4**

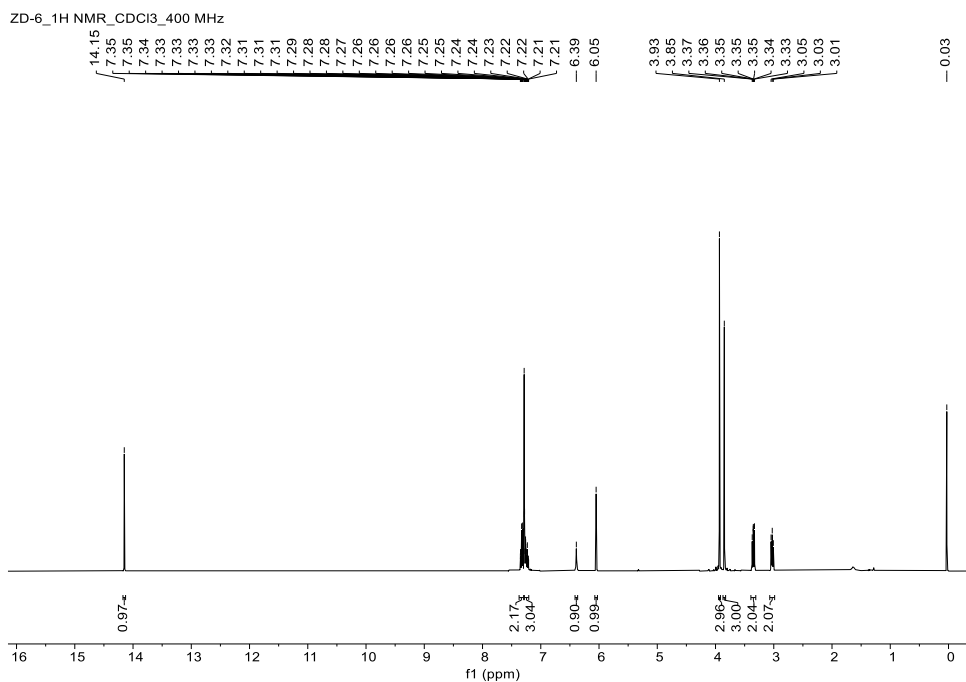


Figure S16: ^1H -NMR spectrum of compound **5**

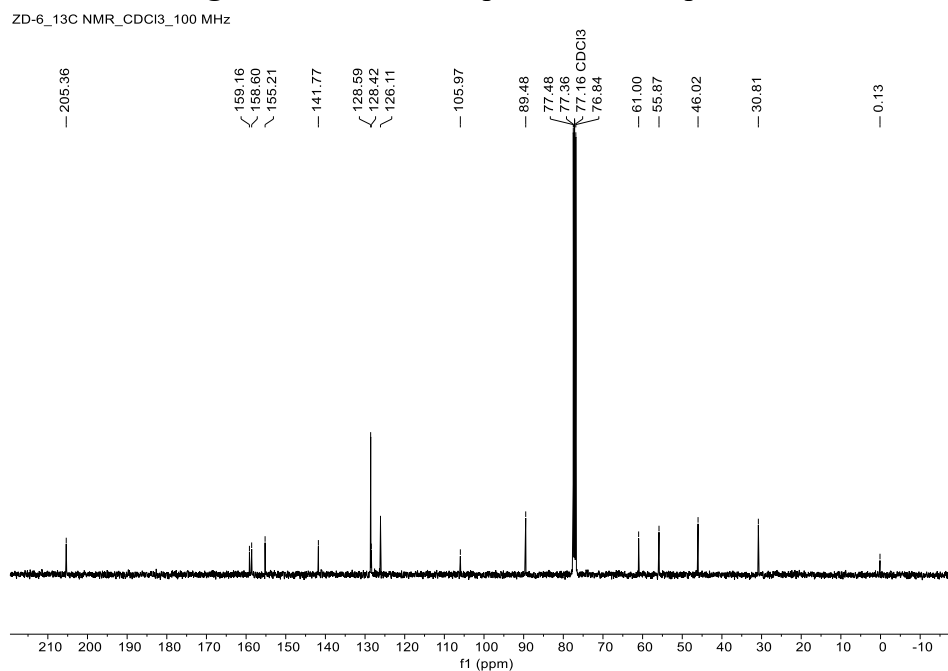


Figure S17: ^{13}C -NMR spectrum of compound **5**

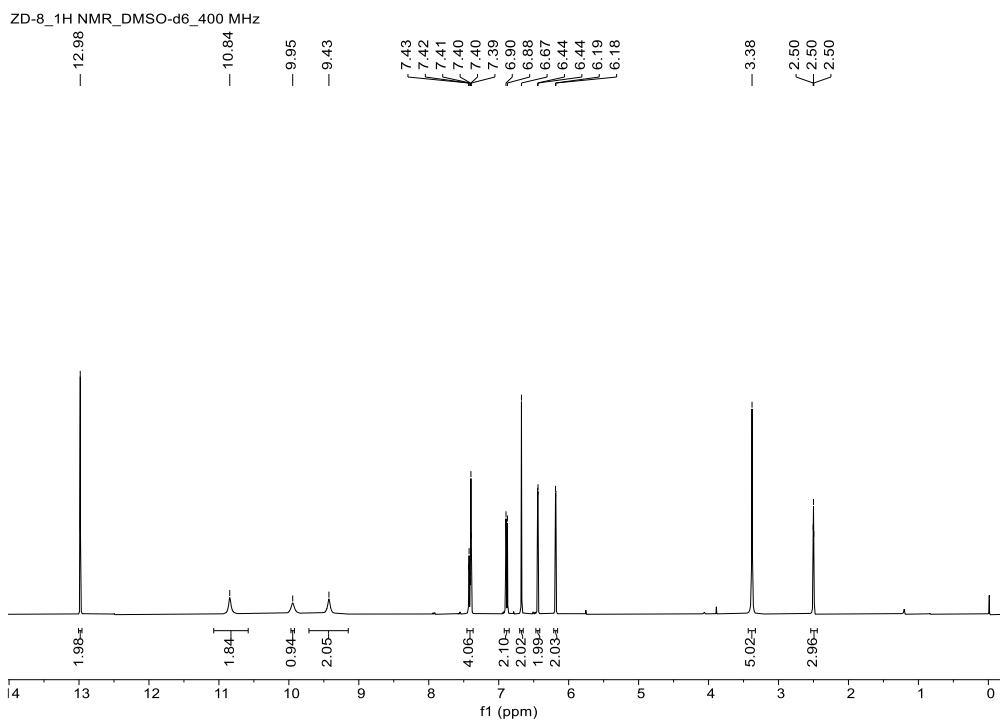


Figure S18: ^1H -NMR spectrum of compound **6**

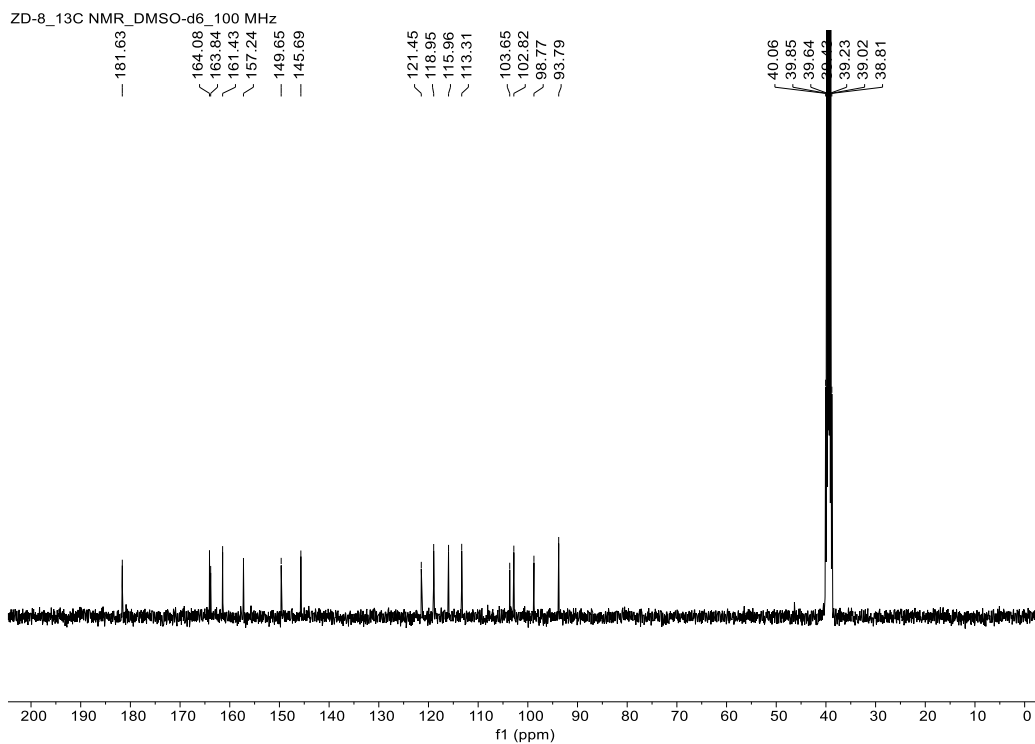


Figure S19: ^{13}C -NMR spectrum of compound **6**

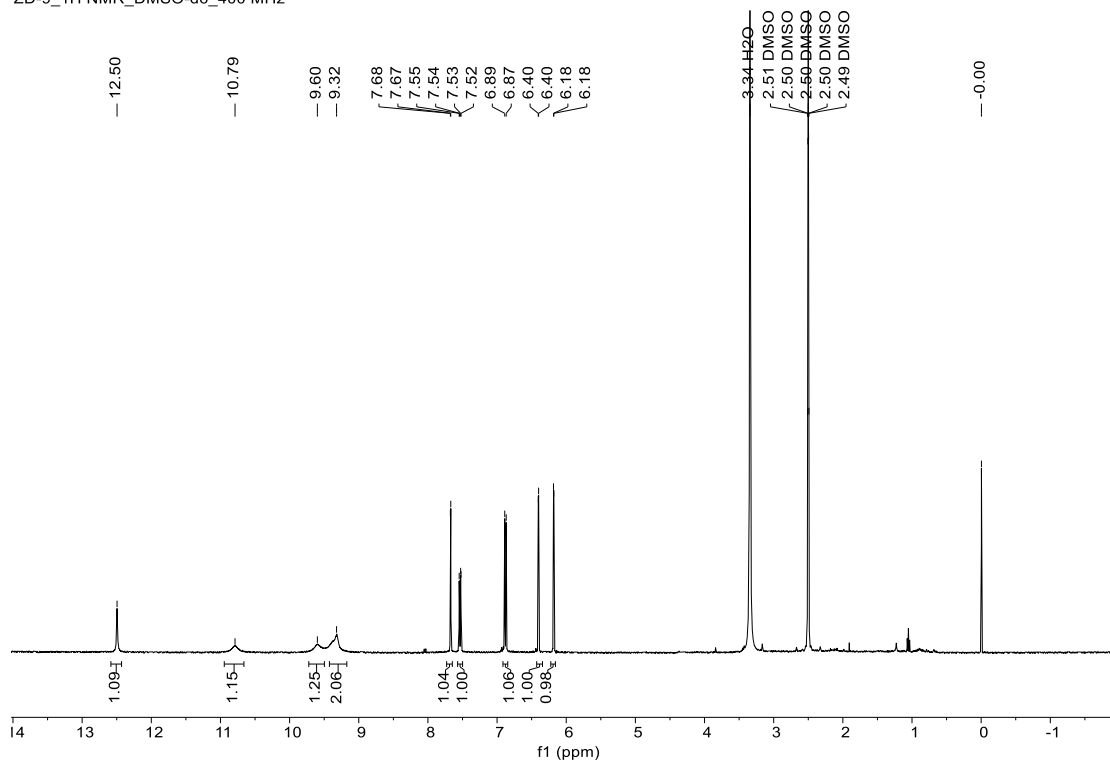


Figure S20: ¹H-NMR spectrum of compound 7

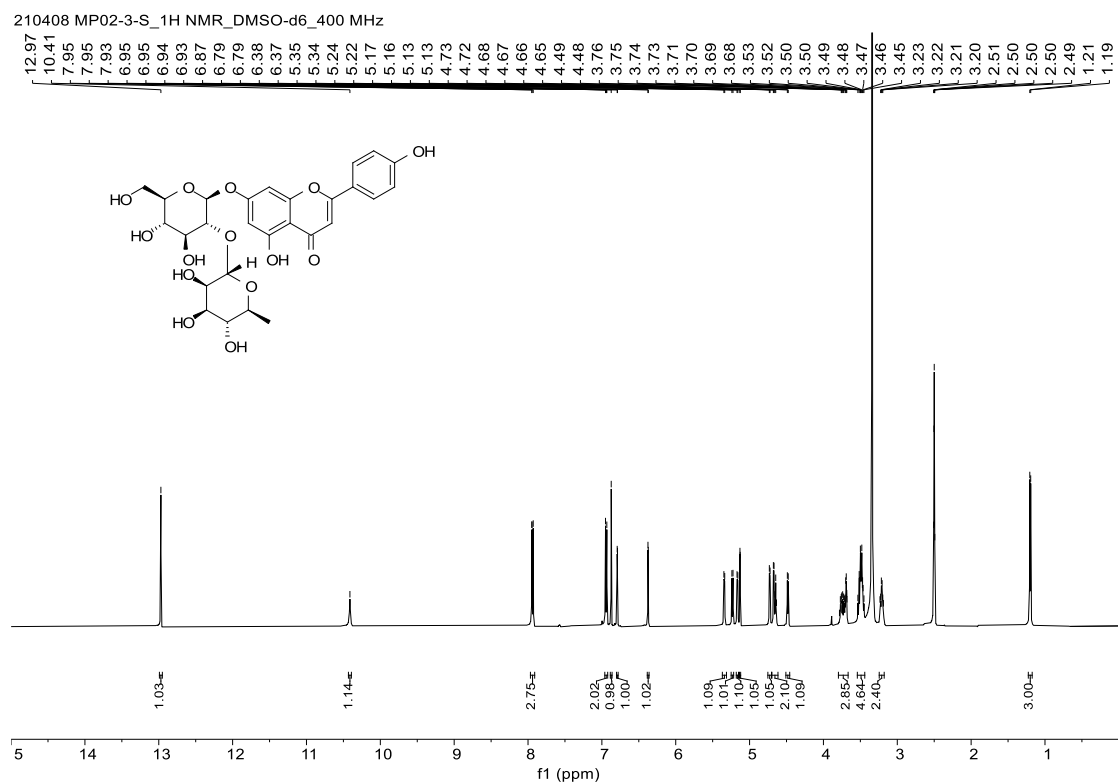


Figure S21: $^1\text{H-NMR}$ spectrum of compound **8**

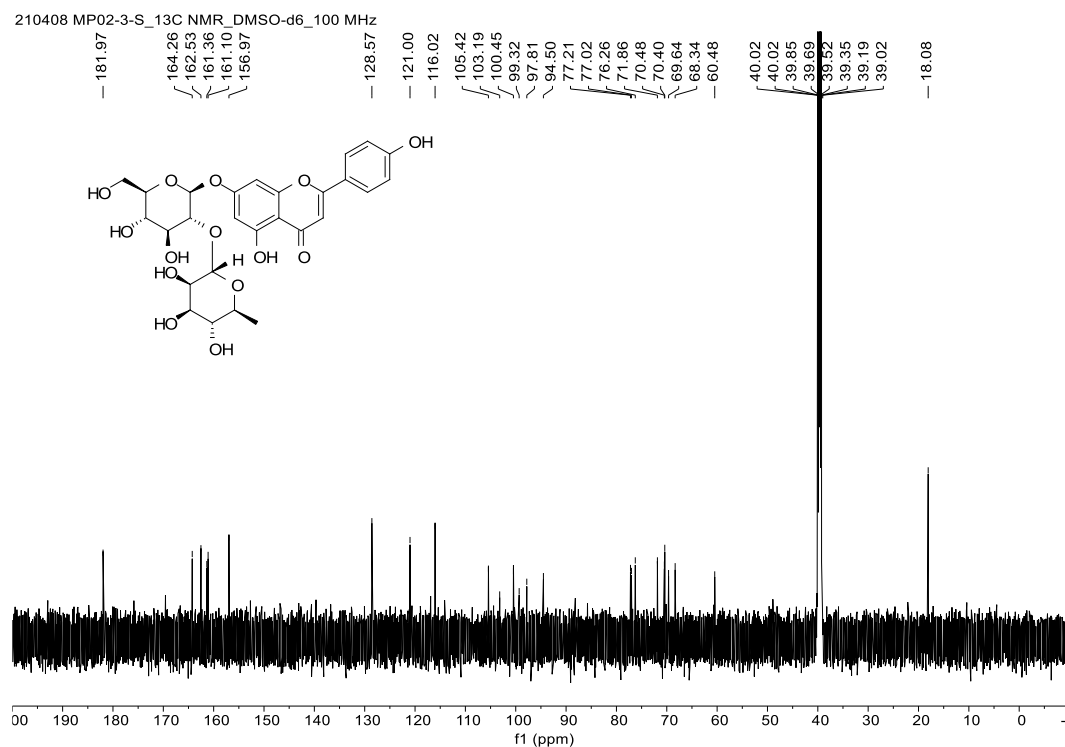


Figure S22: $^{13}\text{C-NMR}$ spectrum of compound **8**

210416 MP10-S_1H NMR_DMSO-d6_500 MHz

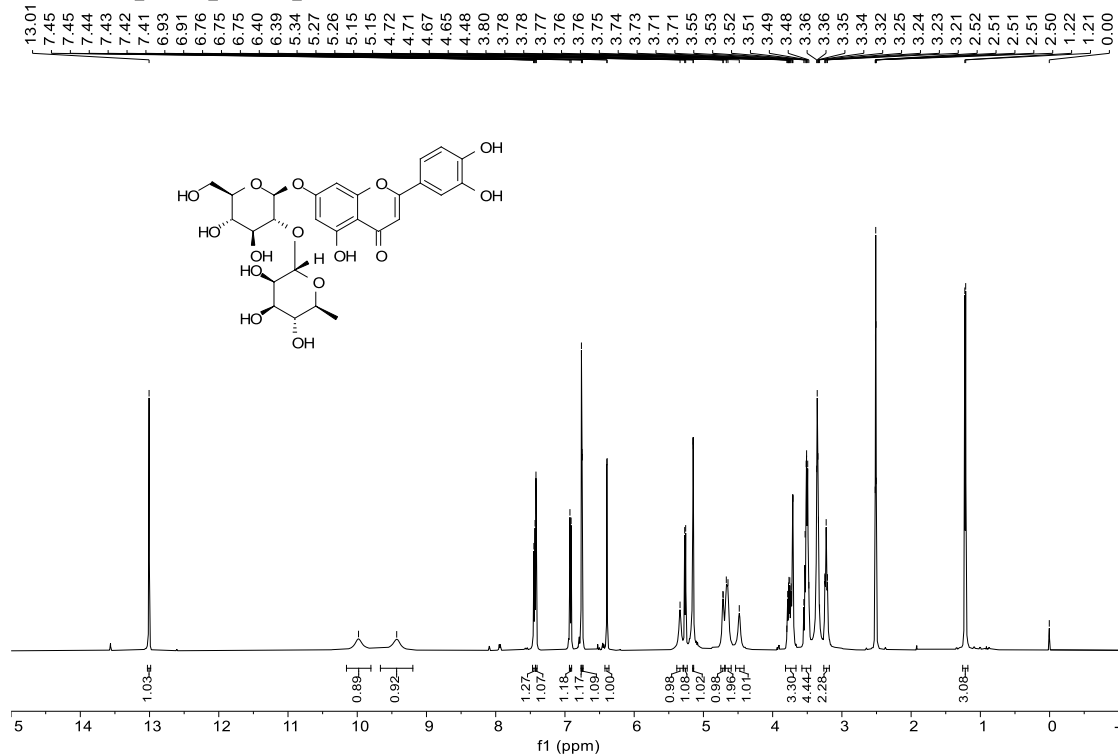
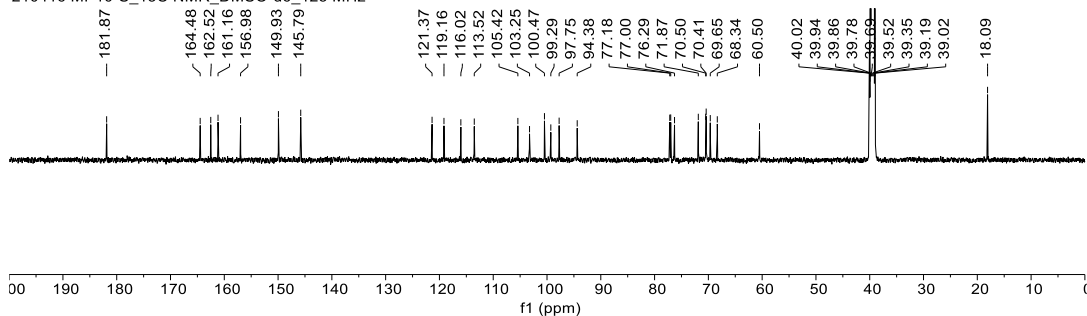


Figure S23: ¹H-NMR spectrum of compound 9

210416 MP10-S_13C NMR_DMSO-d6_125 MHz



210416 MP10-S_DEPT-135_DMSO-d6_125 MHz

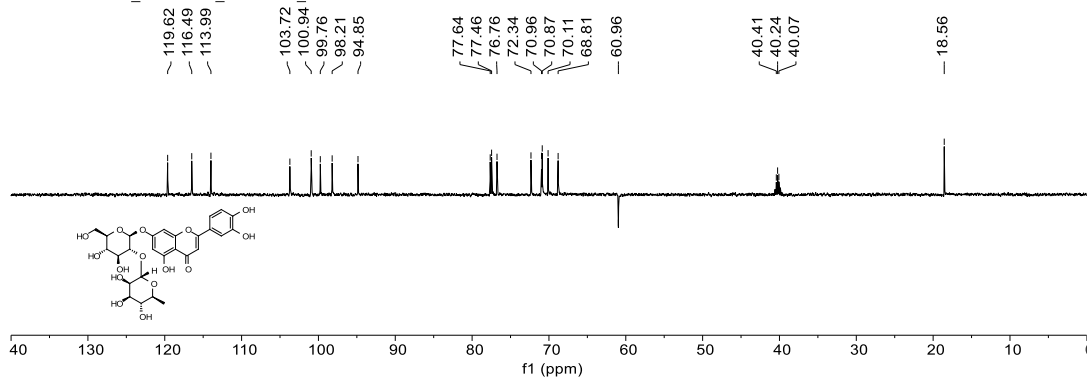


Figure S24: ¹³C-NMR and DEPT135 spectra of compound 9

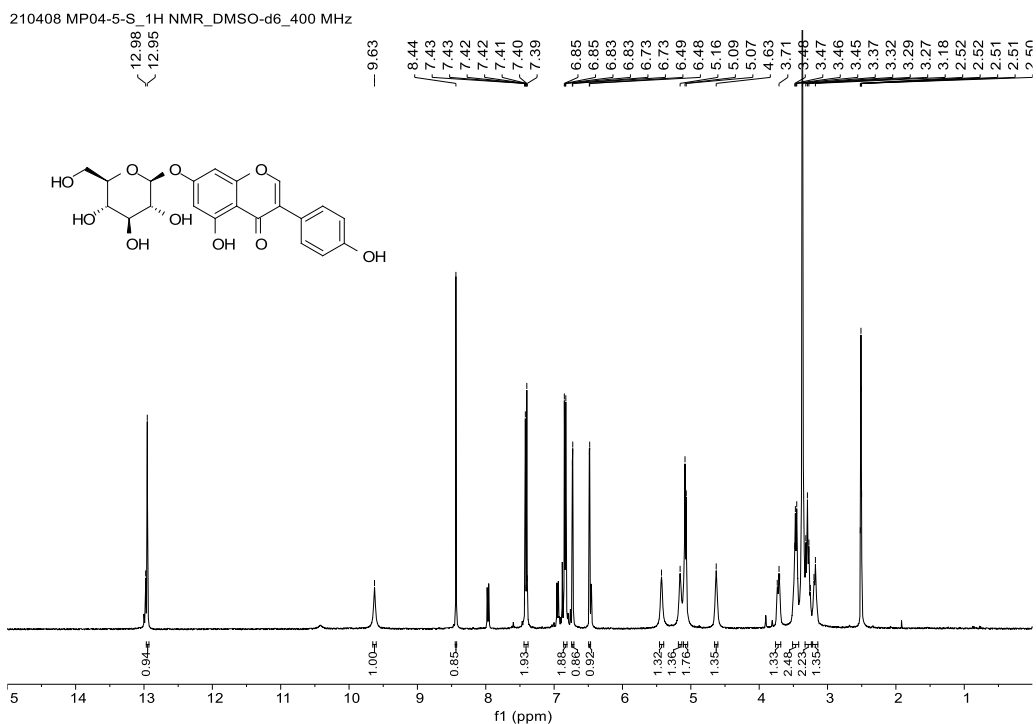


Figure S25: ^1H -NMR spectrum of compound 10

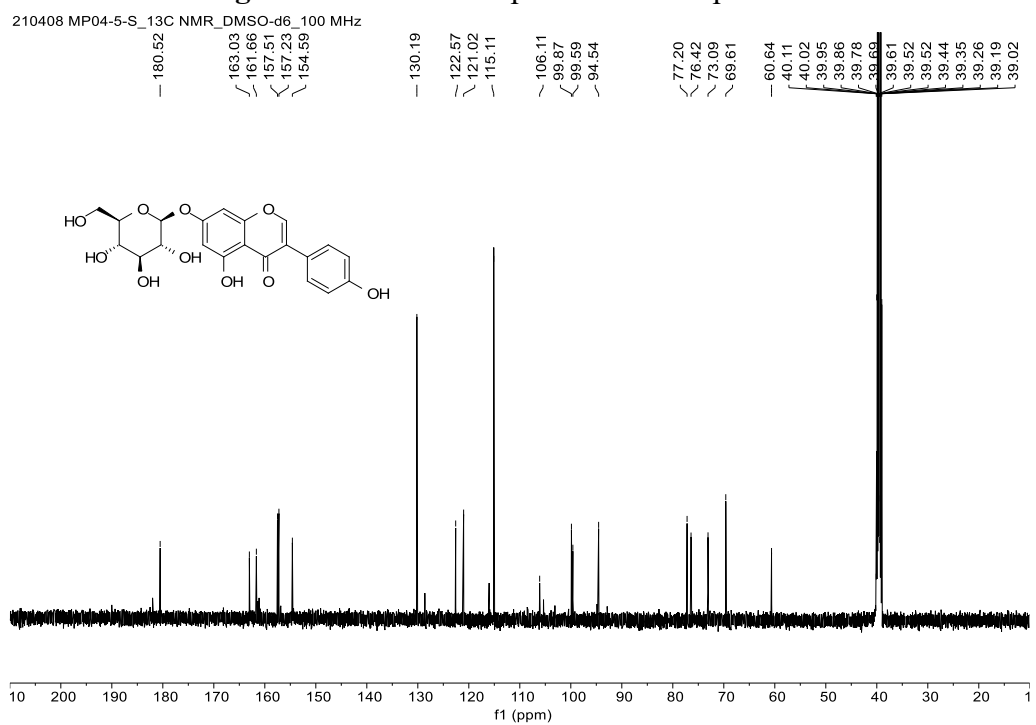


Figure S26: ^{13}C -NMR spectrum of compound 10

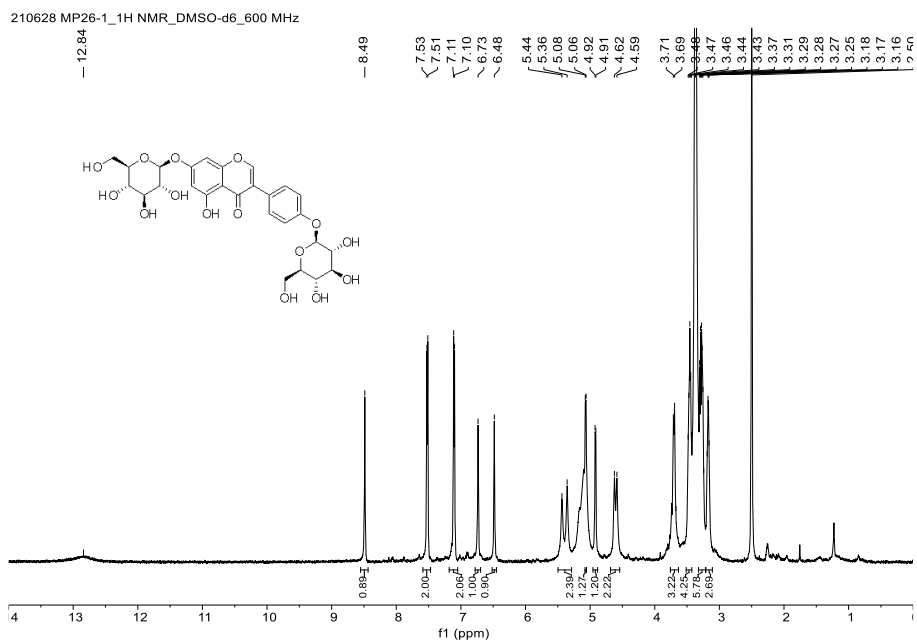


Figure S27: ¹H-NMR spectrum of compound 11

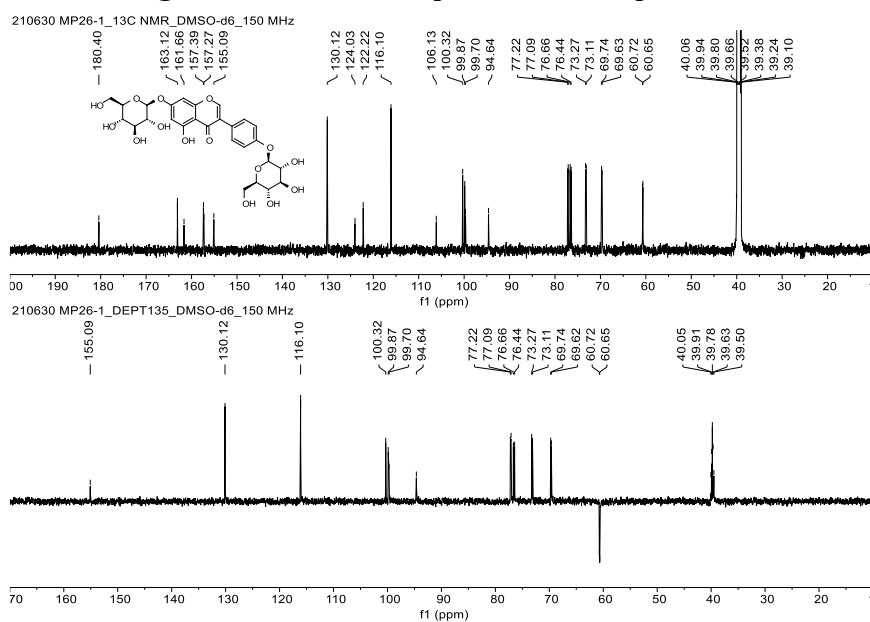


Figure S28: ¹³C-NMR and DEPT135 spectra of compound 11

210413 MP05-2_1H NMR_DMSO-d6_600 MHz

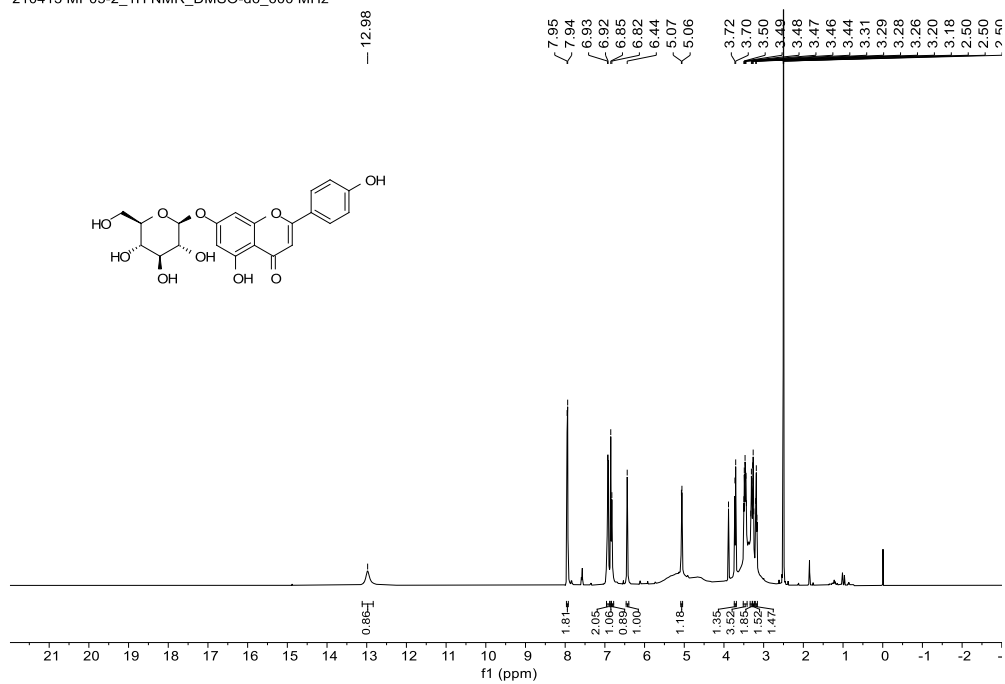
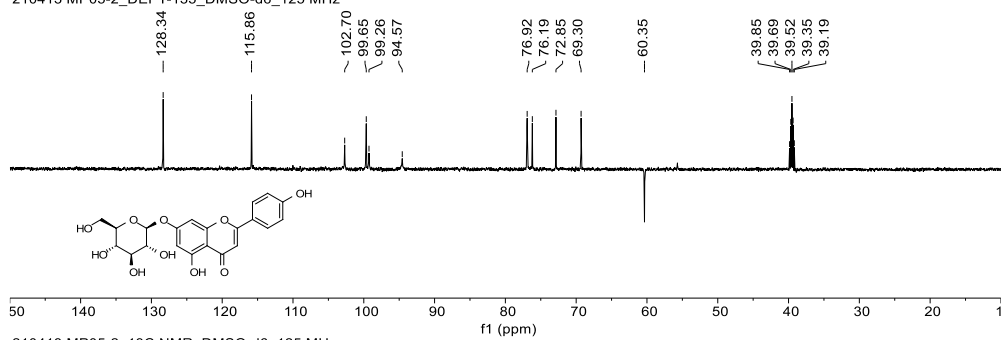


Figure S29: ^1H -NMR spectrum of compound 12

210413 MP05-2_DEPT-135_DMSO-d6_125 MHz



210413 MP05-2_13C NMR_DMSO-d6_125 MHz

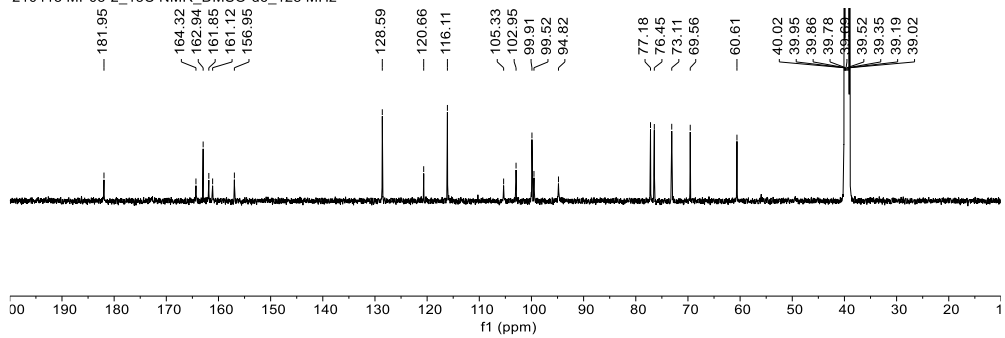


Figure S30: DEPT and ^{13}C -NMR spectra of compound 12

210408 MP04-4-S_1HNMR_DMSO-d6_600 MHz

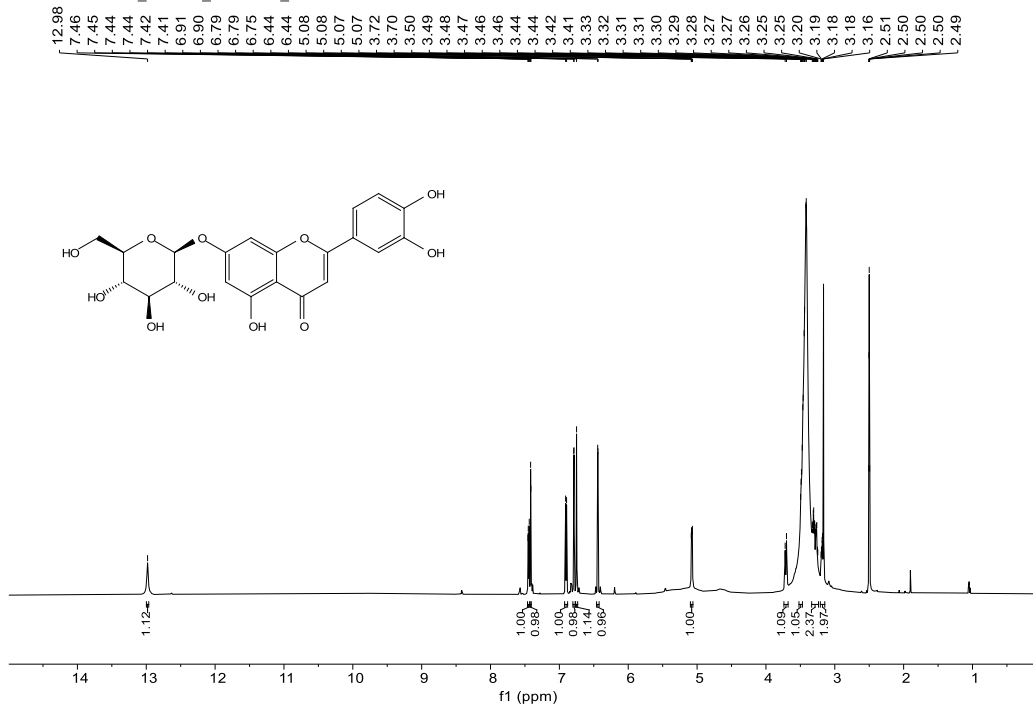
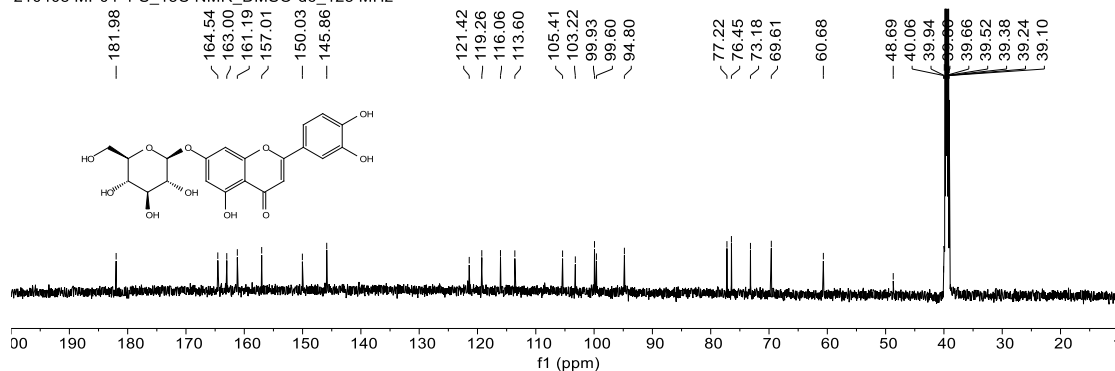


Figure S31: ¹H-NMR spectrum of compound 13

210408 MP04-4-S_13C NMR_DMSO-d6_125 MHz



210408 MP04-4-S_DEPT-135_DMSO-d6_125 MHz

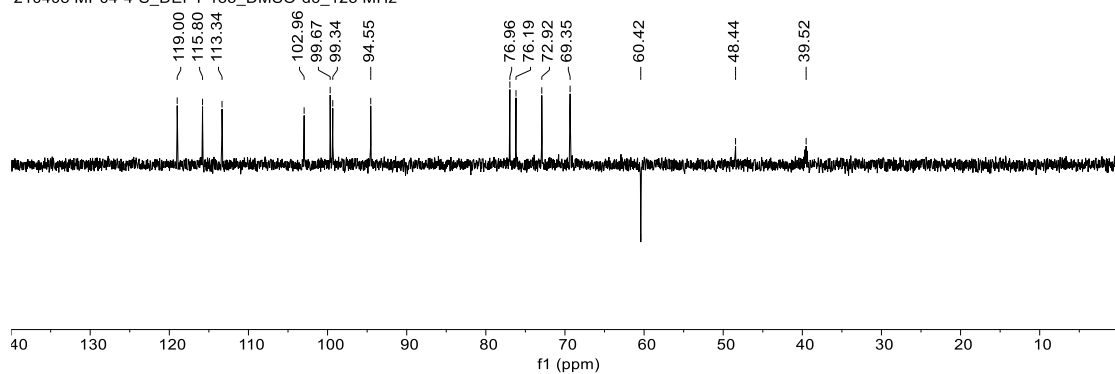


Figure S32: ¹³C-NMR and DEPT135 spectra of compound 13

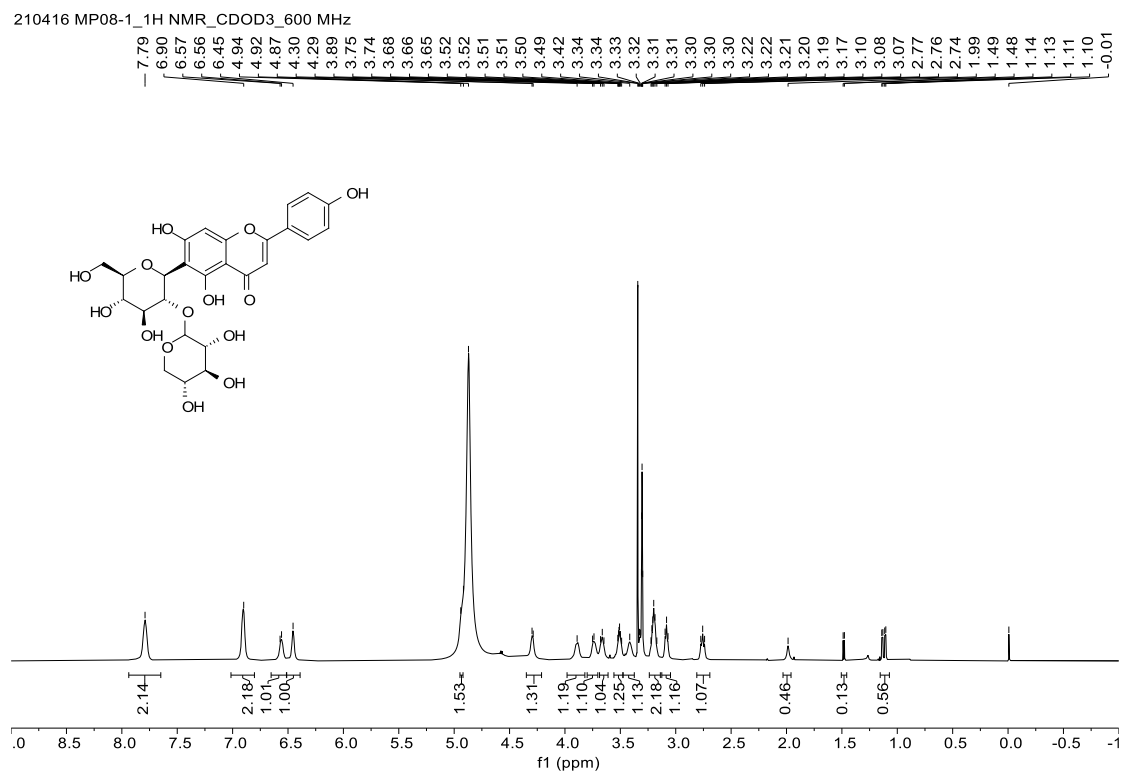


Figure S33: ^1H -NMR spectrum of compound 14

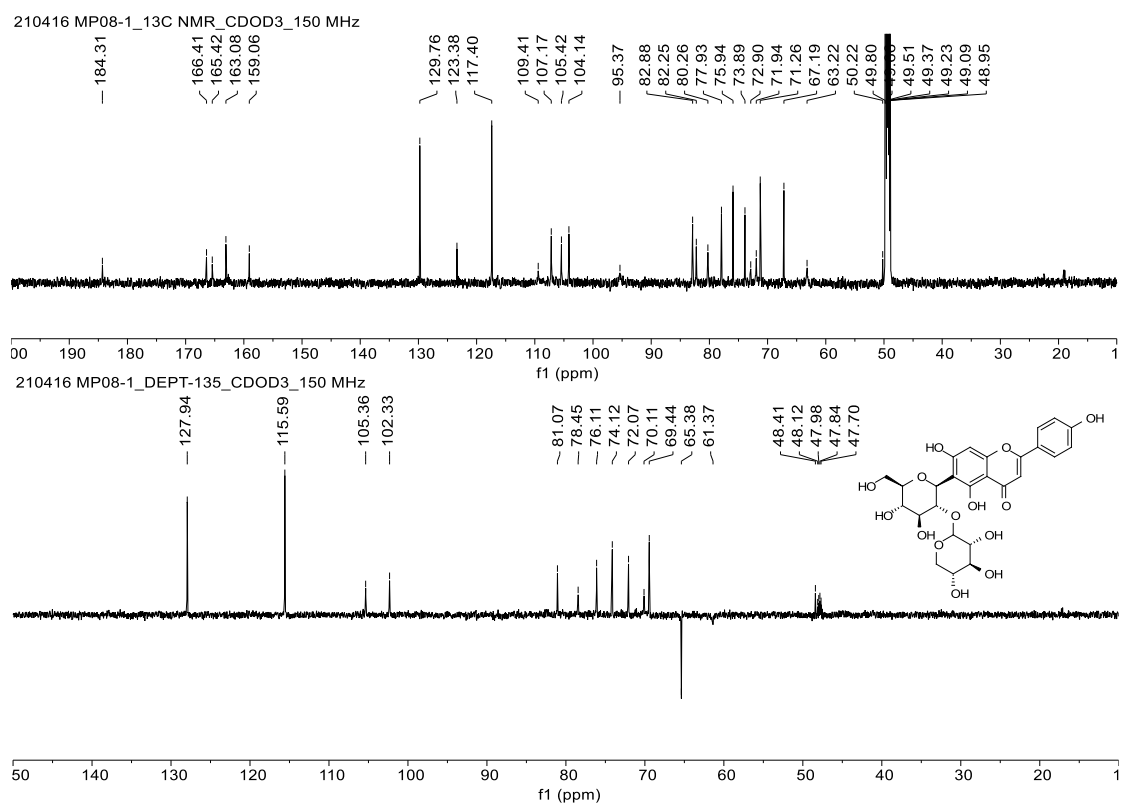


Figure S34: ^{13}C -NMR and DEPT135 spectra of compound 14

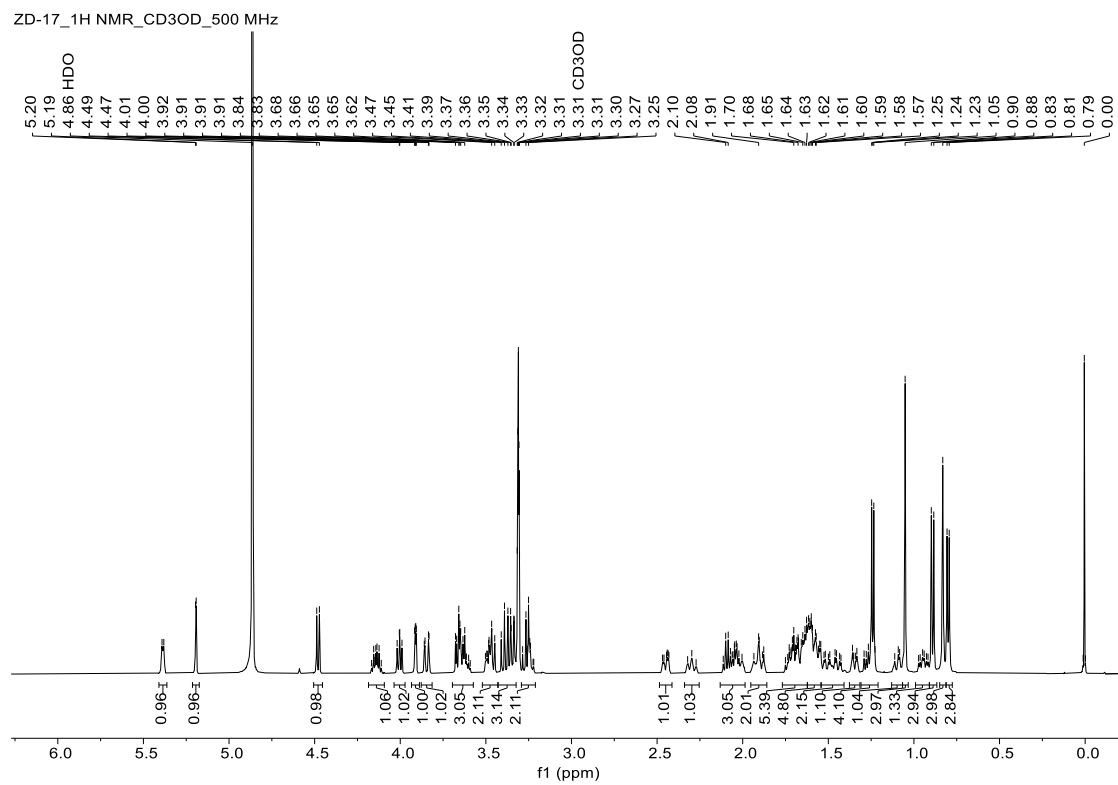


Figure S35: ^1H -NMR spectrum of compound **15**

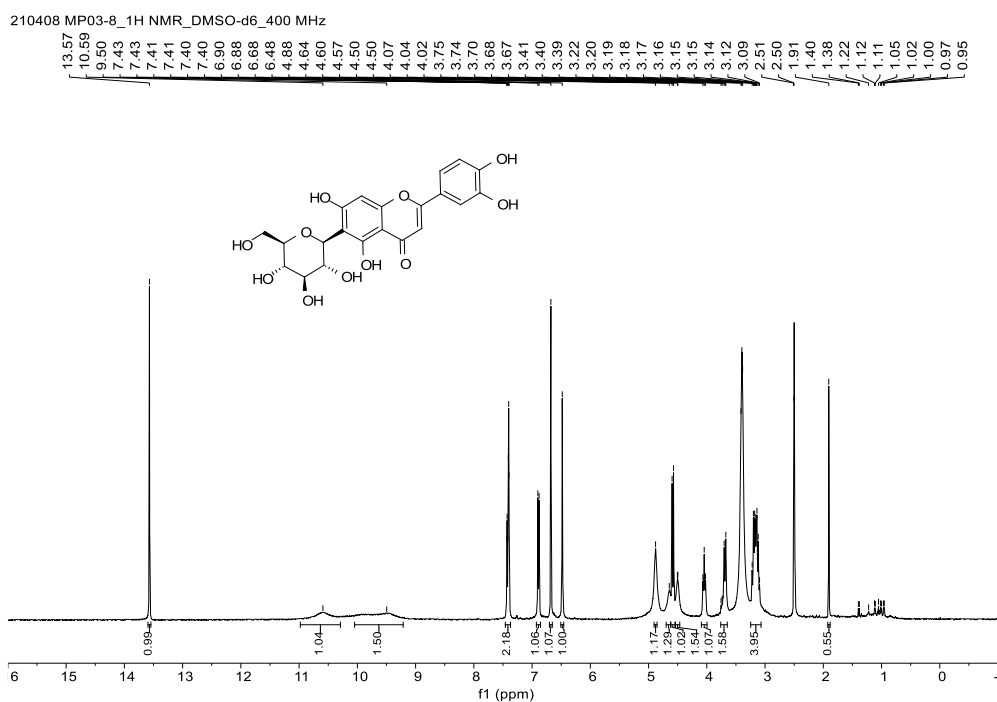


Figure S36: $^1\text{H-NMR}$ spectrum of compound 16

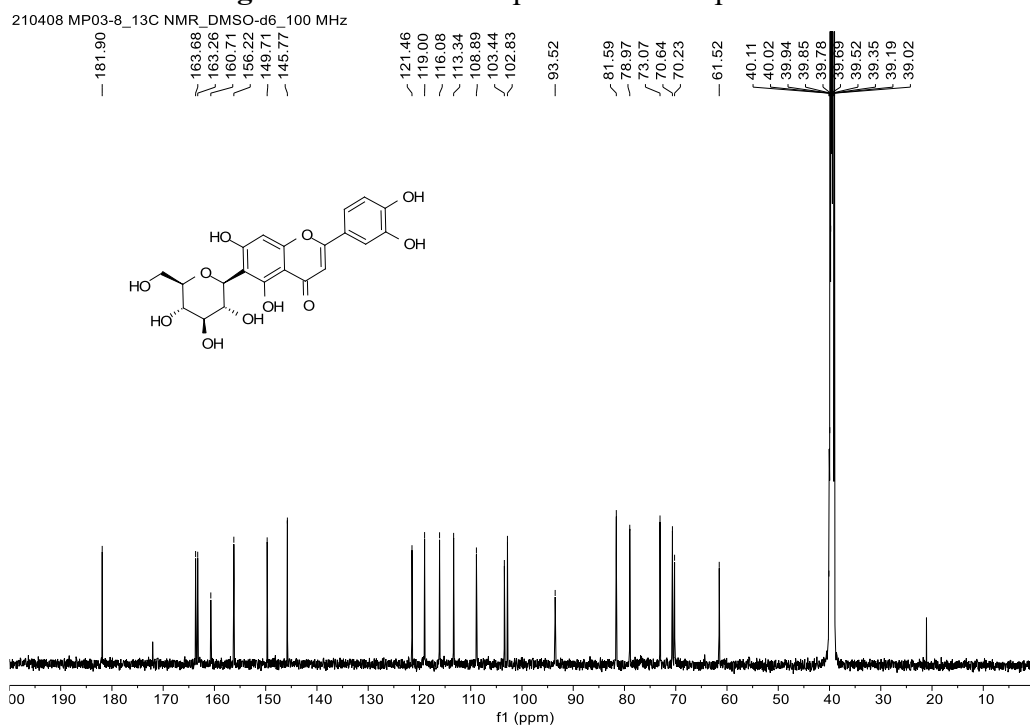


Figure S37: $^{13}\text{C-NMR}$ spectrum of compound 16

ZD-1_1H NMR_CDCl3_600 MHz

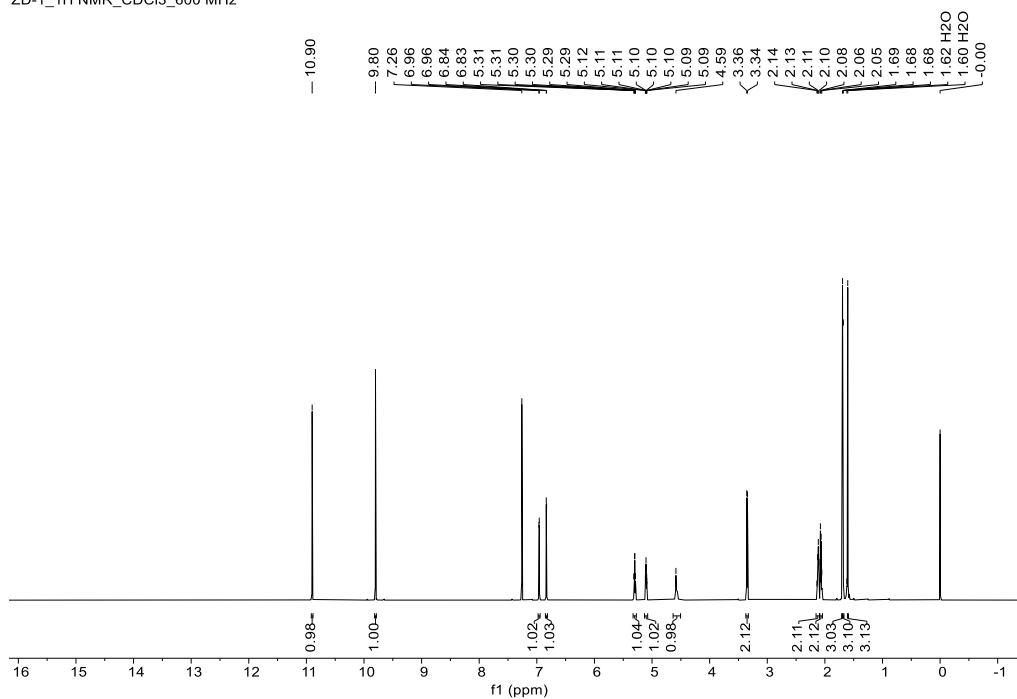
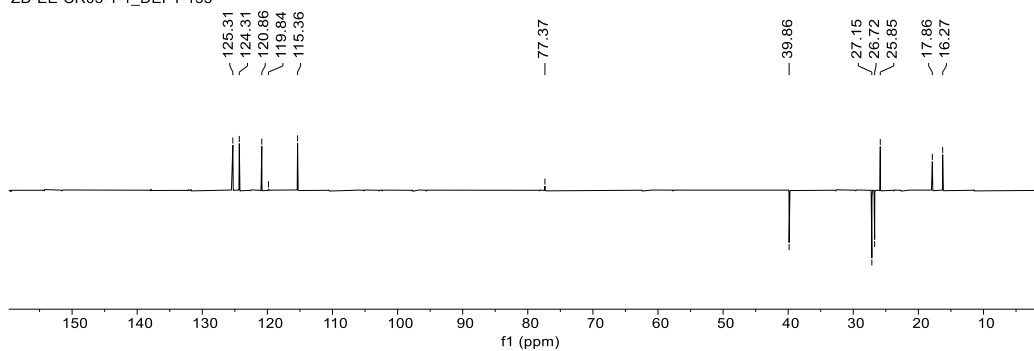


Figure S38: ¹H-NMR spectrum of compound 17

ZD-EE-CR03-1-1_DEPT-135



ZD-1_13C NMR_CDCl3_150 MHz

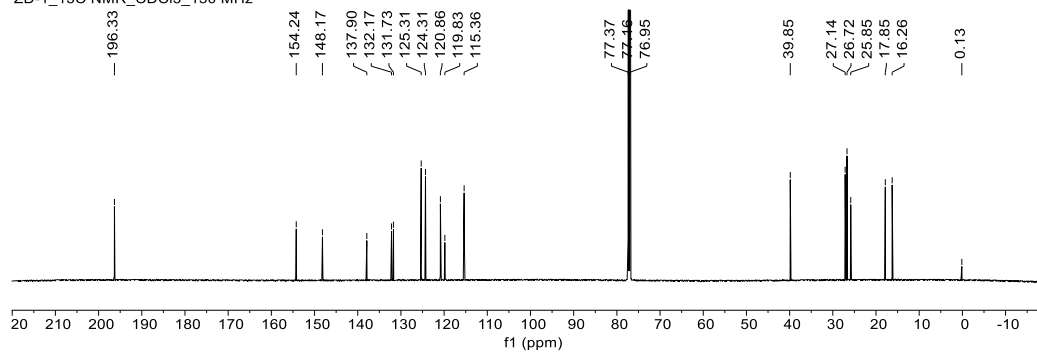


Figure S39: DEPT and ¹³C-NMR spectra of compound 17

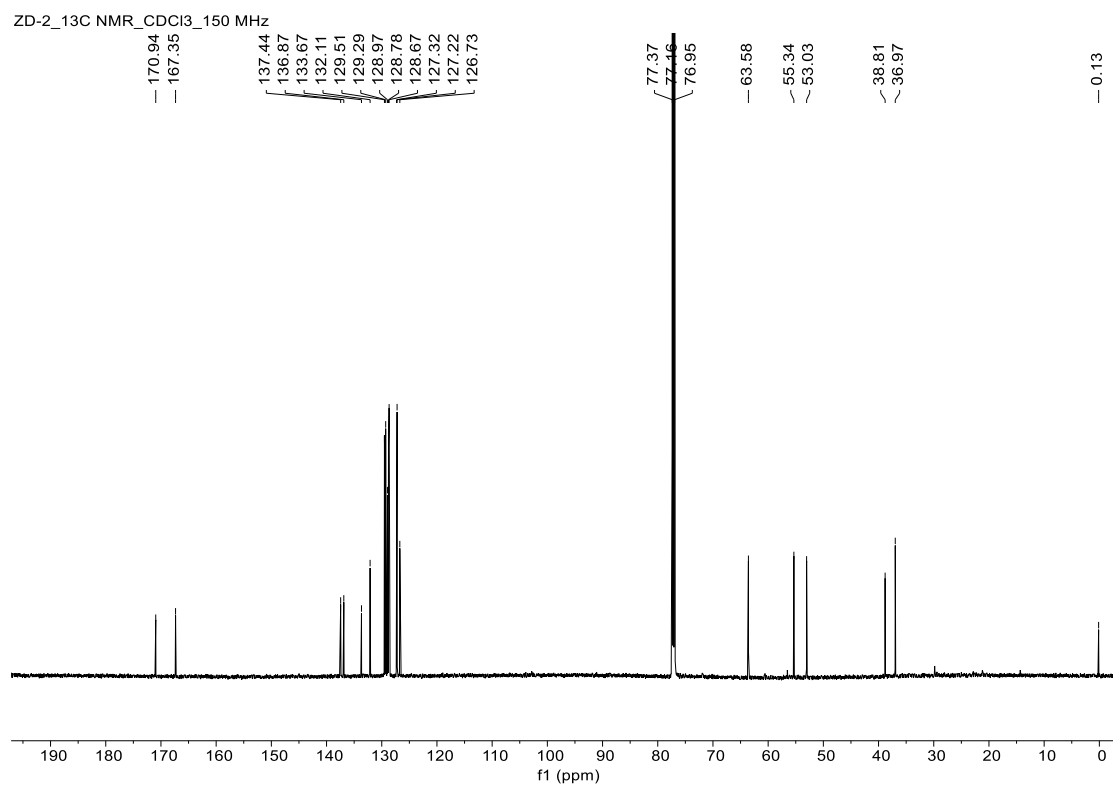


Figure S40: ^{13}C -NMR spectrum of compound **18**

ZD-10_1H NMR_DMSO-d6_500 MHz

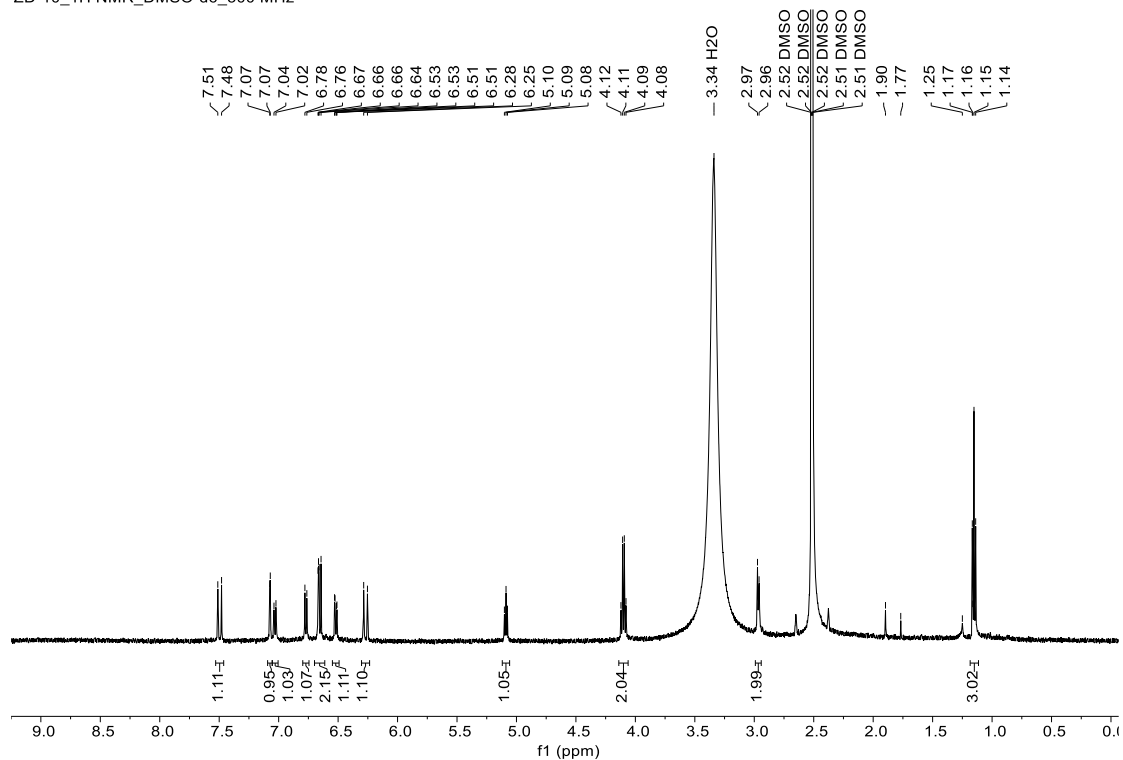


Figure S41: ^1H NMR spectrum of compound **19**

ZD-10_13C NMR_CDCl3_125 MHz

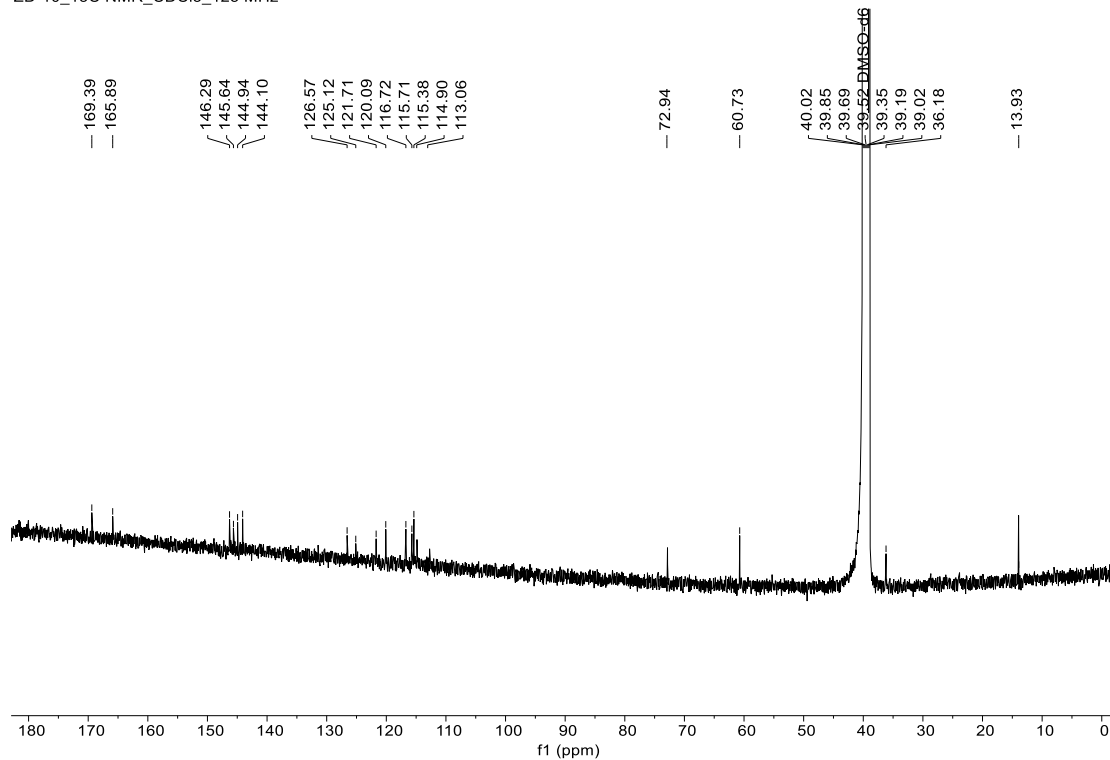


Figure S42: ^{13}C -NMR spectrum of compound **19**

ZD-11_1H NMR_DMSO-d6_500 MHz

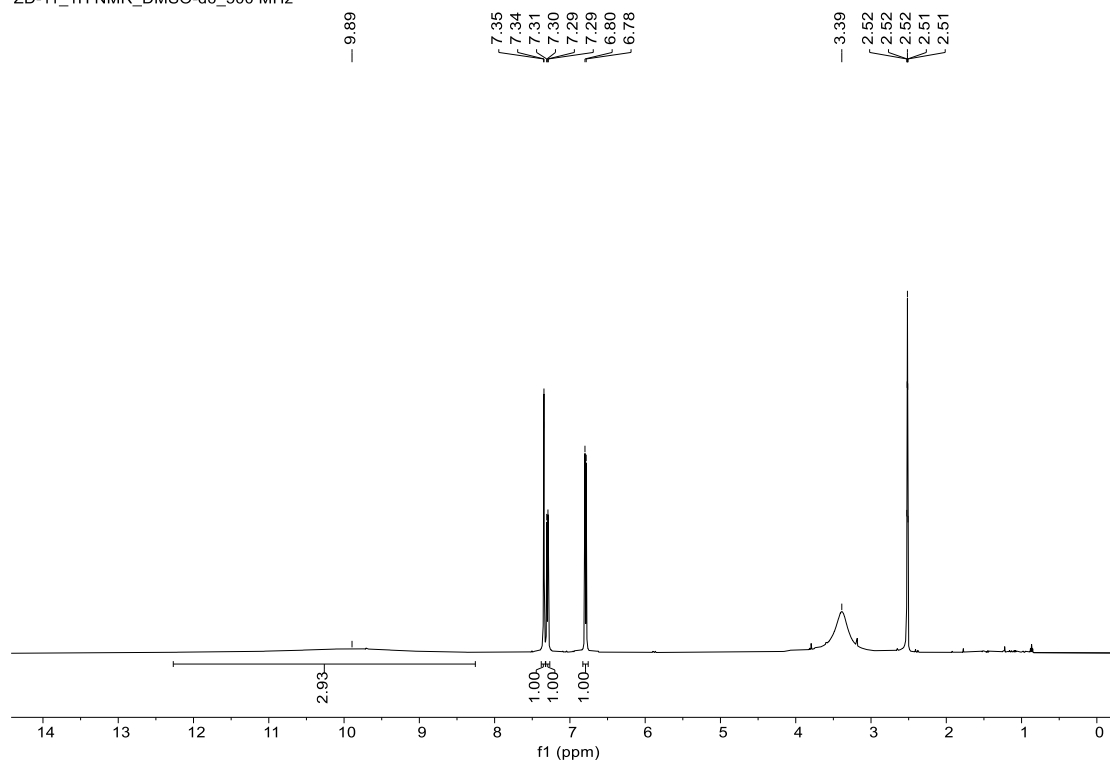


Figure S43: ^1H NMR spectrum of compound **20**

ZD-11_13C NMR_DMSO-d6_125 MHz

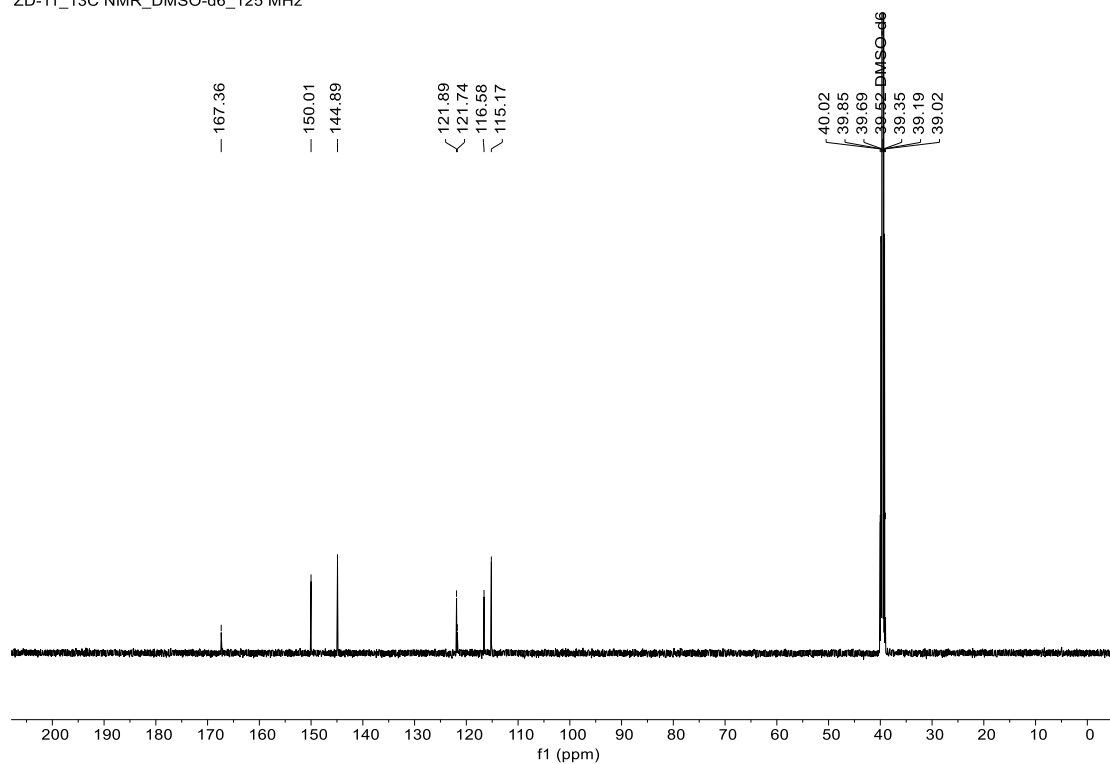


Figure S44: ^{13}C -NMR spectrum of compound **20**

ZD-7_1H NMR_DMSO-d6_500 MHz

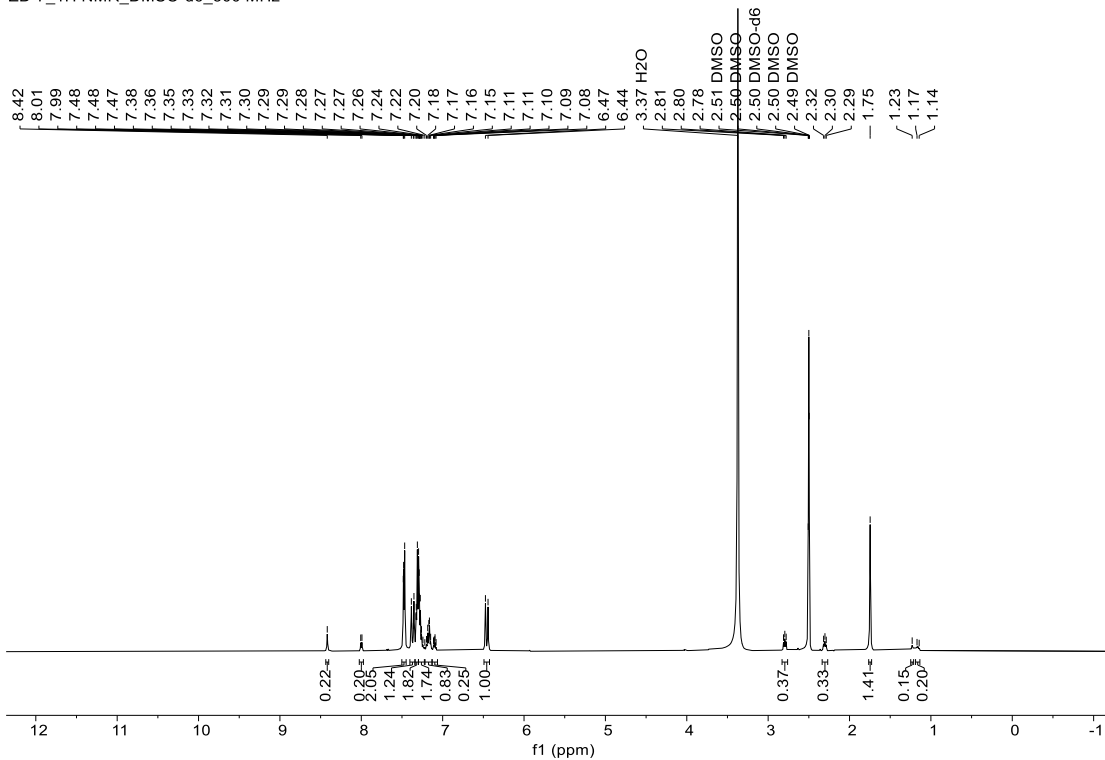


Figure S45: ¹H-NMR spectrum of compound 21

ZD-7_13C NMR_DMSO-d6_125 MHz

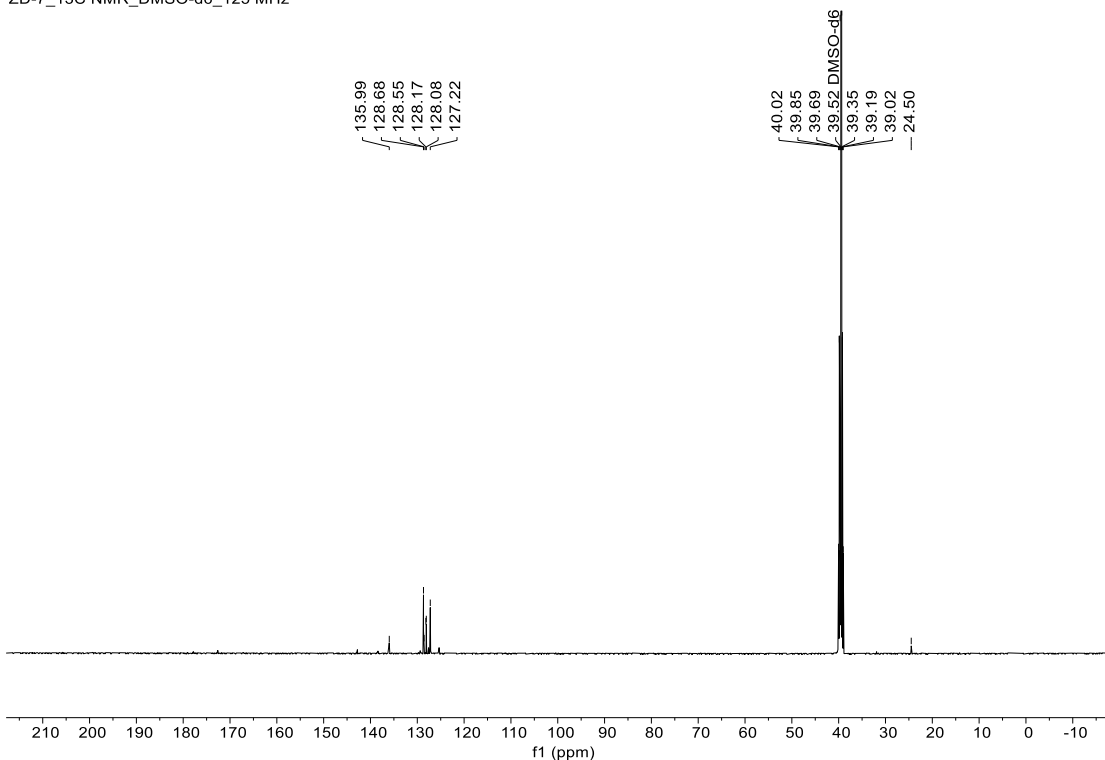


Figure S46: ¹³C-NMR spectrum of compound 21

ZD-12_1H NMR_DMSO-d6_500 MHz

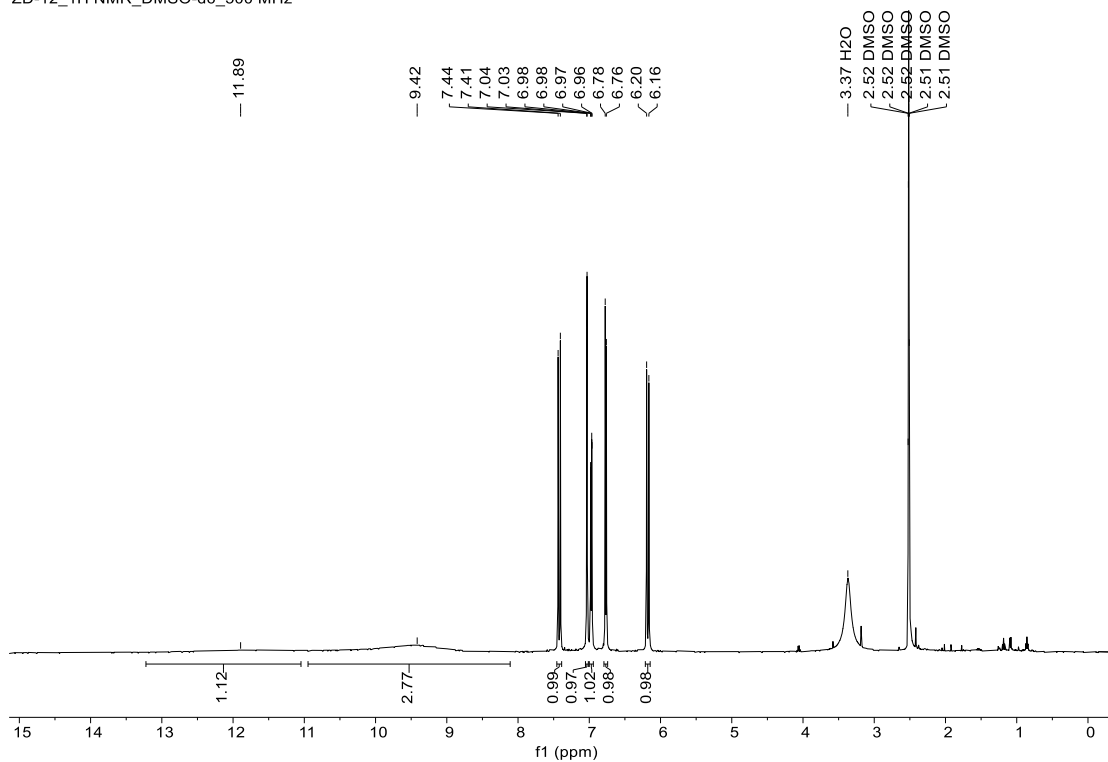


Figure S47: ¹H-NMR spectrum of compound 22

ZD-12_13C NMR_DMSO-d6_125 MHz

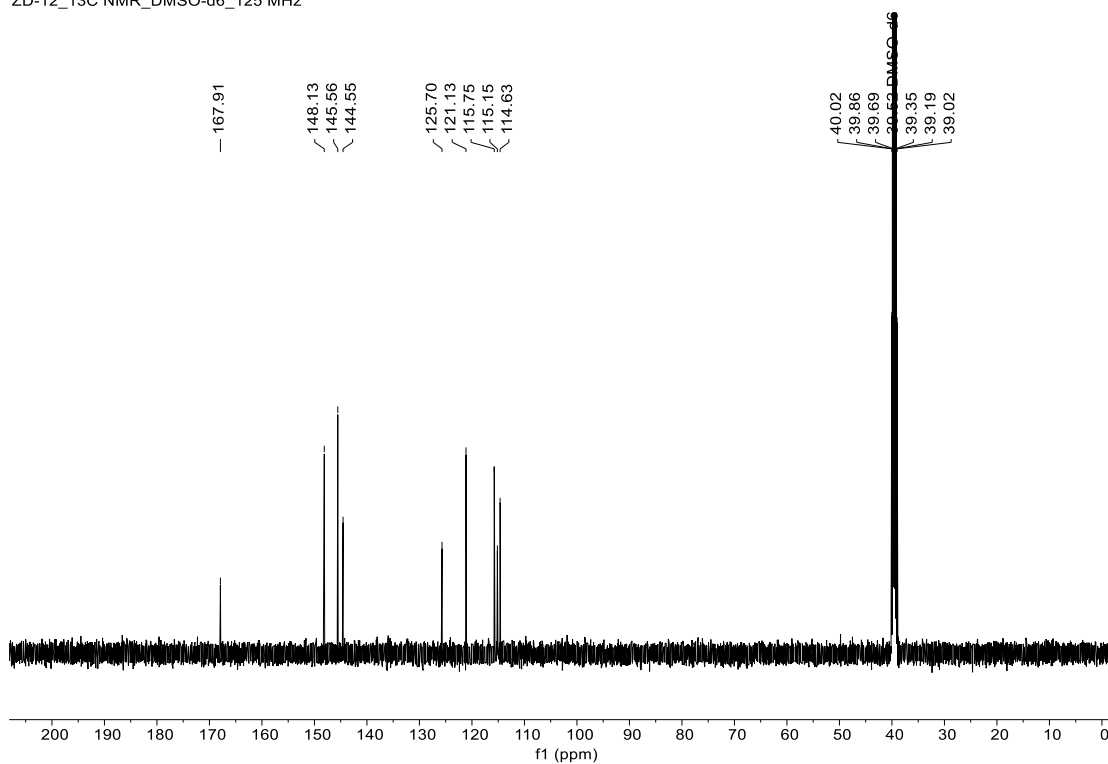


Figure S48: ¹³C-NMR spectrum of compound 22

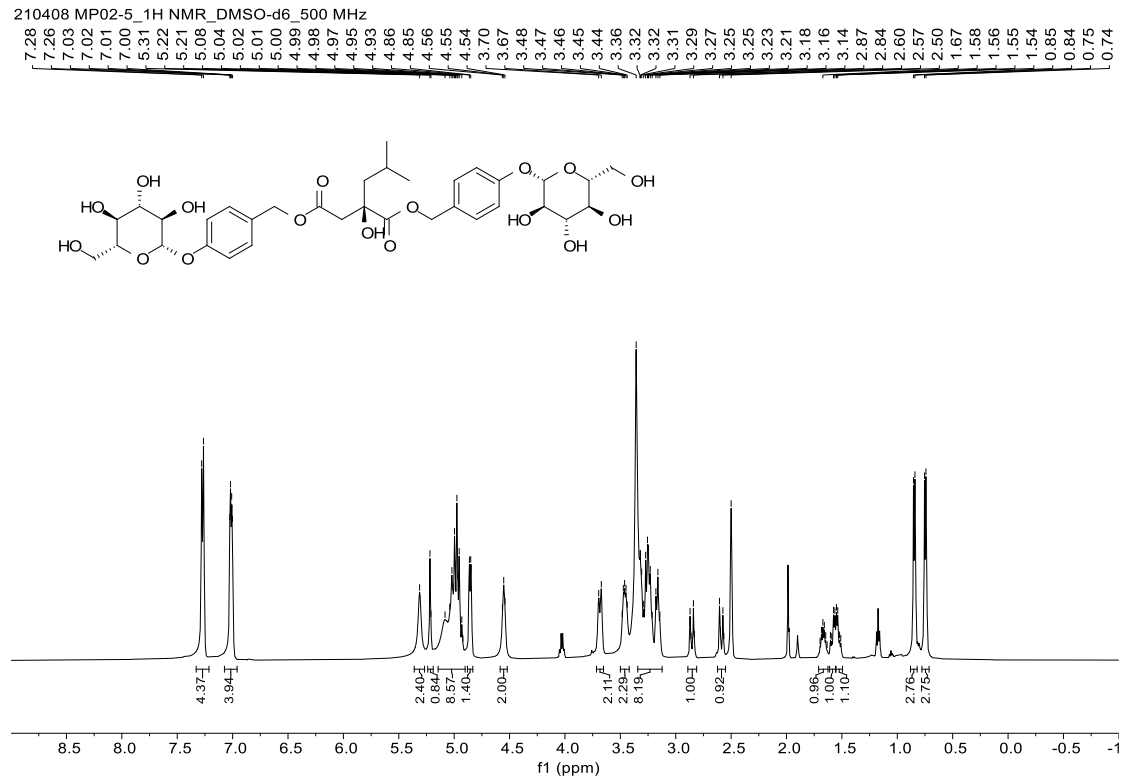


Figure S49: ^1H -NMR spectrum of compound **23**

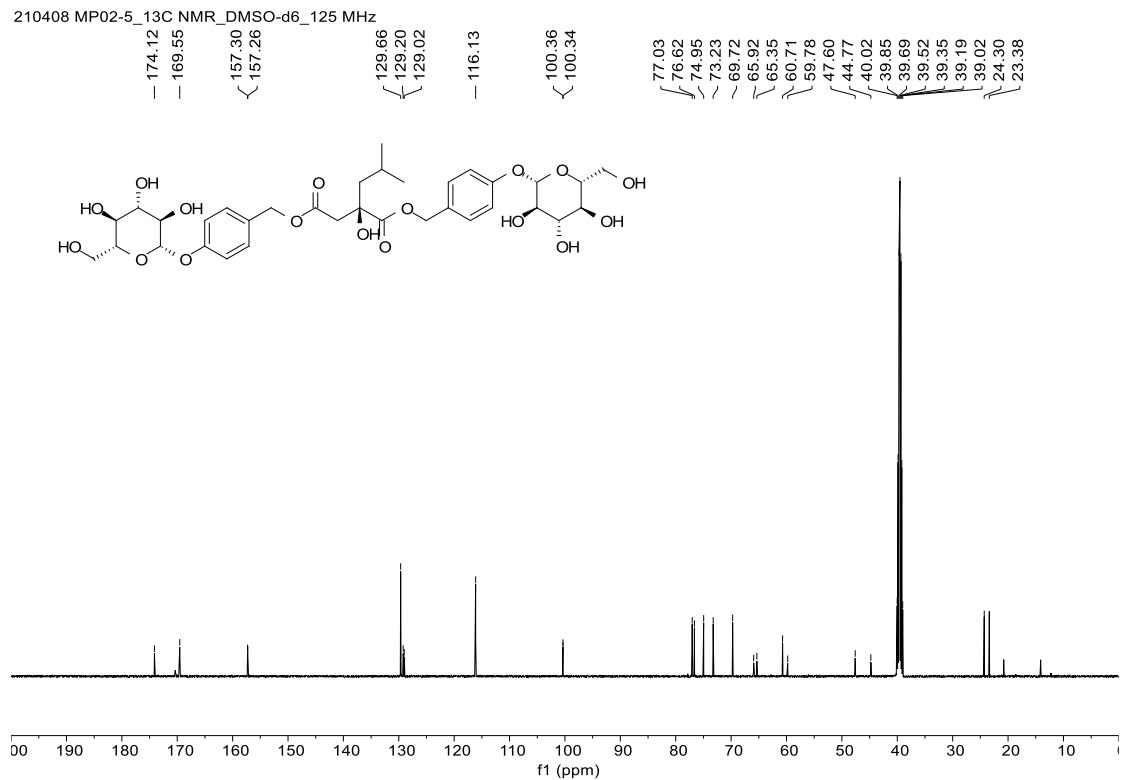


Figure S50: ^{13}C -NMR spectrum of compound **23**

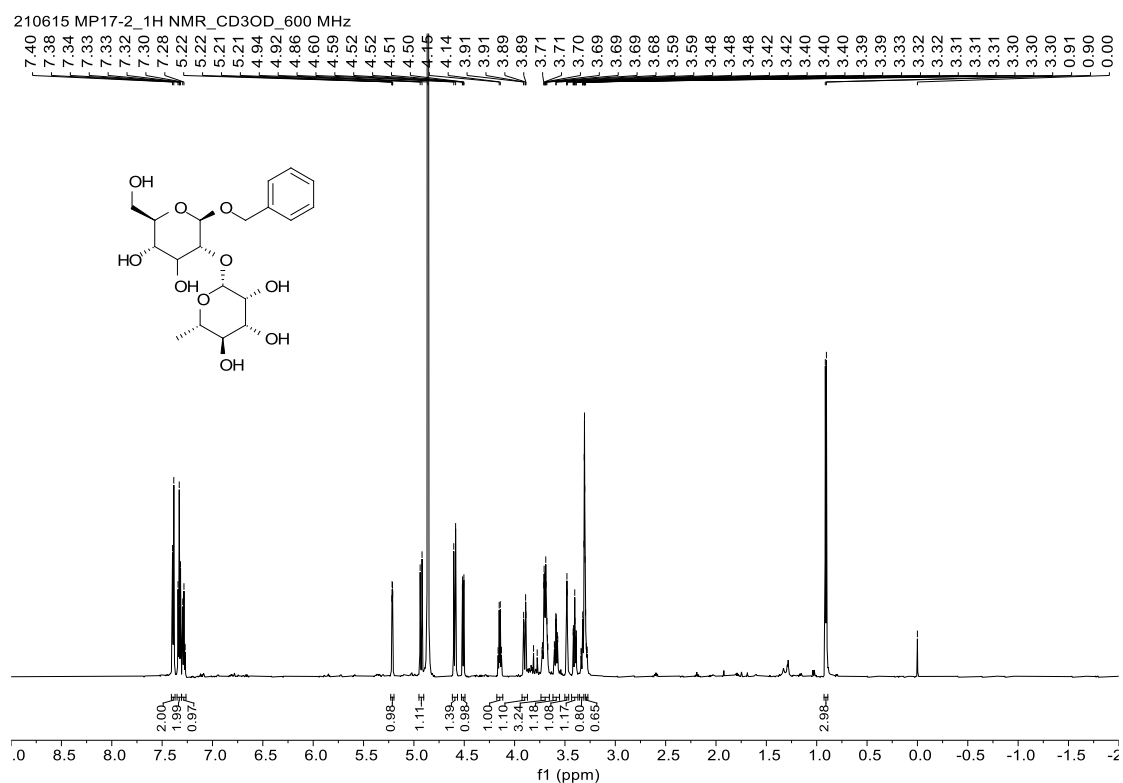


Figure S51: ^1H NMR spectrum of compound 24

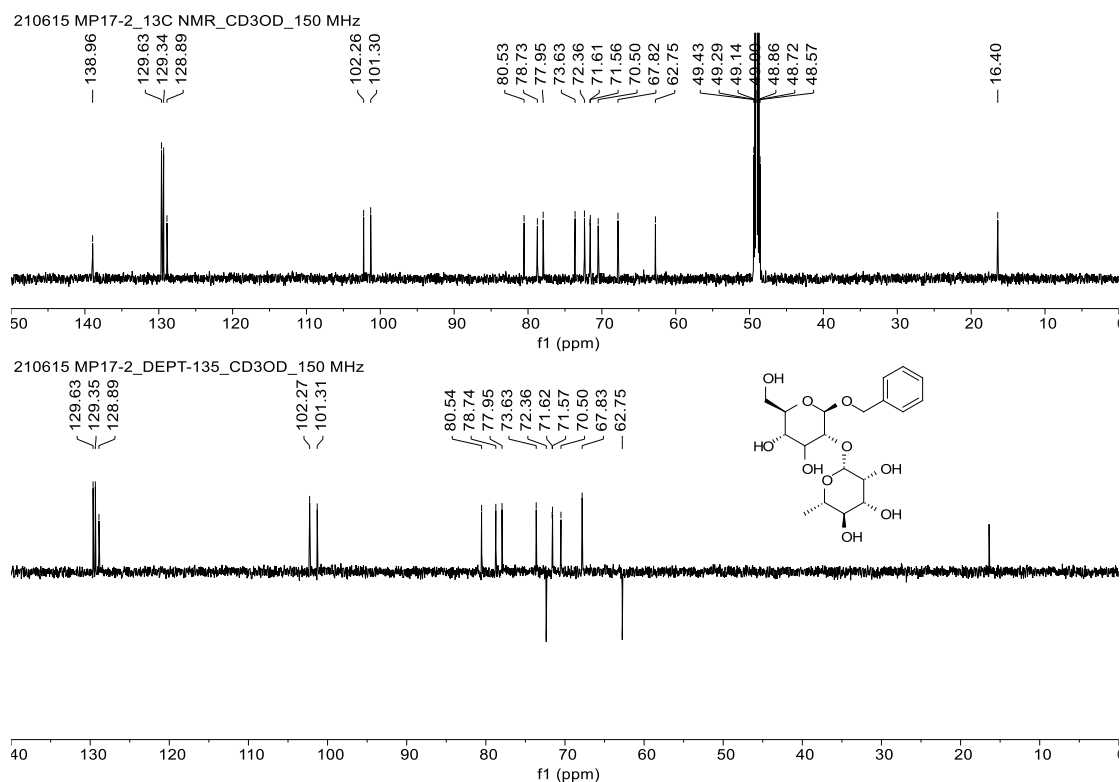


Figure S52: ^{13}C -NMR and DEPT spectra of compound 24

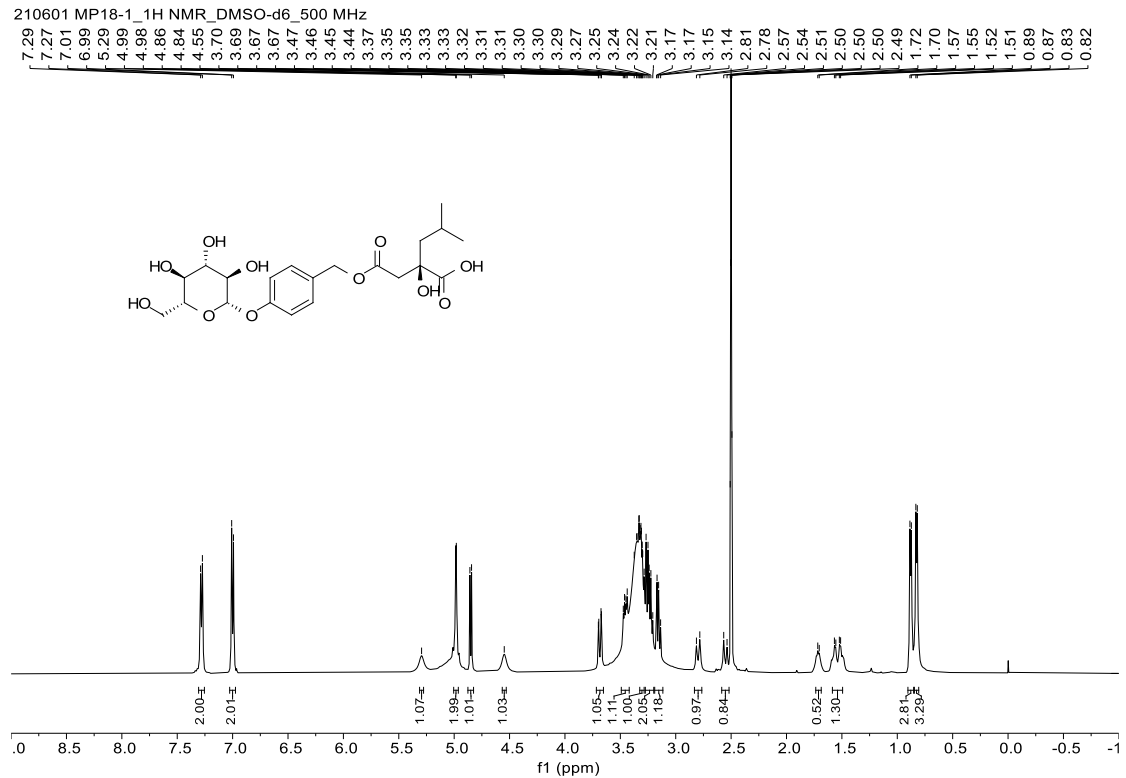


Figure S53: ^1H NMR spectrum of compound 25

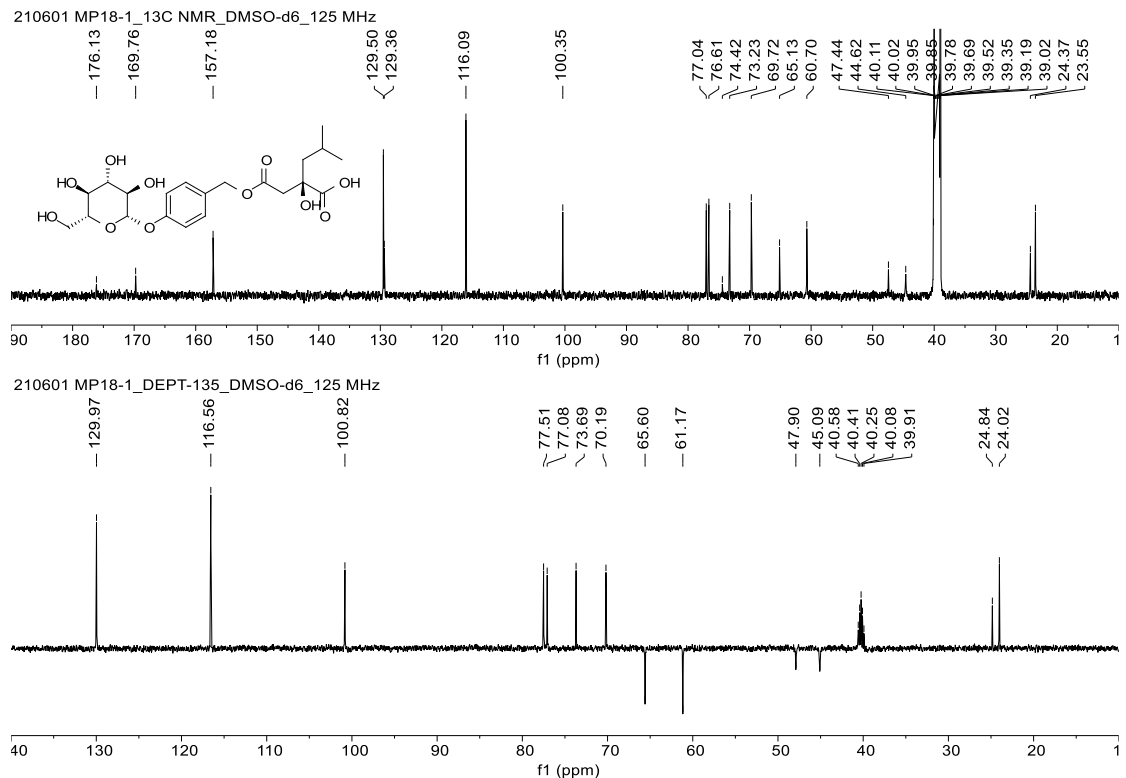


Figure S54: ^{13}C -NMR and DEPT spectra of compound 25

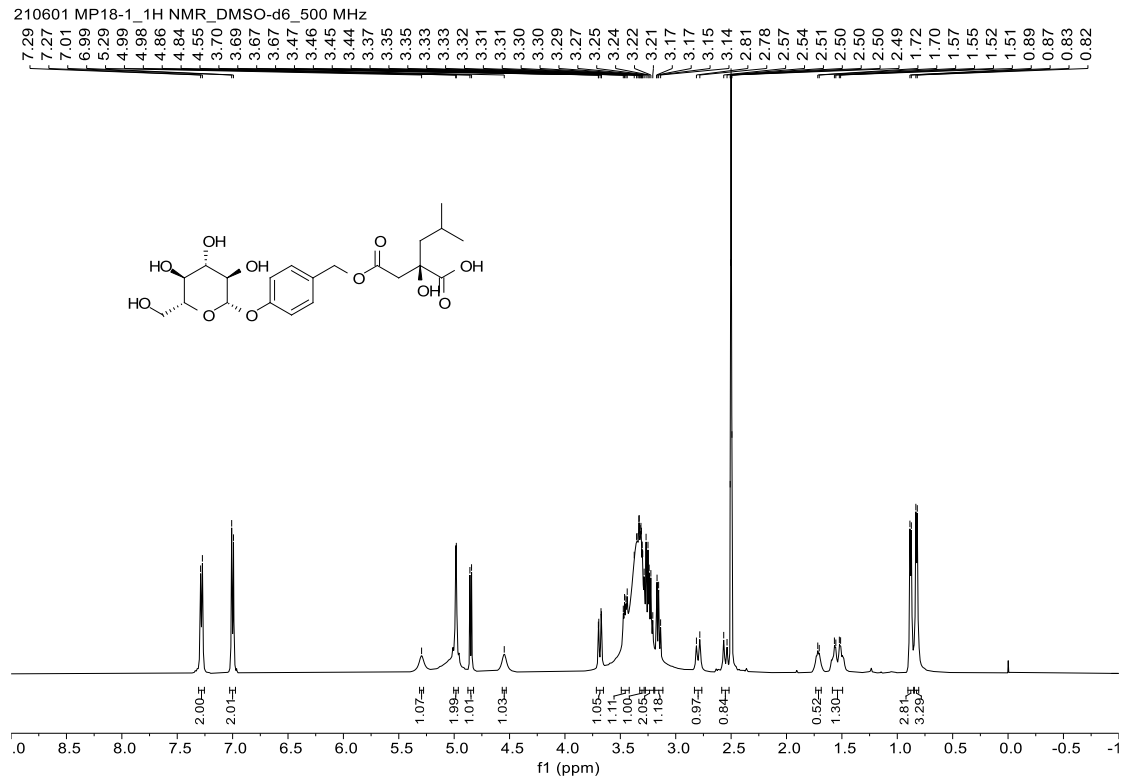


Figure S55: ^1H -NMR spectrum of compound 26

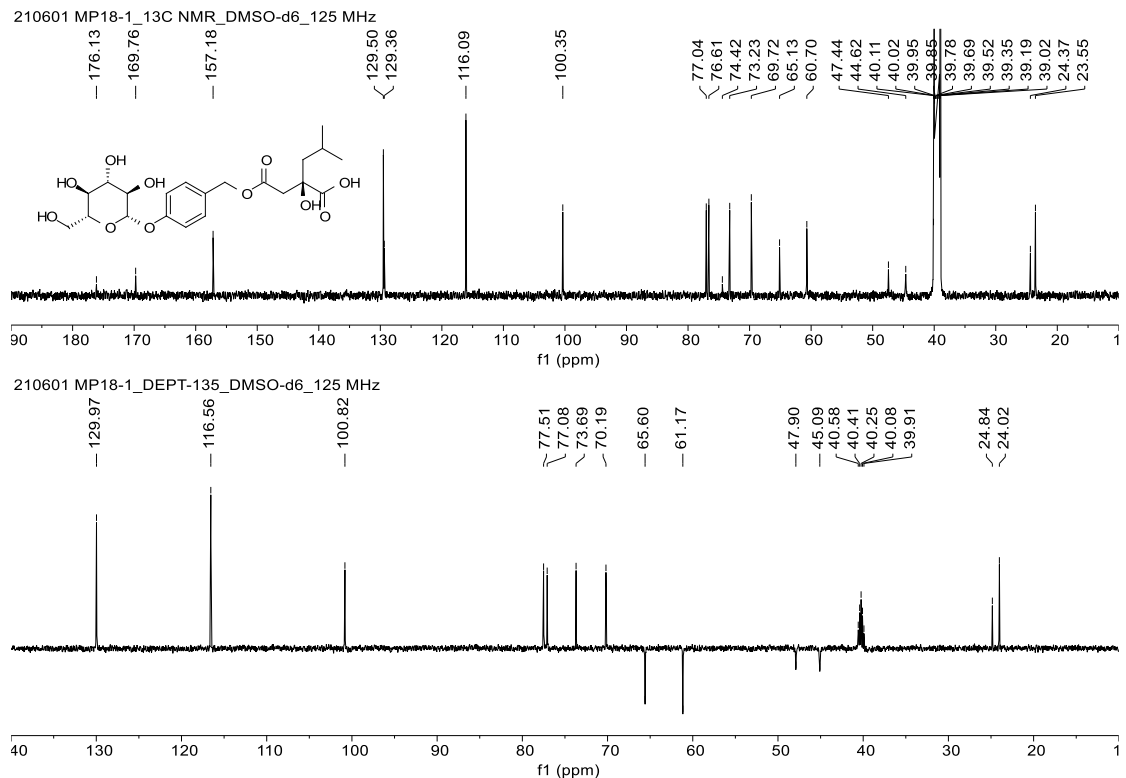
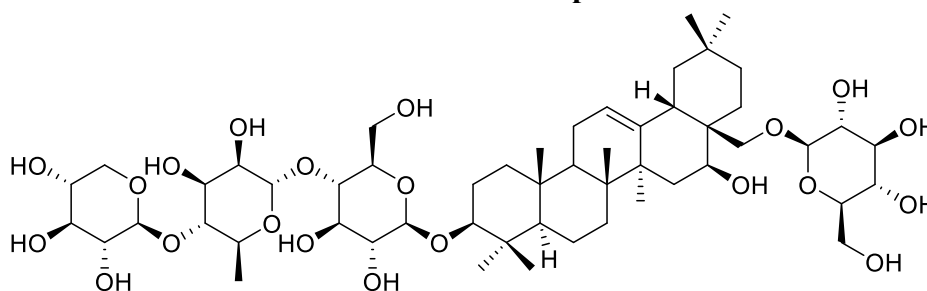


Figure S56: ^{13}C -NMR and DEPT spectra of compound 26

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<p>256510-01-7</p> <p>Absolute stereochemistry shown, Rotation (-)</p> <p>C₅₃H₈₈O₂₂ β-D-Glucopyranoside, (3β,16β)-28-(β-D-glucopyranosyloxy)-16-hydroxyolean-12-en-3-ol...</p> <p>3 References 0 Reactions 0 Suppliers</p>	<p>1391941-08-4</p> <p>Absolute stereochemistry shown</p> <p>C₅₄H₉₀O₂₃ (3β,21β,22α)-28-[[2-O-(6-Deoxy-α-L-mannopyranosyl)-β-D-glucopyranosyl]oxy]-21,22-dihydroxyolean-12-en-3-ol...</p> <p>2 References 0 Reactions 0 Suppliers</p>	<p>1039557-66-8</p> <p>Absolute stereochemistry shown, Rotation (+)</p> <p>C₅₄H₉₀O₂₄ (3β,16α,22α)-28-(β-D-Glucopyranosyloxy)-16,22-dihydroxyolean-12-en-3-yl O-β-D-glucopyranoside...</p> <p>2 References 0 Reactions 0 Suppliers</p>

The most similar three compounds to compound 1. The sugar unit and sugar chain are different from compound 1.