

# Supplementary Materials: Phenolics from *Garcinia mangostana* Inhibit Advanced Glycation Endproducts Formation: Effect on Amadori Products, Cross-Linked Structures and Protein Thiols

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Dr. Hossam  
Sample : GM-2011 CD30D  
PROTON MeOD D:\ nmr

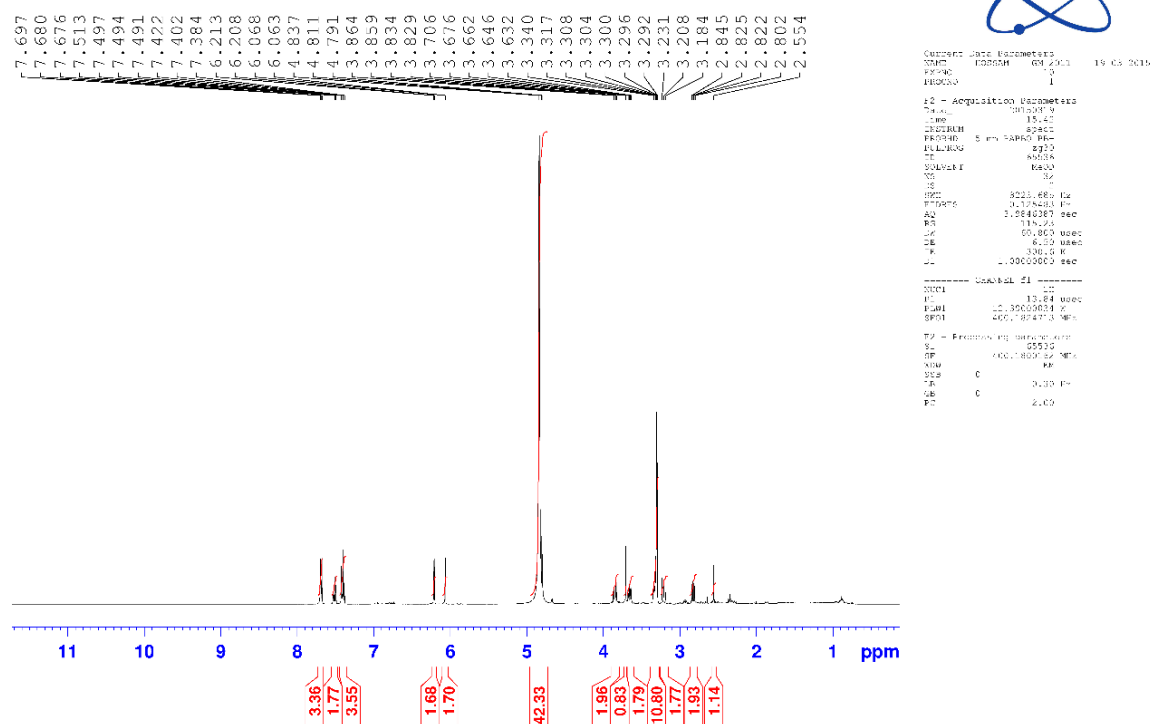


Figure S1. <sup>1</sup>H-NMR of compound 1.

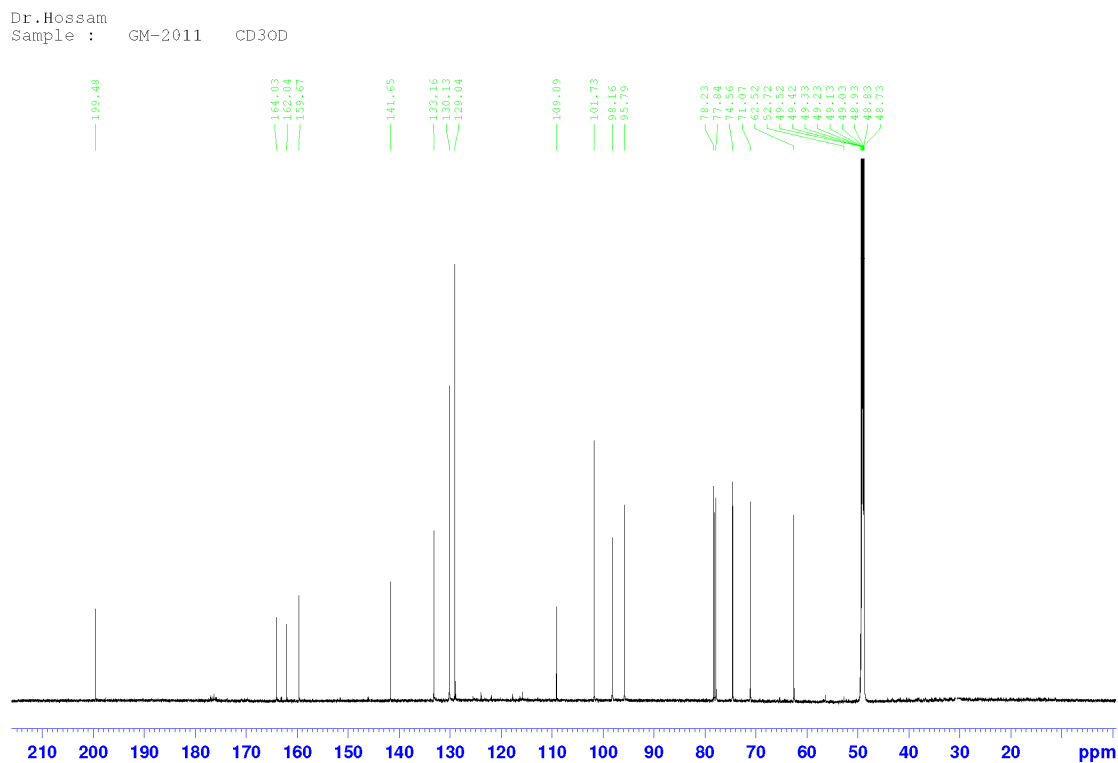


Figure S2. <sup>13</sup>C-NMR of compound 1.

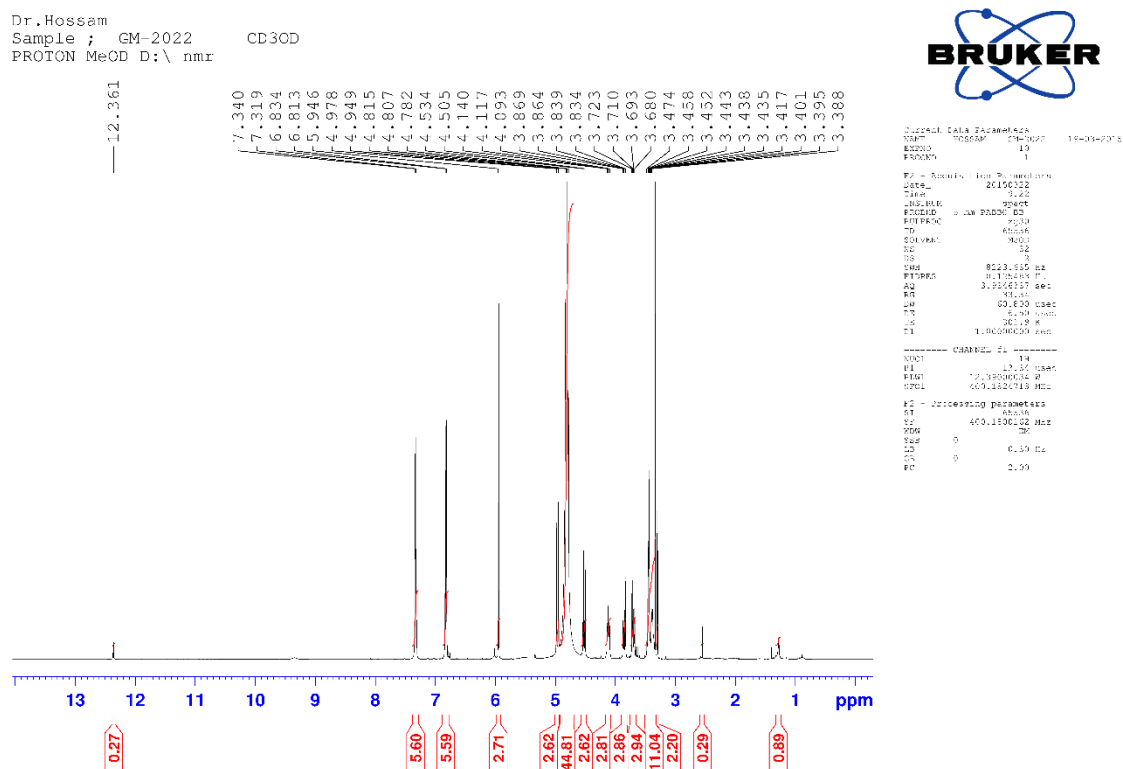


Figure S3. <sup>1</sup>H-NMR of compound 2.

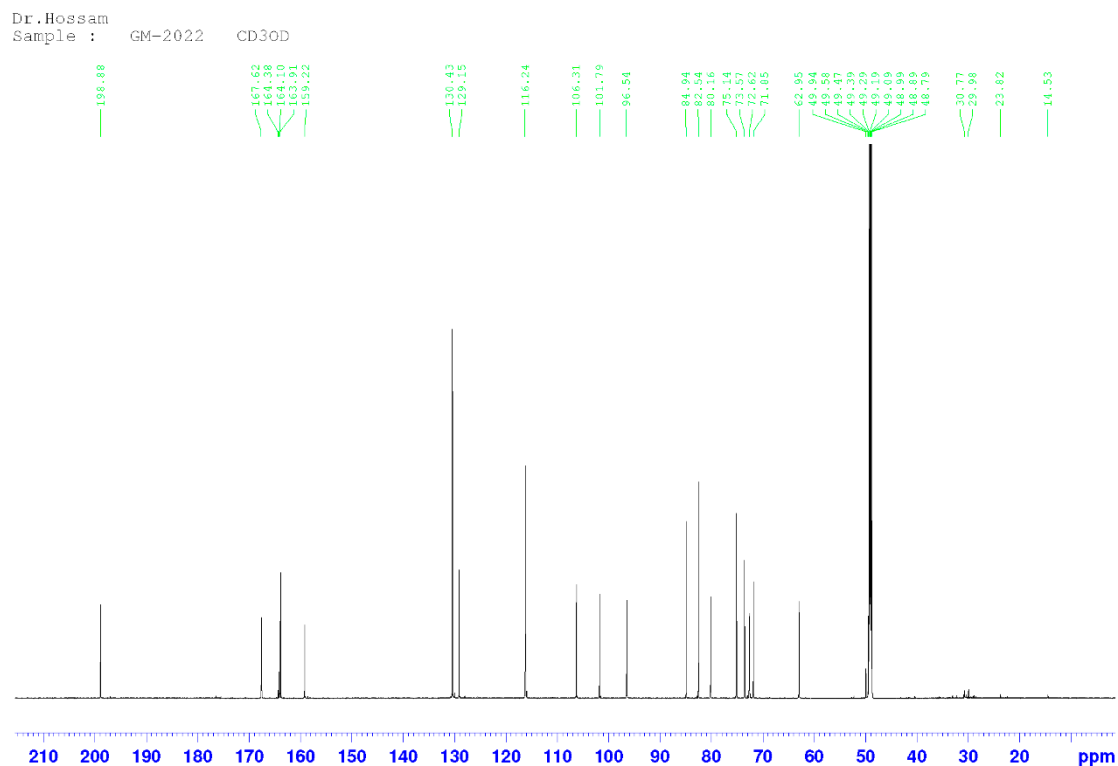


Figure S4. <sup>13</sup>C-NMR of compound 2.

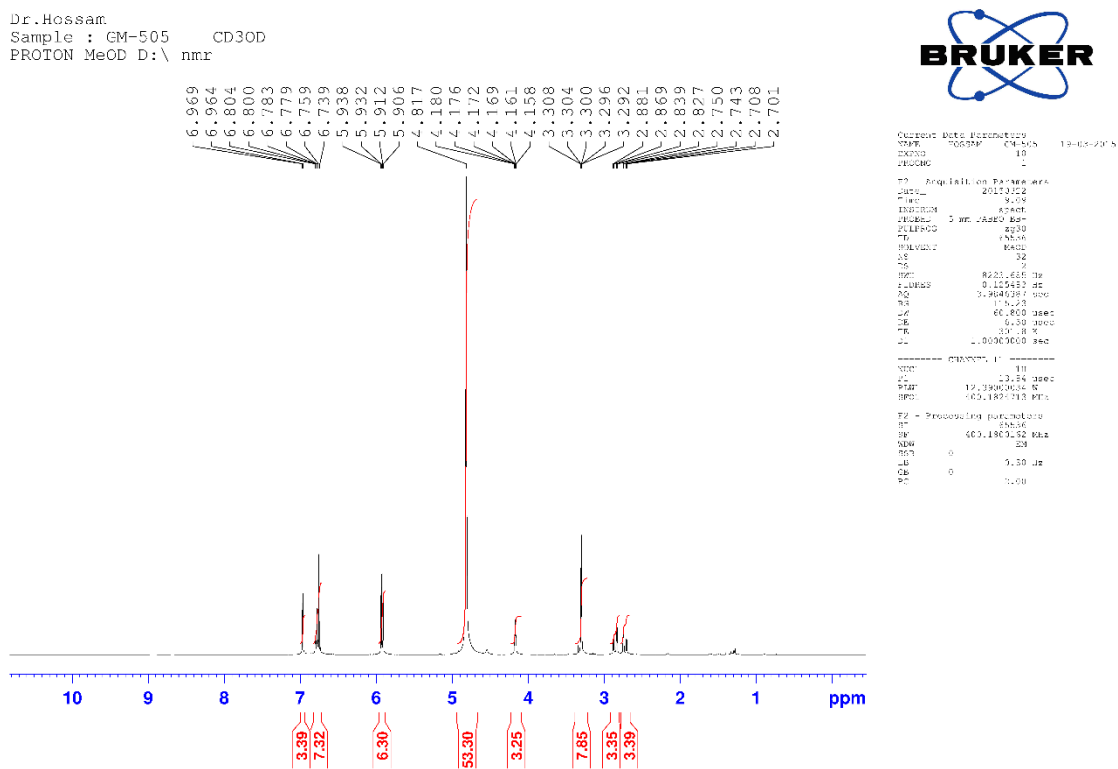


Figure S5. <sup>1</sup>H-NMR of compound 3.

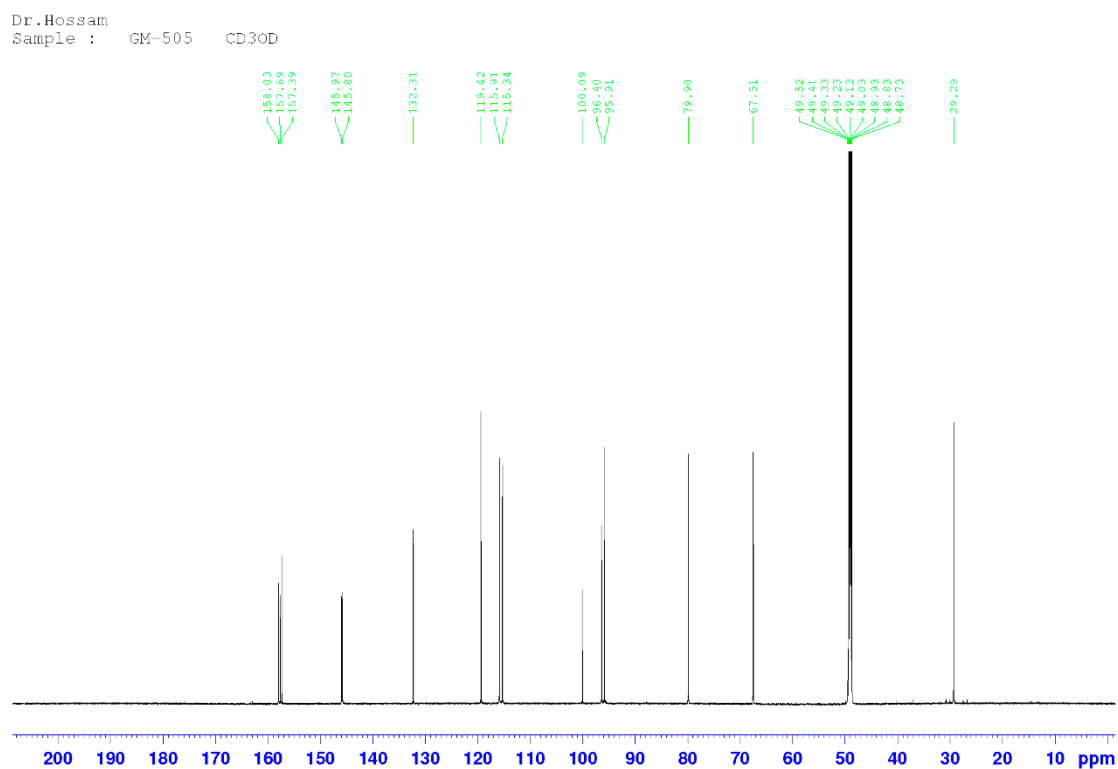


Figure S6. <sup>13</sup>C-NMR of compound 3.

Dr. Hossam  
Sample : GM-707 CD3OD  
PROTON MeOD D:\ nmr

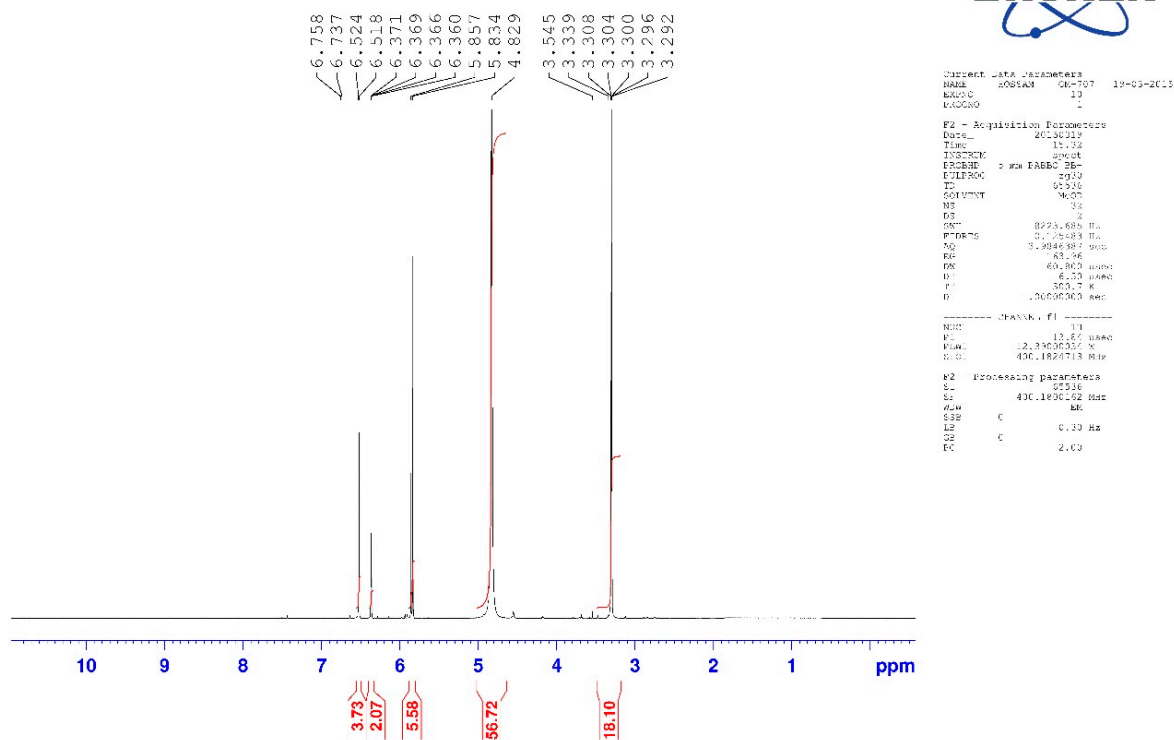
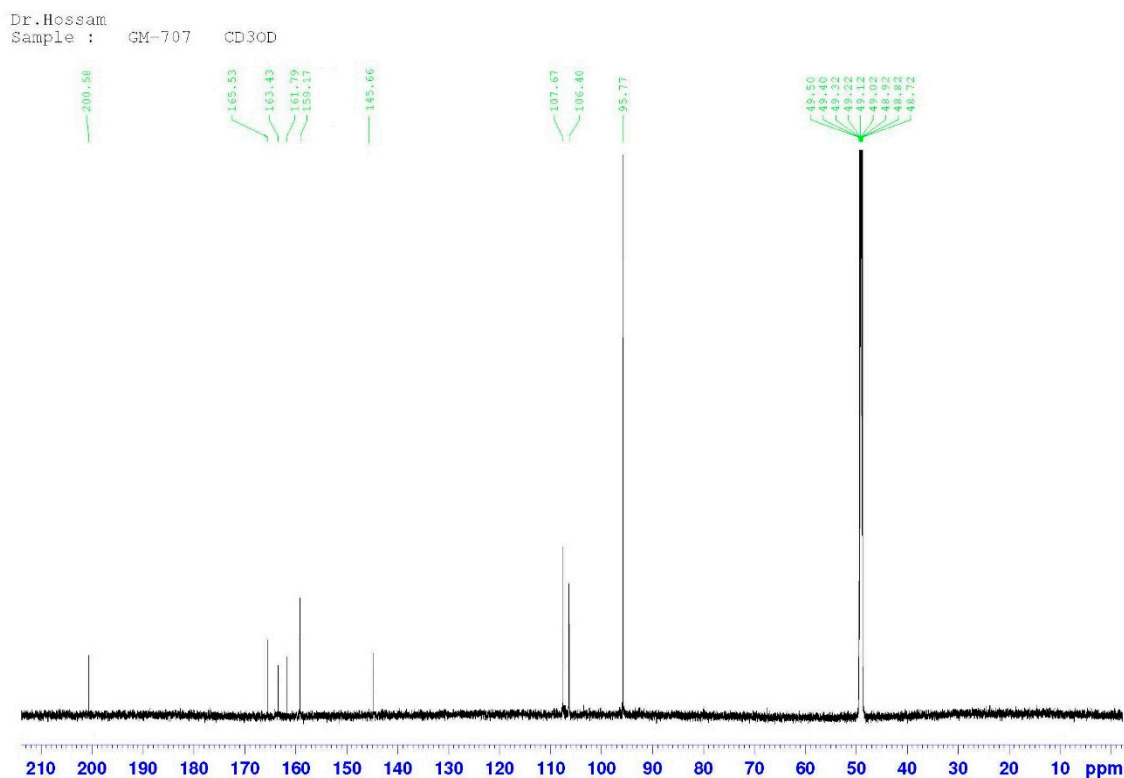


Figure S7. <sup>1</sup>H-NMR of compound 4.

Figure S8.  $^{13}\text{C}$ -NMR of compound 4.

## HPLC Condition

### Instrument

The HPLC system consisted of an Agilent 1200 system, a solvent delivery module, a quaternary pump, an autosampler, a diode-array detector (DAD), and a column compartment (Agilent Technology, Waldbronn, Baden-Württemberg, Germany).

### Chromatographic Conditions

Column: Agilent Zorbax Extend-C18 column (150 mm  $\times$  4.6 mm, i.d. 5  $\mu\text{m}$ ). column Temperature 40  $^{\circ}\text{C}$ .

Mobile phase:  $\text{H}_2\text{O}$  has 0.1% phosphoric acid (solvent A) and Methanol has 0.1% phosphoric acid (solvent B).

The gradient elution process began at 95% solvent B for 20 min, followed by a linear increase in solvent A to 40% at 40 min. Lastly, solvent B decreased back to 5% at 50 min.

Detector: UV at  $\lambda = 280 \text{ nm}$

Flow rate: 0.5 mL/min.

Injection volume: 5  $\mu\text{L}$

*Nota bene:* Peak identification was based on the comparison of retention times and UV spectra of the standard and compounds.

**Table S1.** NMR spectral data of compounds 1–4 (CD<sub>3</sub>OD, 400 and 100, MHz).

No	1		2		3		4	
	$\delta_{\text{H}}$ (mult., J (Hz))	$\delta_{\text{C}}$ (mult.)	$\delta_{\text{H}}$ (mult., J (Hz))	$\delta_{\text{C}}$ (mult.)	$\delta_{\text{H}}$ (mult., J (Hz))	$\delta_{\text{C}}$ (mult.)	$\delta_{\text{H}}$ (mult., J (Hz))	$\delta_{\text{C}}$ (mult.)
1	-	109.1 (C)	-	-	-	-	-	106.4 (C)
2	-	162.0 (C)	4.96 d (12.4)	84.9 (CH)	4.82 s	79.9 (CH)	-	161.8 (C)
3	6.06 d (2.0)	98.2 (CH)	4.52 d (12.4)	73.6 (CH)	4.71 m	67.5 (CH)	5.83 s (2.0)	95.7 (CH)
4	-	164.0 (C)	-	198.9 (C)	2.87 dd (16.6, 4.8) 2.73 dd (16.6, 2.8)	29.3 (CH <sub>2</sub> )	-	165.5 (C)
5	6.24 d (2.0)	95.8 (CH)	-	163.9 (C)	-	157.4 (C)	5.83 s (2.0)	95.7 (CH)
6	-	159.7 (C)	5.95 s	96.5 (CH)	5.91 d (2.4)	96.4 (CH)	-	163.4 (C)
7	-	199.5 (C)	-	167.6 (C)	-	158.0 (C)	-	200.6 (C)
8	-	-	-	105.6 (C)	5.94 d (2.4)	95.9 (CH)	-	-
9	-	-	-	164.1 (C)	-	157.7 (C)	-	-
10	-	-	-	101.8 (C)	-	100.1 (C)	-	-
1'	-	141.7 (C)	-	122.2 (C)	-	132.3 (C)	-	145.7 (C)
2'	7.69 m	130.1 (CH)	7.33 d (8.4)	130.4 (CH)	6.97 d (2.0)	115.4 (CH)	6.73 s	106.4 (CH)
3'	7.38 m	129.0 (CH)	6.82 d (8.4)	116.2 (CH)	-	145.8 (C)	-	159.2 (C)
4'	7.49 m	133.2 (CH)	-	159.2 (C)	-	146.0 (C)	6.52 m	107.7 (CH)
5'	7.38 m	129.0 (CH)	6.82 d (8.4)	116.2 (CH)	6.75 d (8.4)	115.9 (CH)	-	159.2 (CH)
6'	7.69 m	130.1 (CH)	7.33 d (8.4)	130.4 (CH)	6.80 dd (8.4, 2.0)	119.4 (CH)	6.73 s	106.4 (CH)
1''	4.85 d (7.8)	101.7 (CH)	4.78 d (7.6)	75.1 (CH <sub>2</sub> )	-	-	-	-
2''	2.80 m	74.5 (CH)	4.12 m	72.6 (CH)	-	-	-	-
3''	3.23 m	77.8 (CH)	3.46 m	80.2 (CH)	-	-	-	-
4''	3.18 m	71.1 (CH)	3.43 m	71.9 (CH)	-	-	-	-
5''	3.4 m	78.2 (CH)	3.30 m	82.5 (CH)	-	-	-	-
6''	3.82 dd (12.0, 2.0) 3.63 dd (12.0, 5.6)	62.5 (CH <sub>2</sub> )	3.84 dd (12.0, 2.0) 3.70 dd (12.0, 5.2)	63.0 (CH <sub>2</sub> )	-	-	-	-