**Supporting Information**

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# Antiplasmodial activity and Cytotoxicity of isolated Compound from the Stem bark of *Anthocleista liebrechtsiana*

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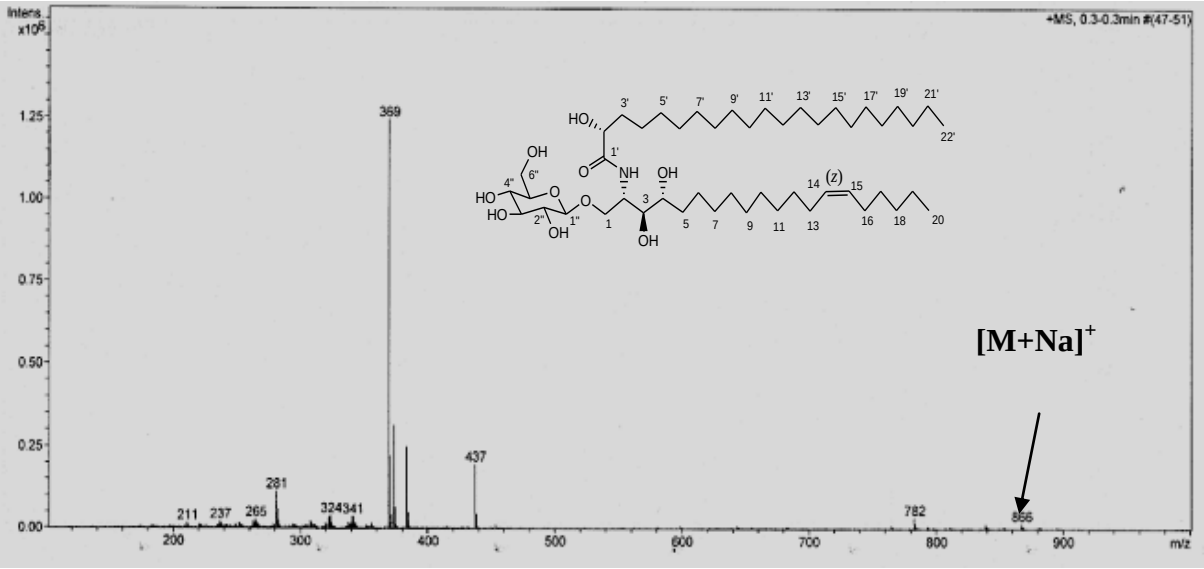
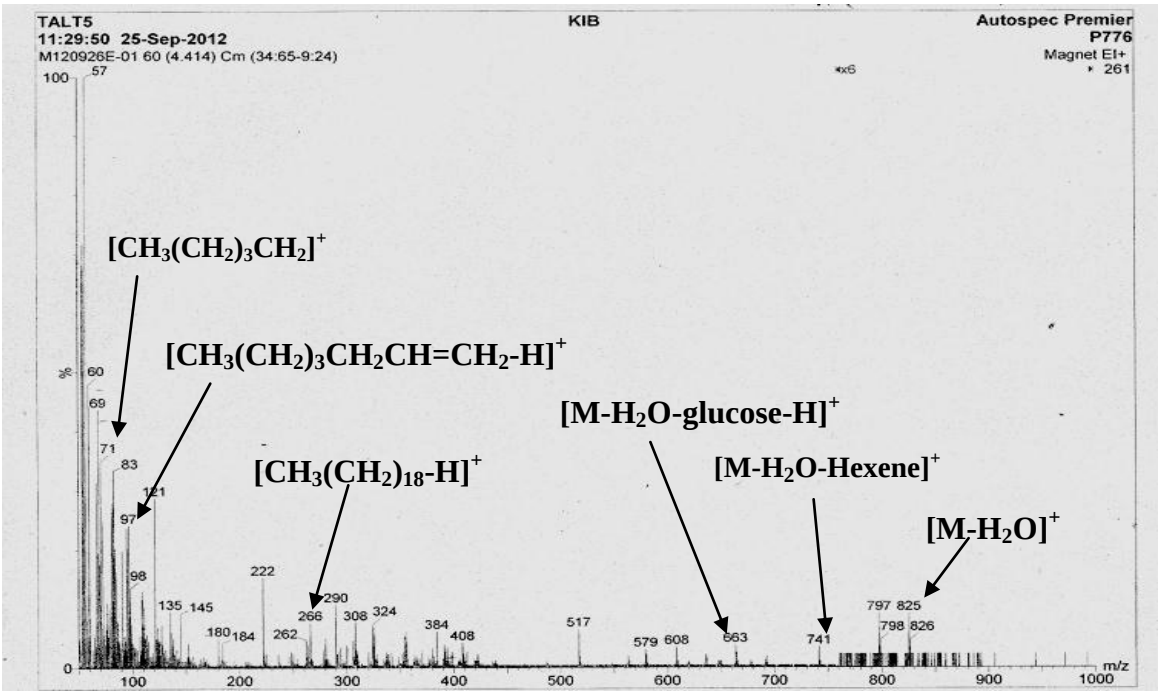
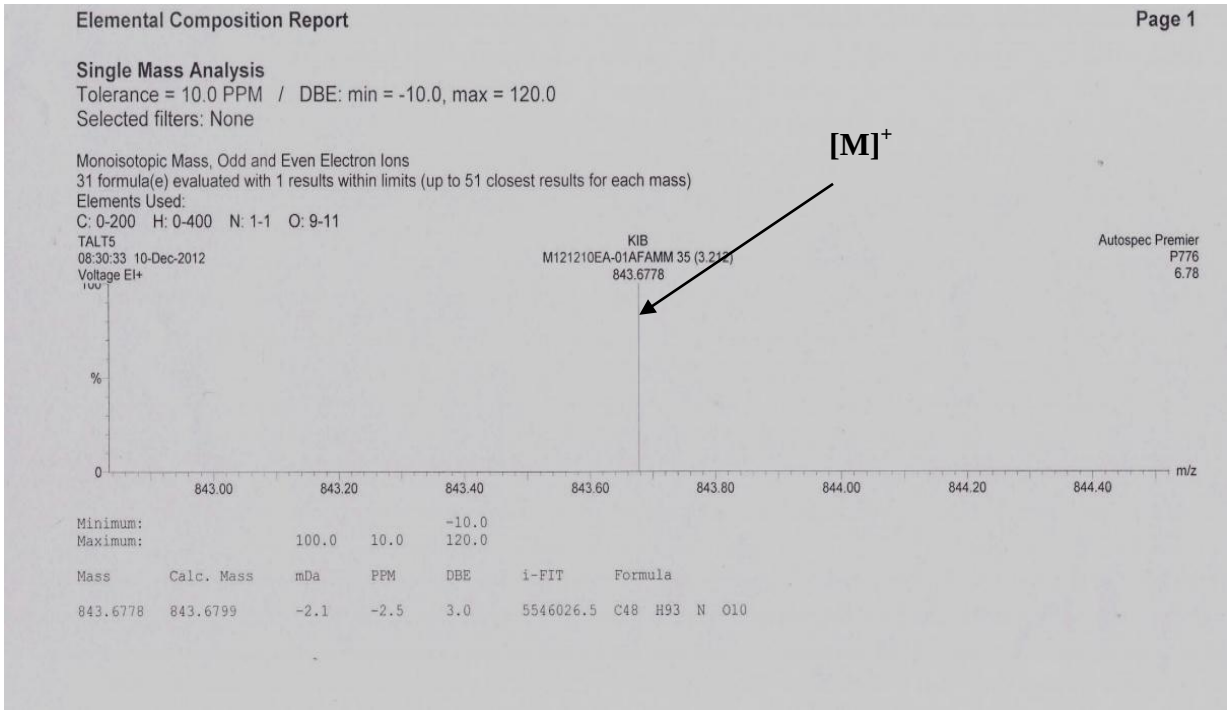


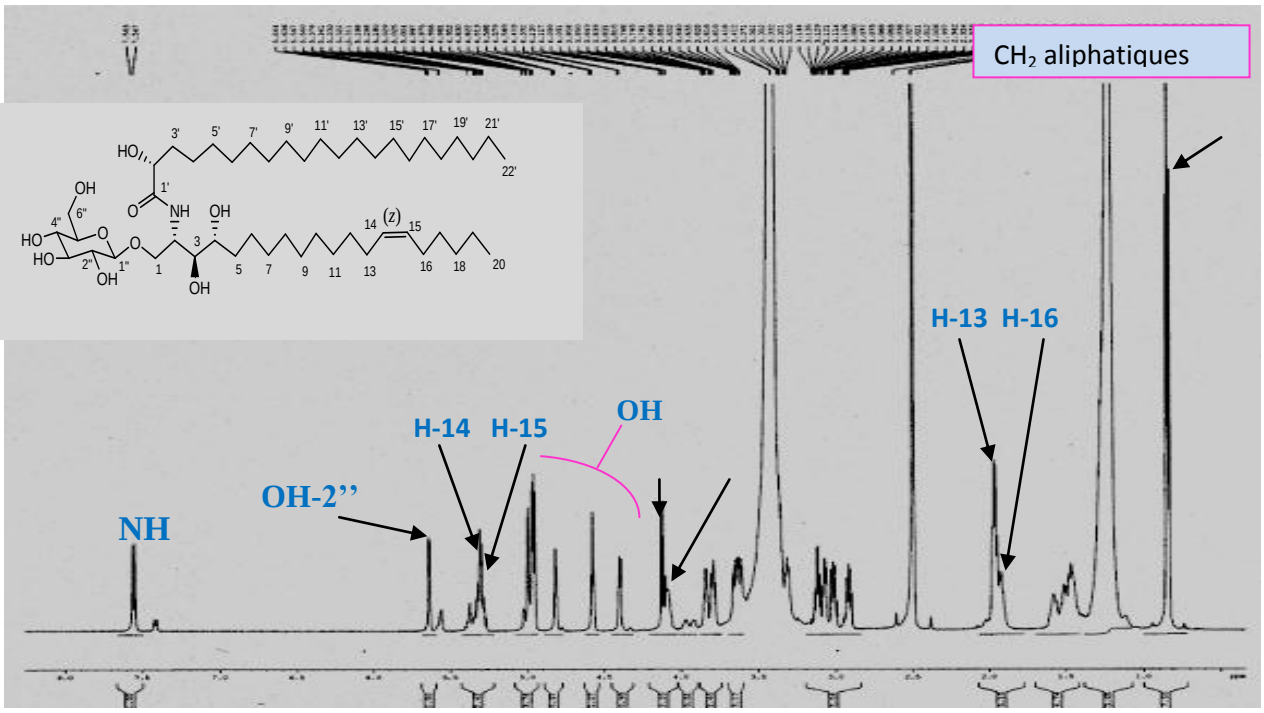

**S1:** ESI-MS Spectrum of Compound **1** (Liebrechtsianoside A)



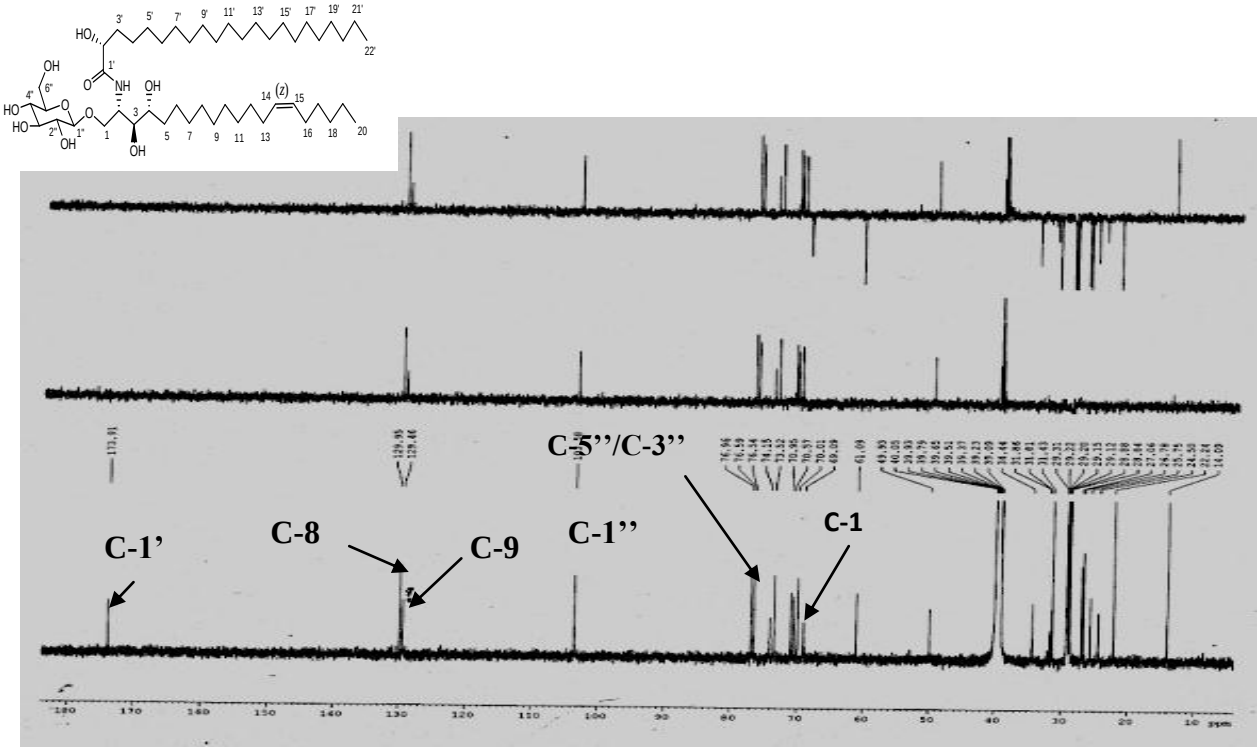

**S2:** EI-MS Spectrum of Compound **1** (Liebrechtsianoside A)



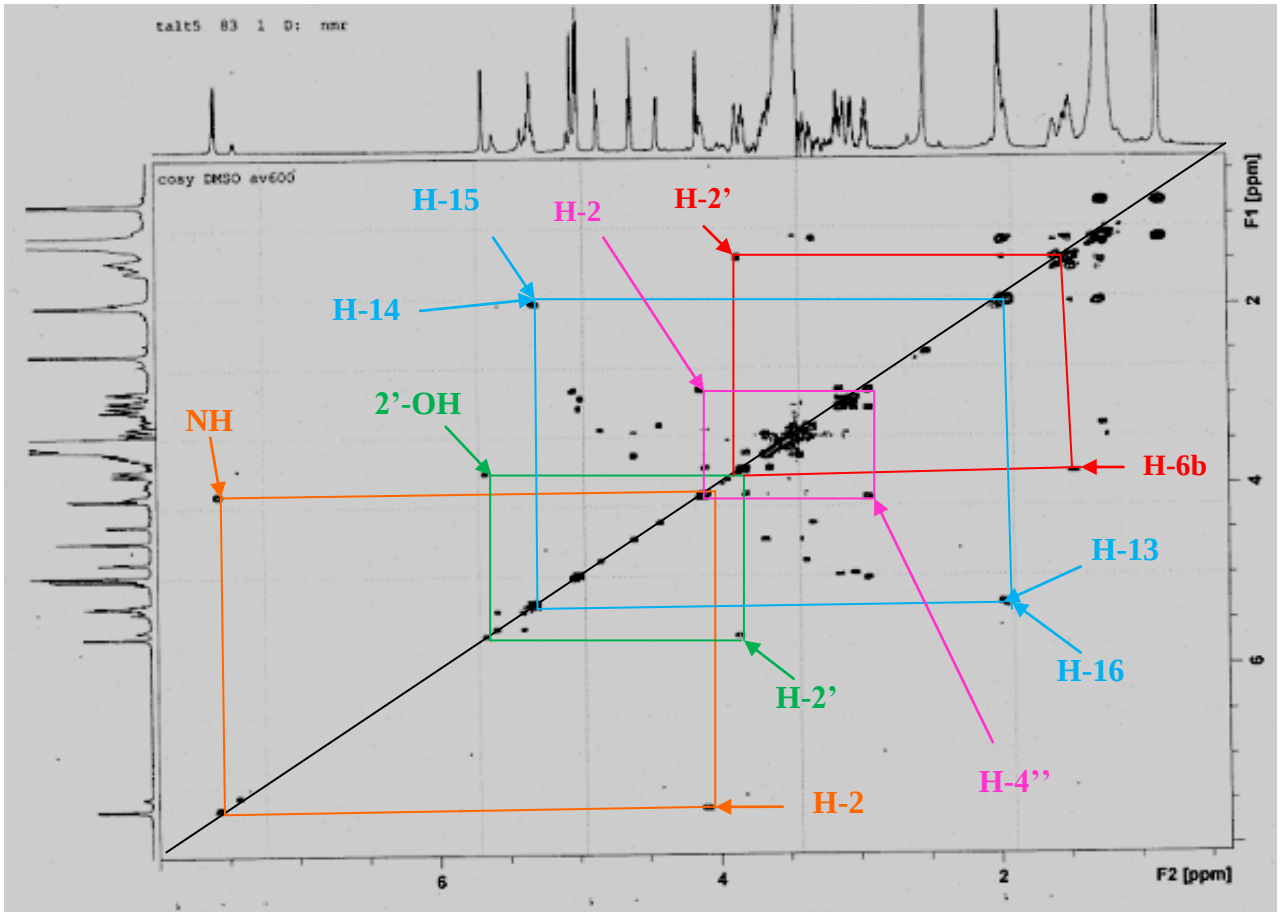

**S3:** HREI-MS Spectrum of Compound **1** (Liebrechtsianoside A)



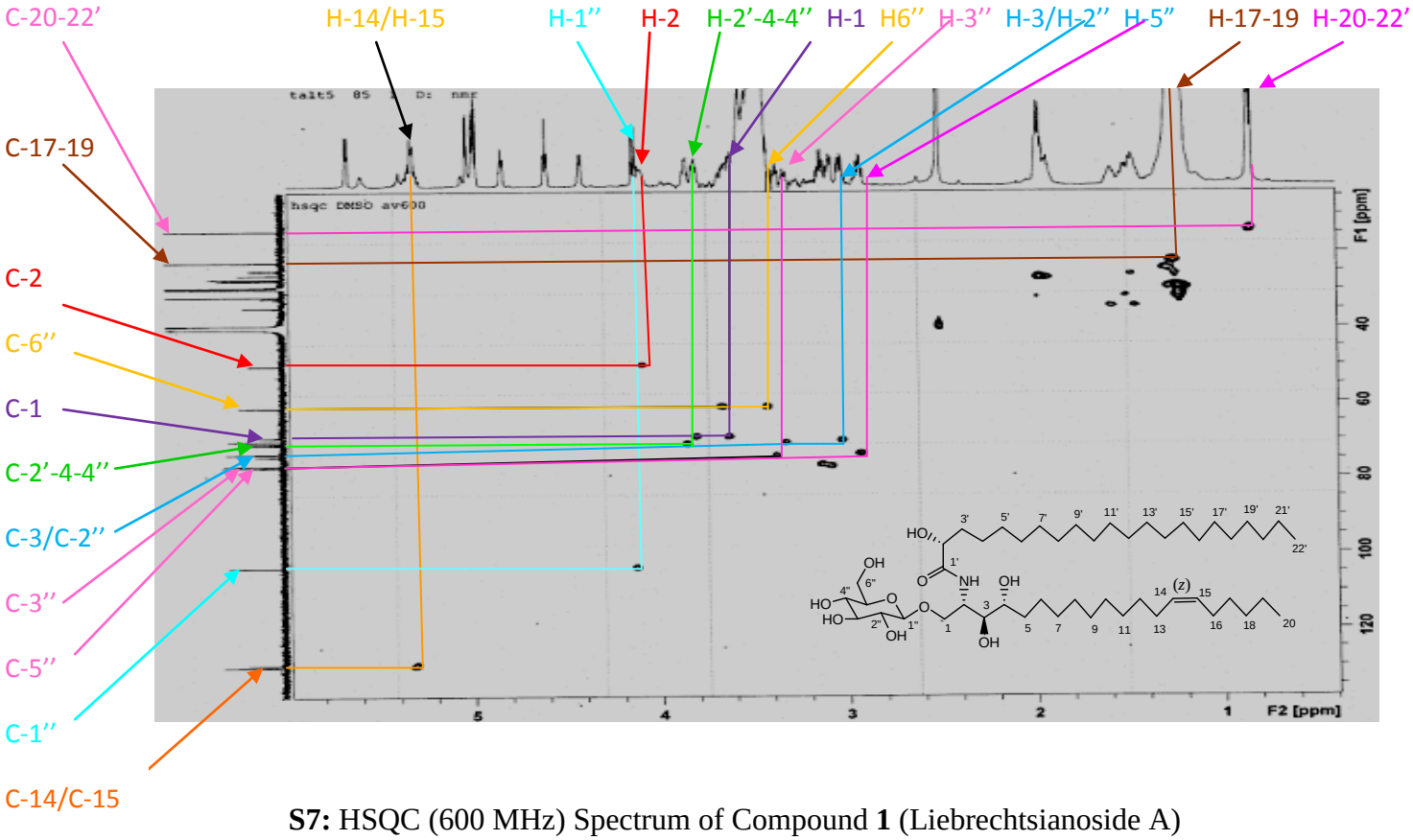

**S4:** $^{1}$H-NMR (600 MHz, DMSO-$d_6$) Spectrum of Compound **1** (Liebrechtsianoside A)



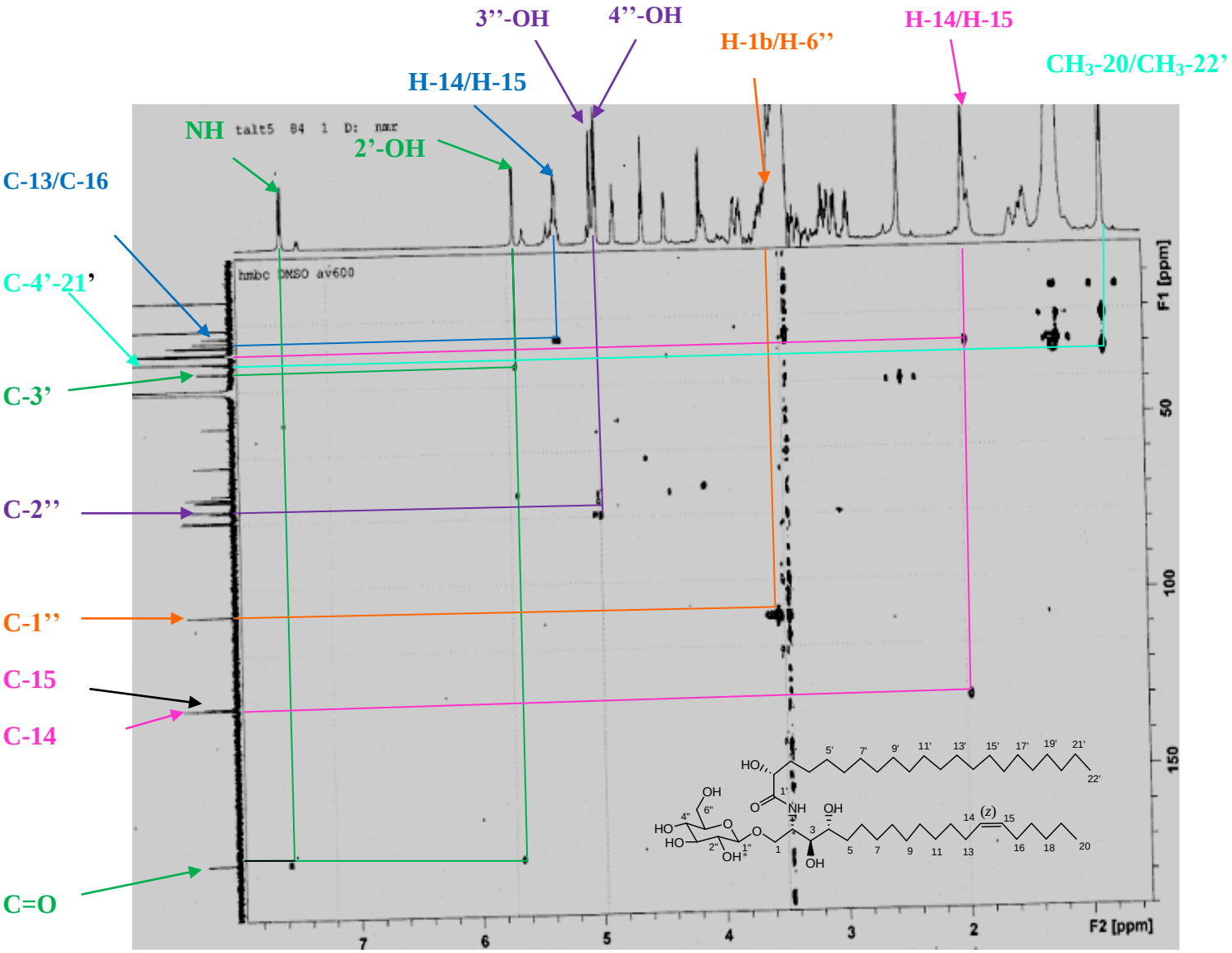

**S5:** $^{13}$C-NMR + DEPT (125 MHz, DMSO-*d6*) Spectrum of Compound **1** (Liebrechtsianoside A)




**S6:** COSY (600 MHz) Spectrum of Compound **1** (Liebrechtsianoside A)




**S7:** HSQC (600 MHz) Spectrum of Compound **1** (Liebrechtsianoside A)




**S8:** HMBC (600 MHz) Spectrum of Compound **1** (Liebrechtsianoside A)

*Liebrechtsianoside A* ***(1)****:* Colorless powder; MP. 182-183 °C; $[\alpha]_D^{25}$ = + 56.66 (*c* = 0.002, DMSO); UV (MeOH): $\lambda_{max}$ (log ε): 202 (3.94); IR $\nu_{max}$ (KBr): = 3118, 2918, 2850, 1622, 1535, 1463 $cm^{-1}$; $^1H$ NMR (600 MHz, DMSO-$d_6$): $\delta$ (ppm) = 0.83 (6H, t, *J* = 9.8 Hz, H-20/H-22'), 1.21 (64H, brs, H-7-12, H-4'-21', H-17-19), 1.57 (1H, m, H-3'a), 1.53 (1H, m, H-5b), 1.96 (1H, m, H-5a), 1.96 (1H, m, H-6a), 1.96 (2H, m, H-16), 1.53 (1H, m, H-6b), 1.40 (1H, m, H-3'b), 1.92 (2H, m, H-13), 3.13 (1H, m, H-3''), 2.89 (1H, m, H-2''), 3.03 (1H, m, H-4''), 3.11 (1H, m, H-5''), 3.32 (1H, m, H-4), 3.36 (1H, m, H-3), 3.41 (1H, dd, *J* = 6.0, 10.2 Hz, H-6''b), 3.65 (1H, dd, *J* = 6.0, 10.2 Hz, H-6''a), 3.79 (1H, dd, *J* = 4.2, 11.4 Hz, H-1a), 3.84 (1H, m, H-2'), 3.62 (1H, dd, *J* = 4.2, 11.4 Hz, H-1b), 4.12 (1H, d, *J* = 7.8 Hz, H-1''), 4.09 (1H, m, H-2), 5.37 (1H, m, H-15), 5.56 (1H, m, H-14), 7.55 (1H, d, *J* = 9.6 Hz, NH); $^{13}C$ NMR (150 MHz, DMSO-$d_6$): $\delta$ (ppm) = 14.1 ($2CH_3$, C-20, C-22'), 27.0 (CH, C-16), 26.8 (CH, C-13), 29.3-28.8 ($CH_2$, C-7-12, C-4'-21', C-17-19), 31.4 ($CH_2$, C-5), 31.8 ($CH_2$, C-6), 34.4 (CH, C-3'), 49.9 (CH, C-2), 61.1 ($CH_2$, C-6''), 69.1 (CH, C-1), 70.0 (CH, C-4''), 70.5 (CH, C-4), 70.9 (CH, C-2'), 73.5 (CH, C-2''), 74.1 (CH, C-3), 76.3 (CH, C-3''), 76.9 (CH, C-5''), 103.5 (CH, C-1''), 129.4 (CH, C-15), 129.9(CH, C-14), 173.9 (C, C-1'). EIMS: See Figure 2; HREIMS: *m/z* 843.6778 (calcd. 843.6799 for $C_{48}H_{93}NO_{10}$).