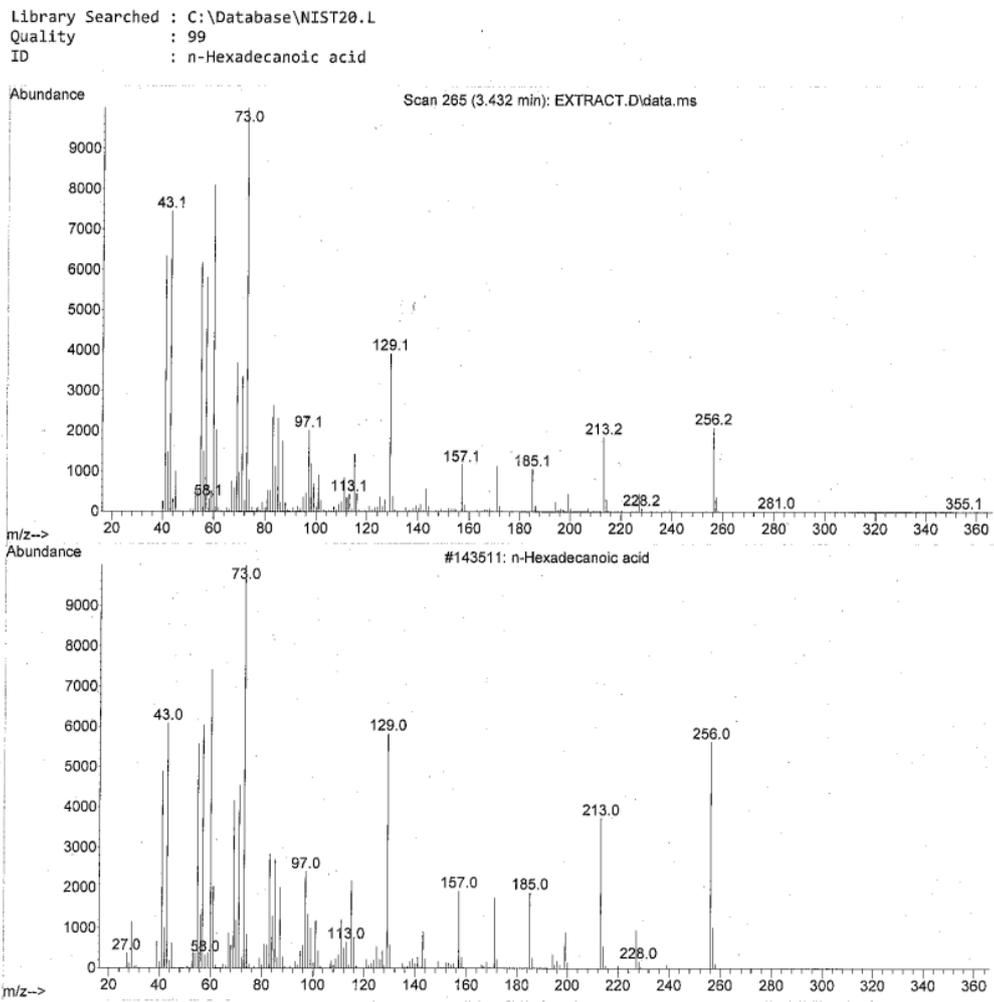


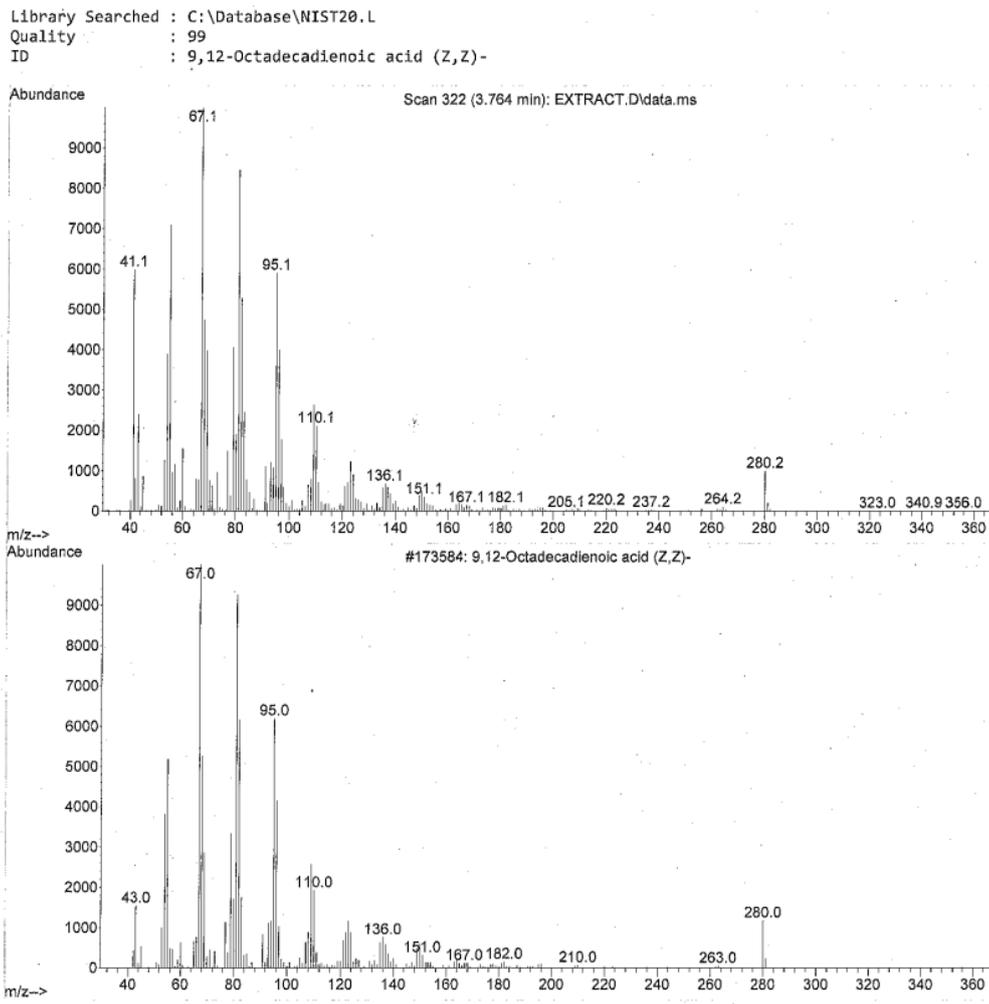
**Figure S1.** Total ion chromatograph of the leek seed extract obtained from GC-MS analysis. Retention time (Rt) at 3.43 min: n-hexadecanoic acid, Rt at 2.78 min: octadecanoic acid, and Rt at 5.31 min: linolein.

**Scheme 10.** components obtained from leek seed extract.

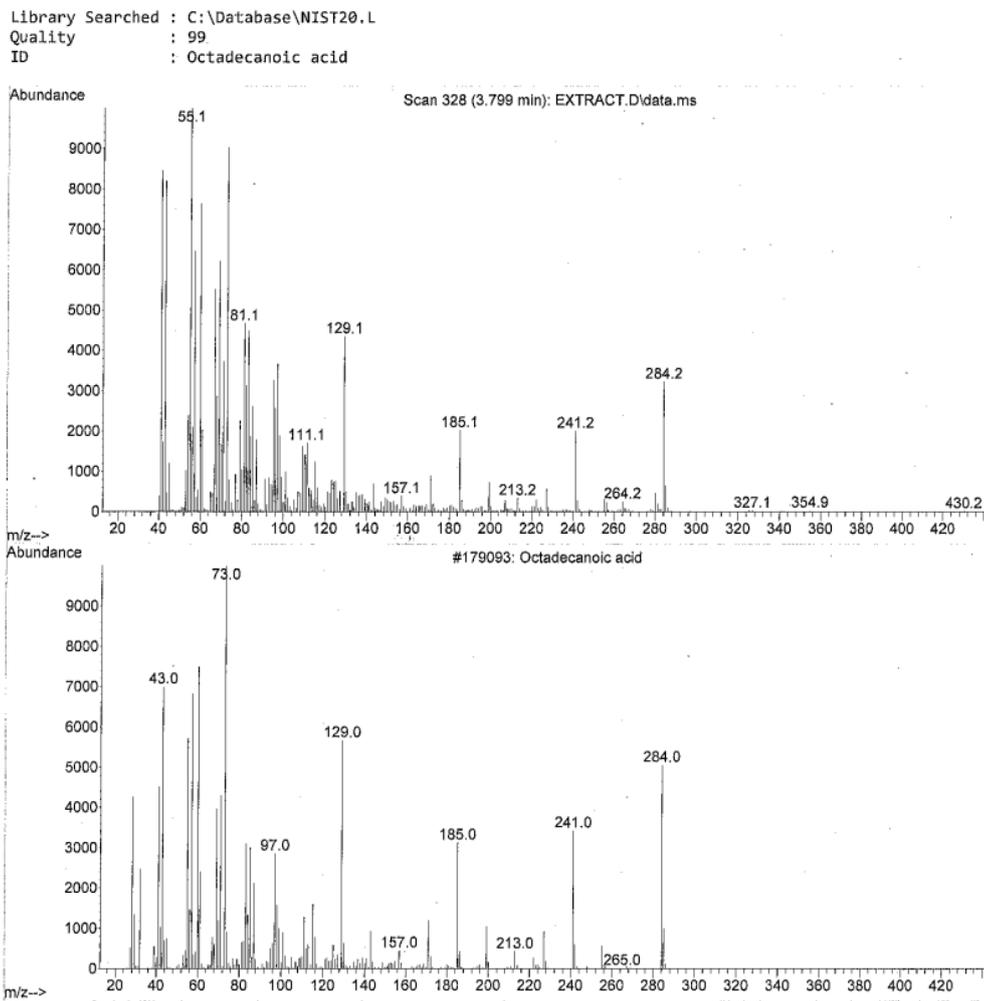
**1. Mass spectrum matched with n-hexadecanoic.**



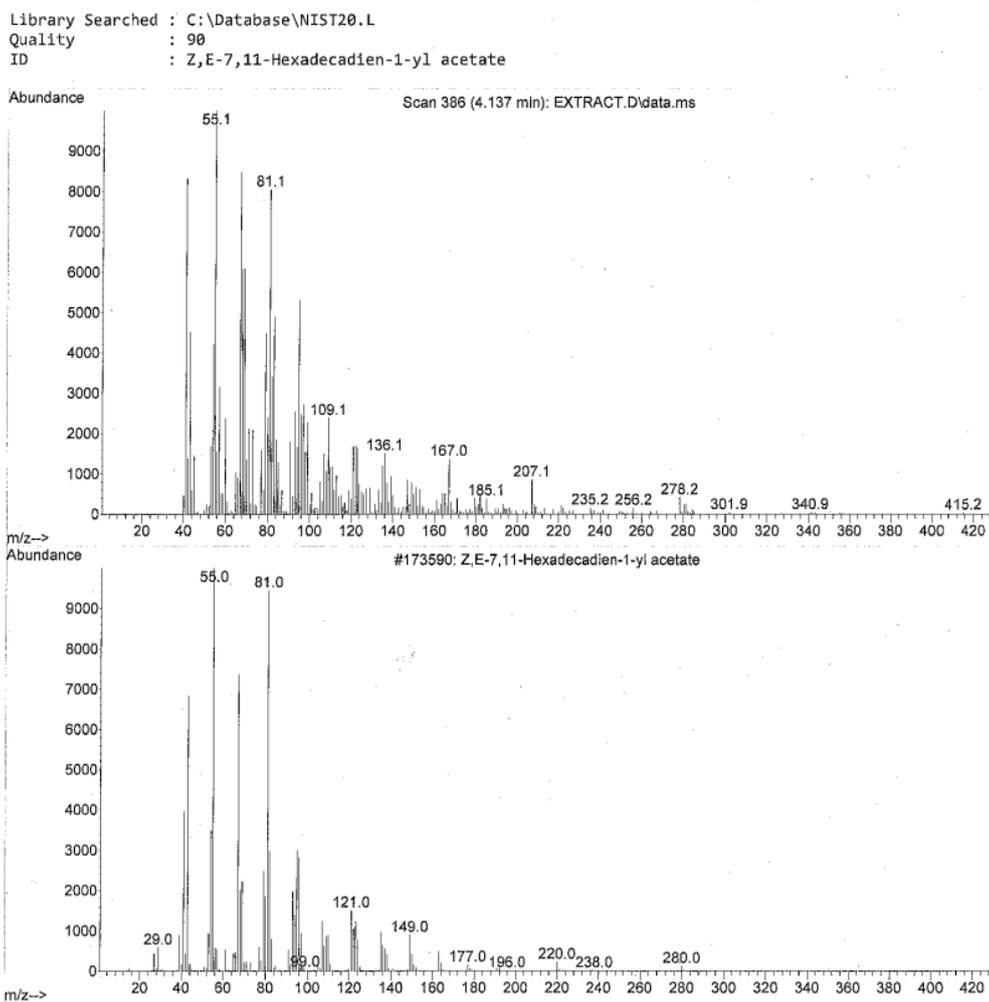
2. Mass spectrum matched with 9(Z),12(Z)-octadecadienoic acid.



### 3. Mass spectrum matched with octadecanoic acid.

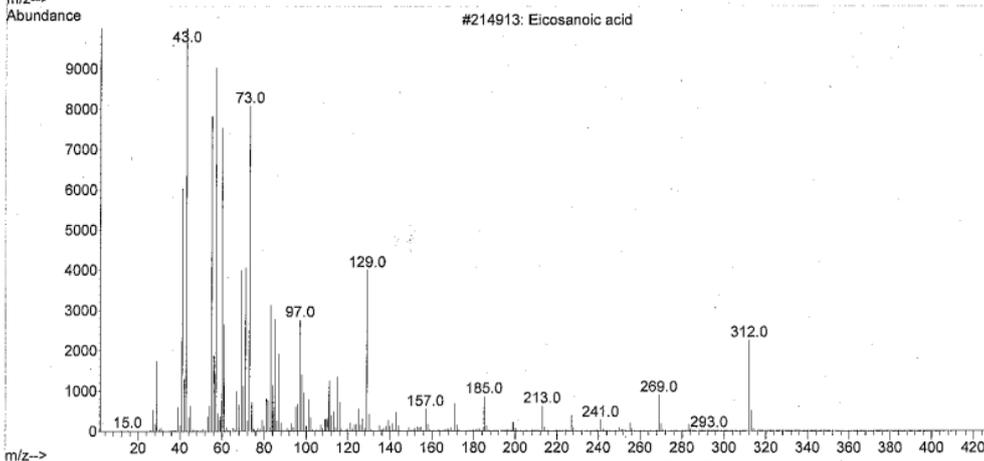
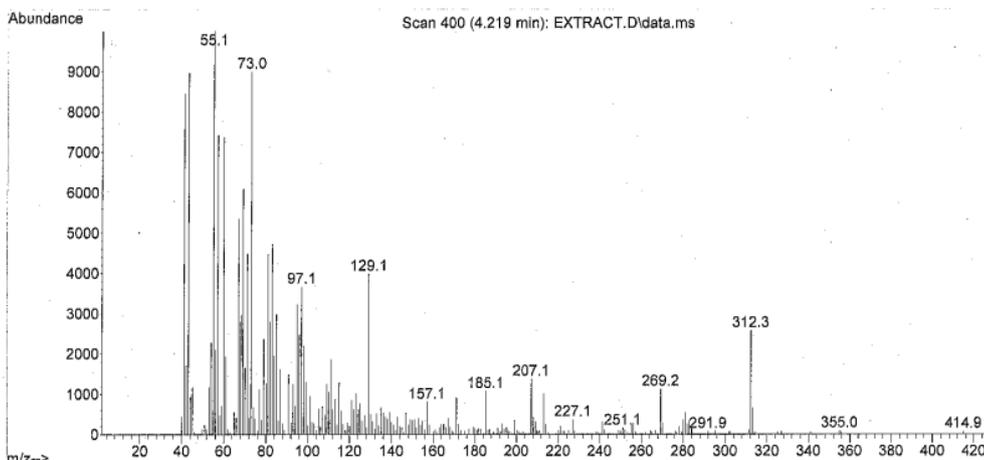


4. Mass spectrum matched with (Z,E)-7,11-hexadecadien-1-yl acetate.



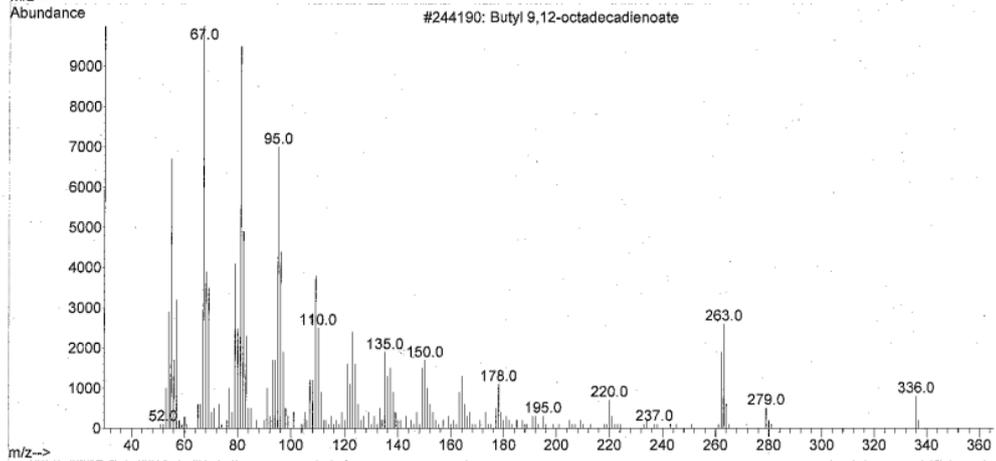
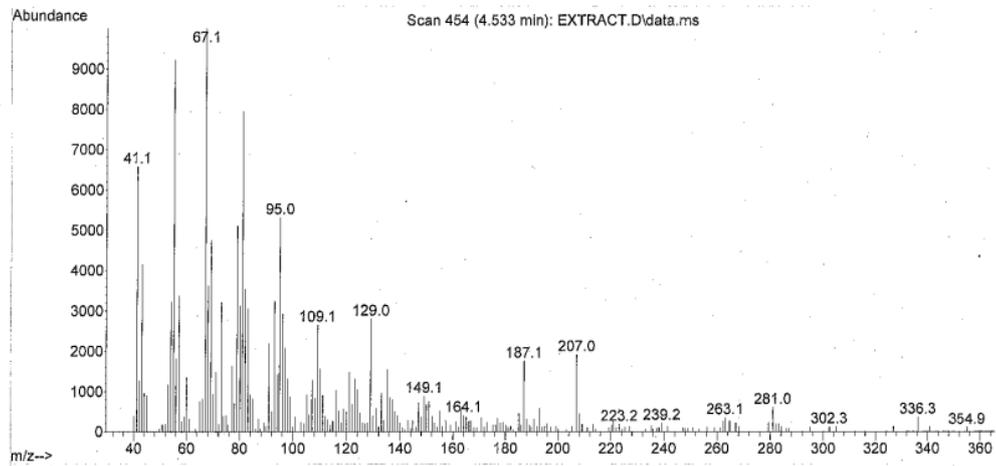
### 5. Mass spectrum matched with eicosanoic acid.

Library Searched : C:\Database\NIST20.L  
Quality : 97  
ID : Eicosanoic acid

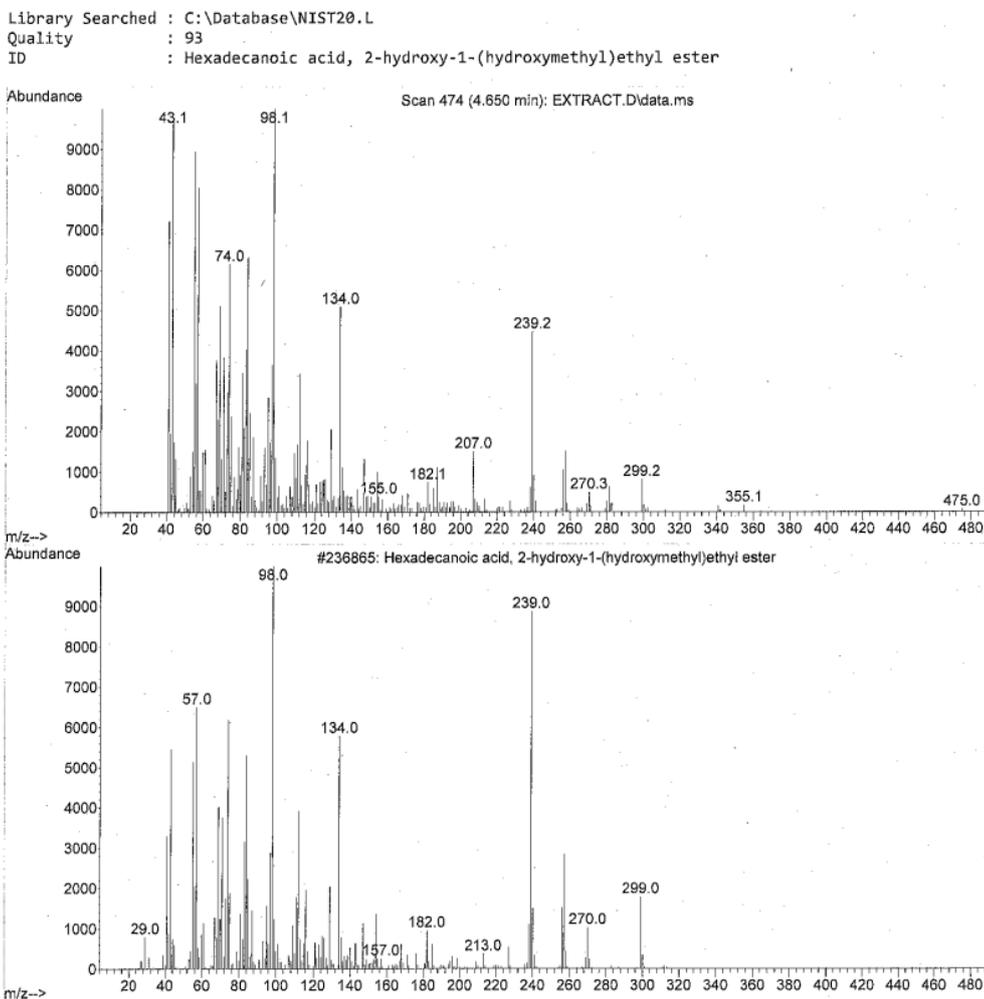


6. Mass spectrum matched with butyl 9,12-octadecadienoate.

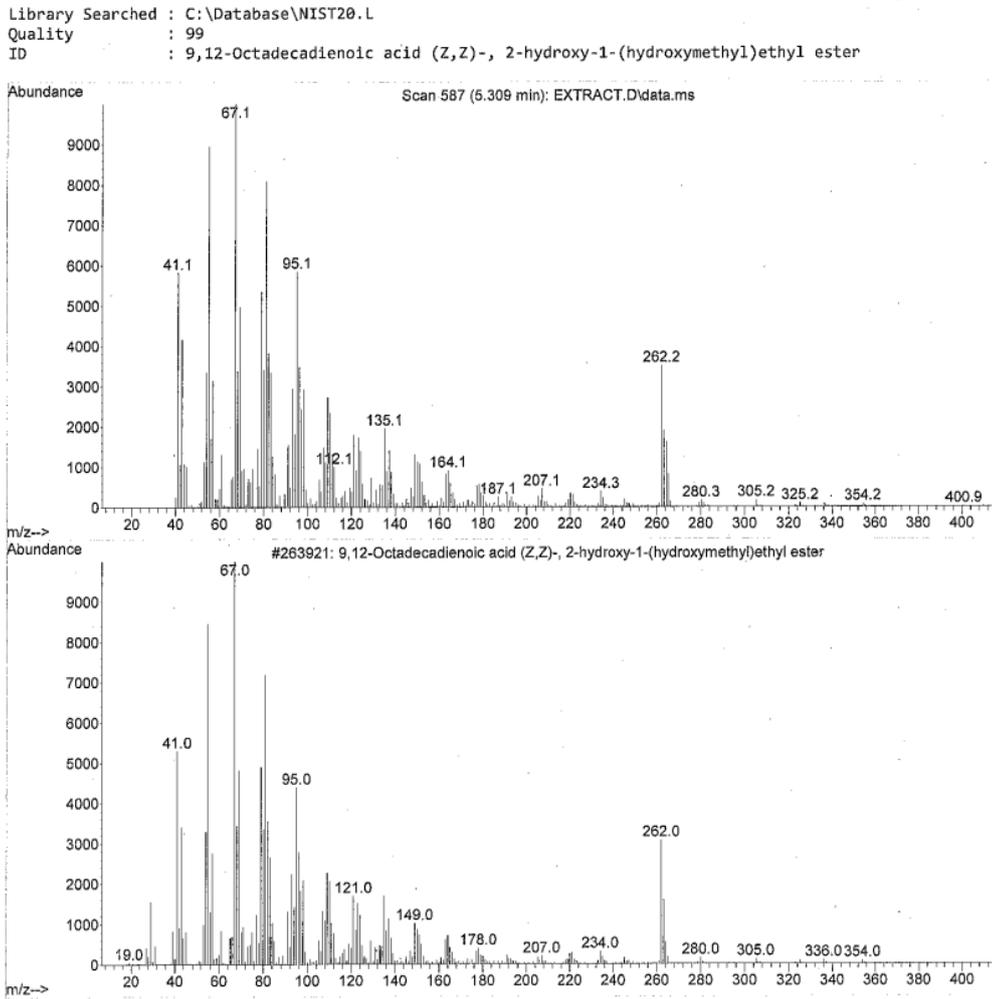
Library Searched : C:\Database\NIST0.L  
 Quality : 95  
 ID : Butyl 9,12-octadecadienoate



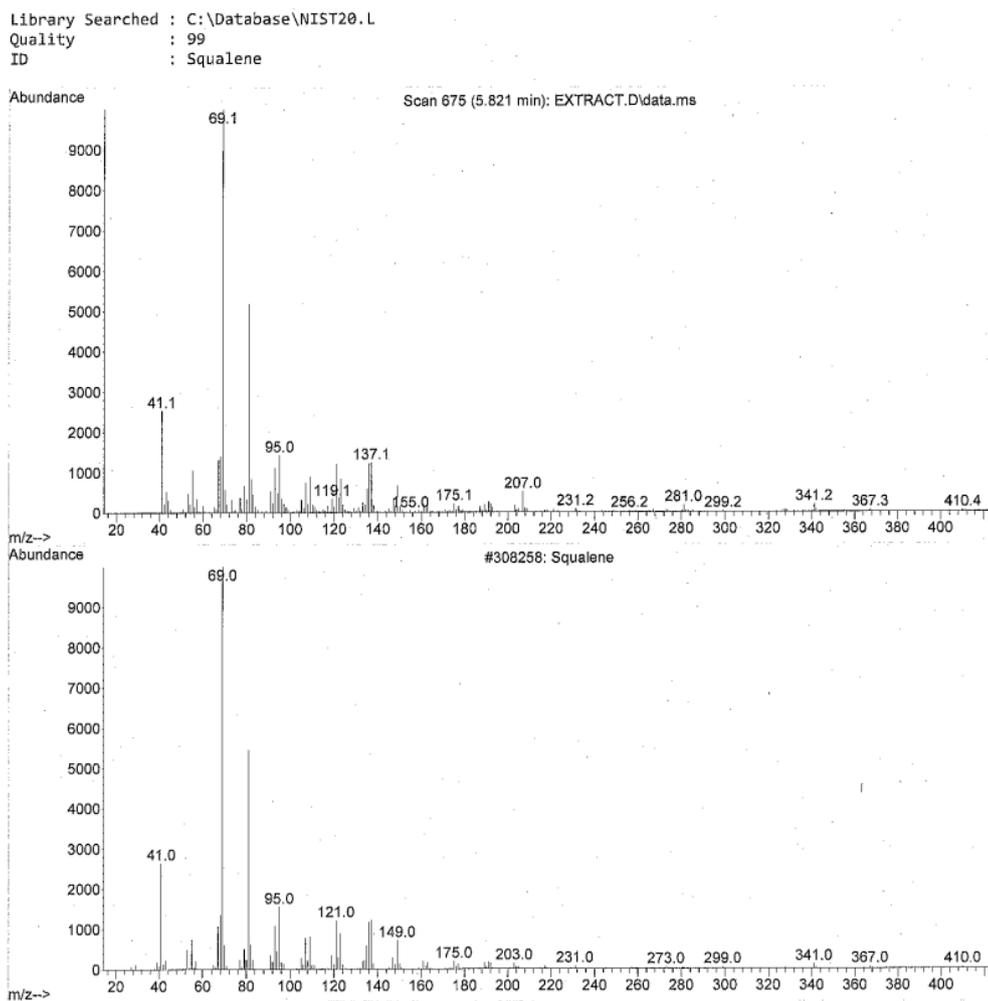
7. Mass spectrum matched with palmitin [ hexadecanoic acid, 2-hydroxy-1-(hydroxymethyl)ethyl ester].



8. Mass spectrum matched with linolein [9,12-octadecadienoic acid (Z, Z)-, 2-hydroxy-1-(Hydroxymethyl)ethyl ester].

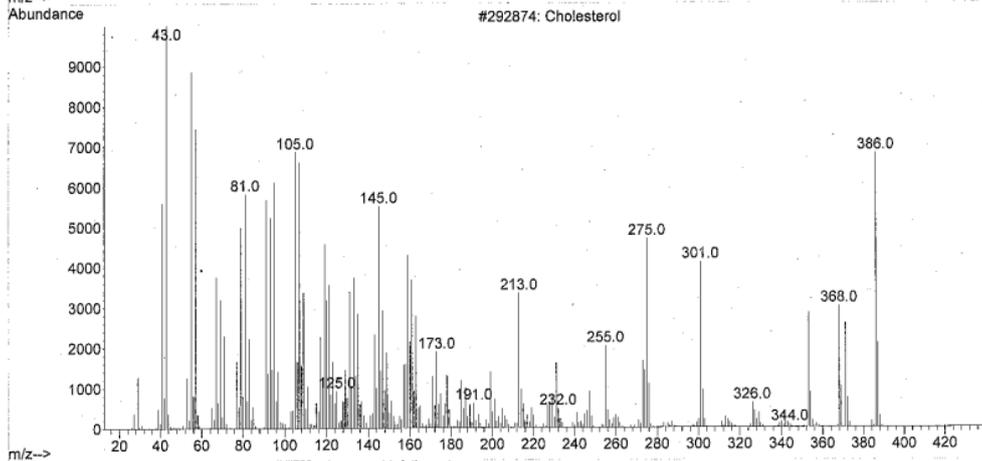
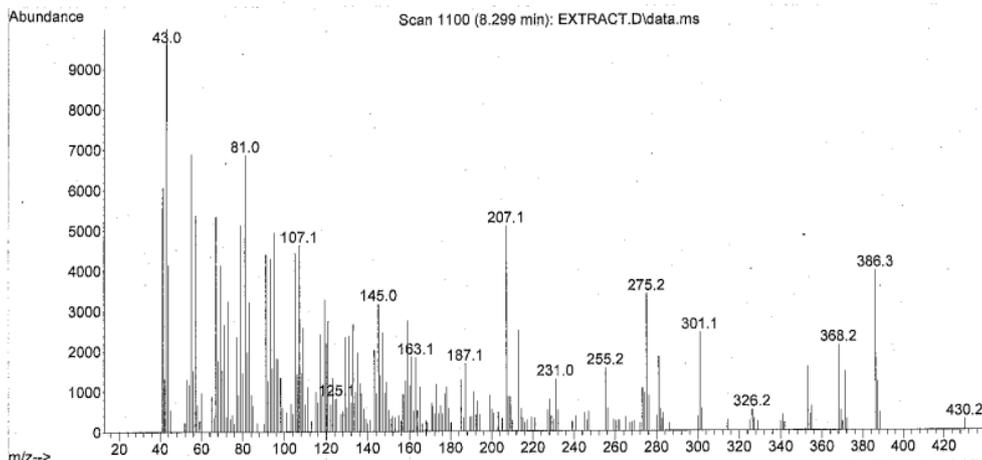


### 9. Mass spectrum matched with squalene.



### 10. Mass spectrum matched with cholesterol.

Library Searched : C:\Database\NIST20.L  
Quality : 99  
ID : Cholesterol



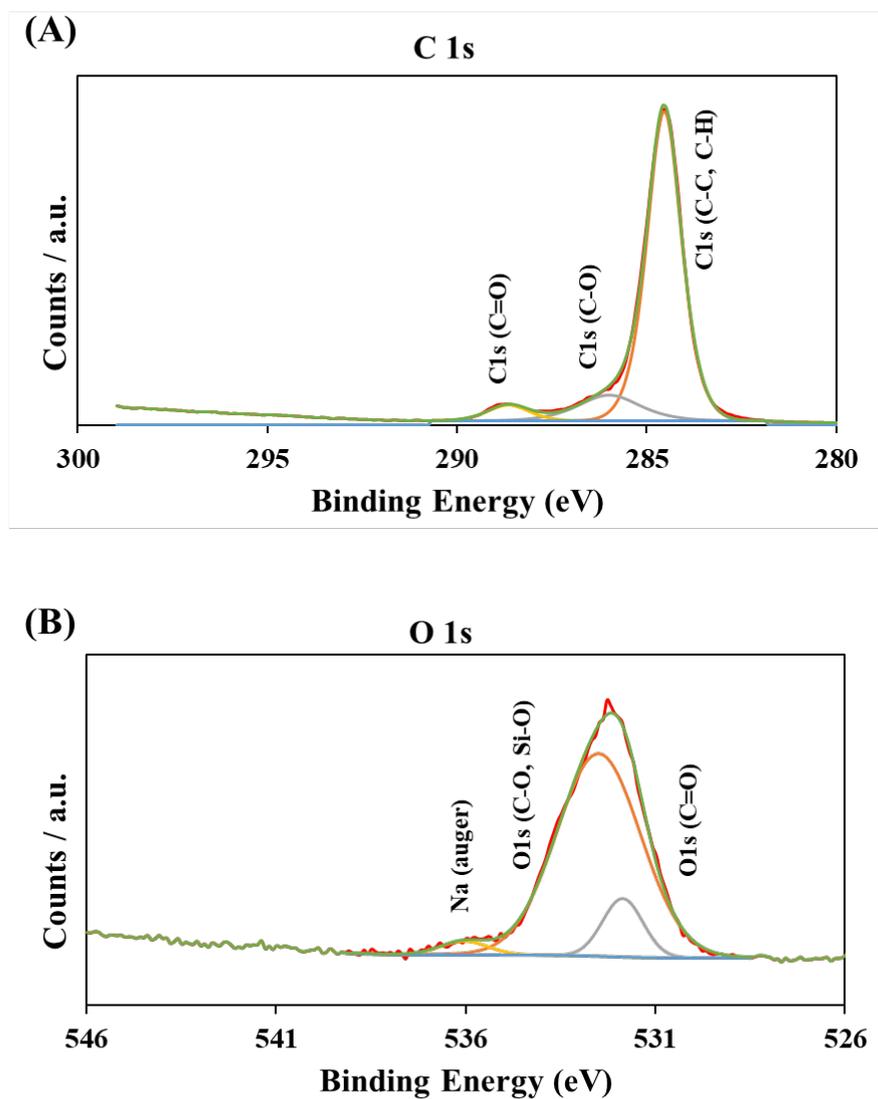


Figure S2. Deconvoluted (A) C 1s and (B) O 1s XPS spectra of CD-micelles.

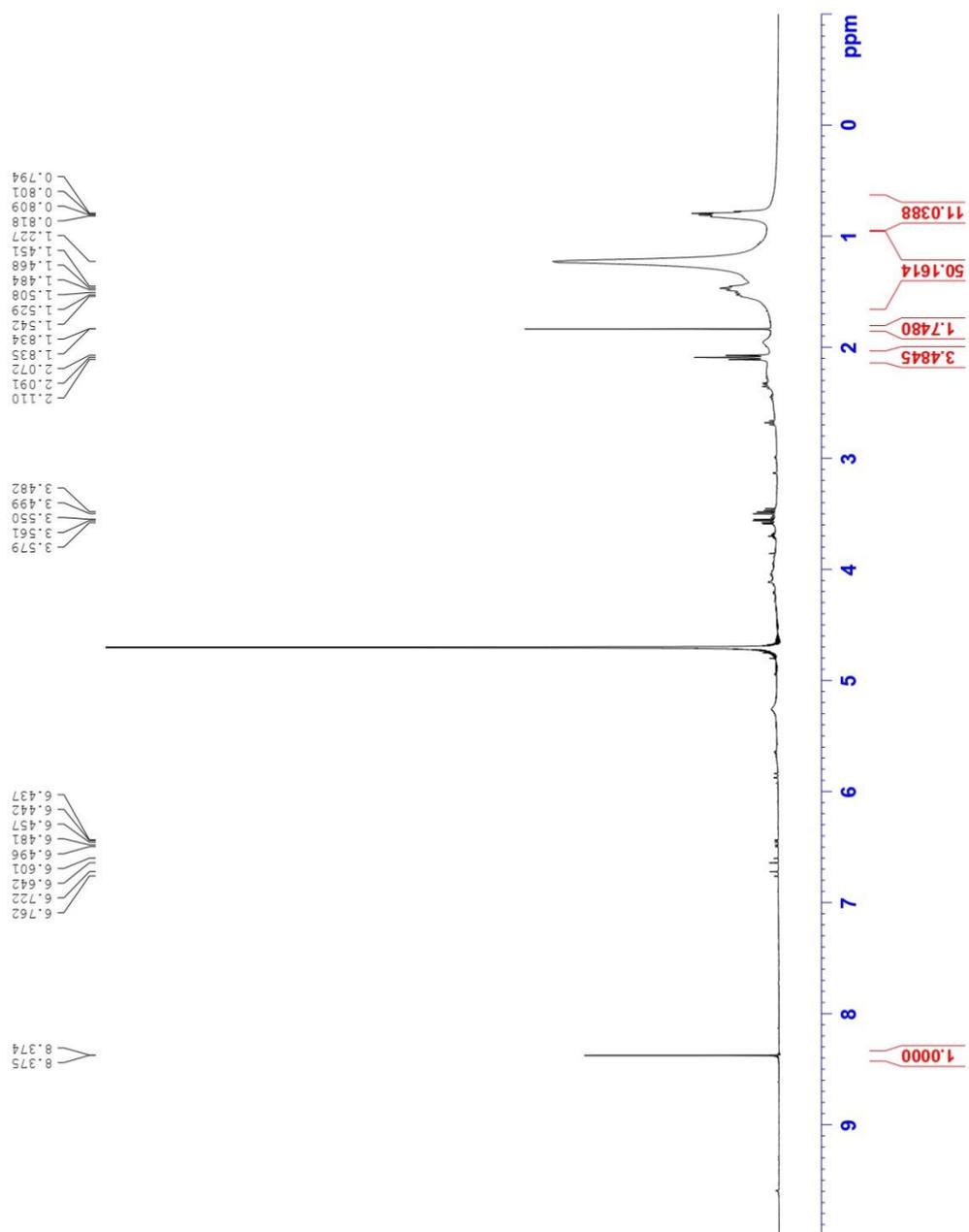


Figure S3. <sup>1</sup>H NMR spectrum of the CD-micelles

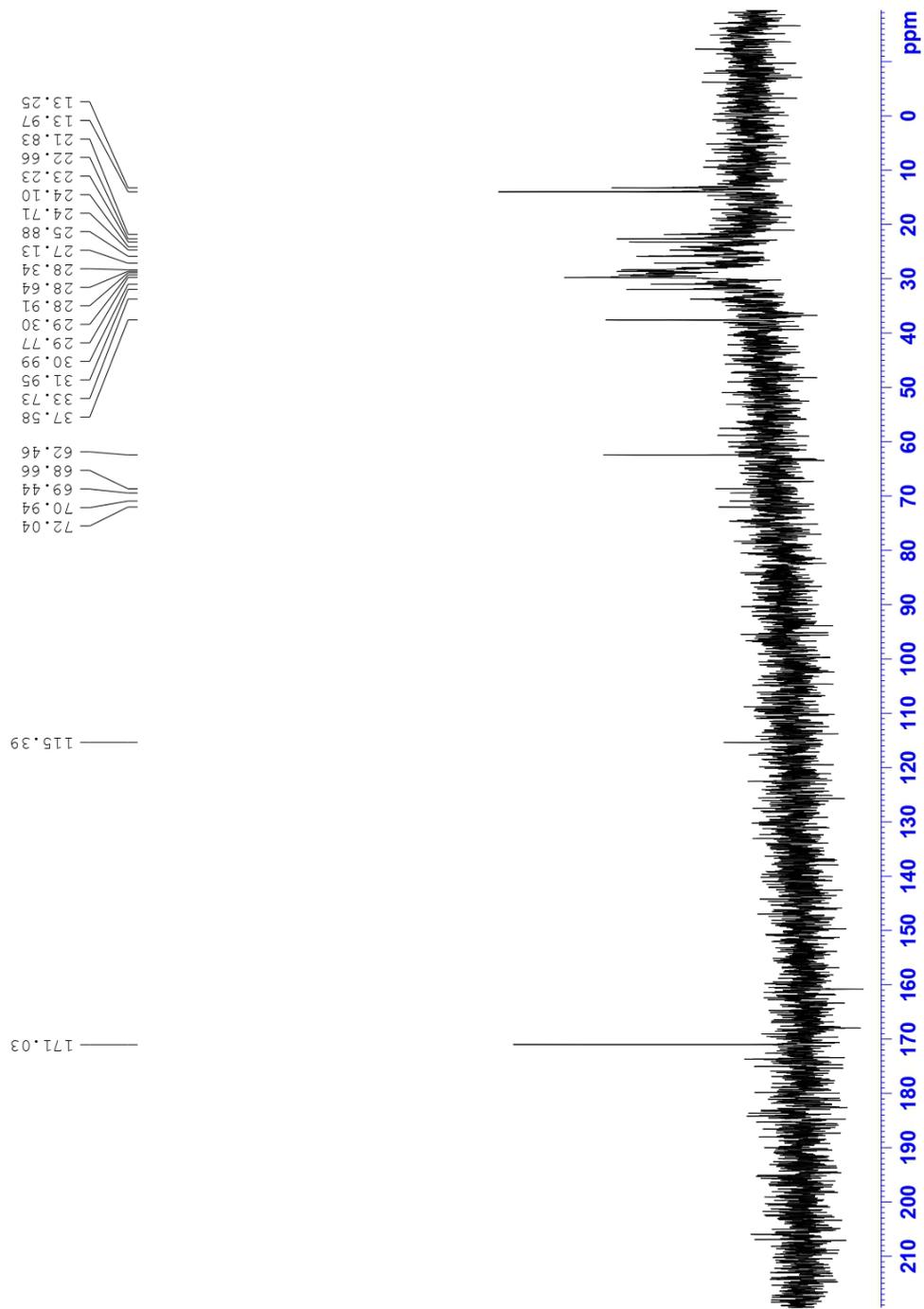


Figure S4.  $^{13}\text{C}$  NMR spectrum of the CD-micelles

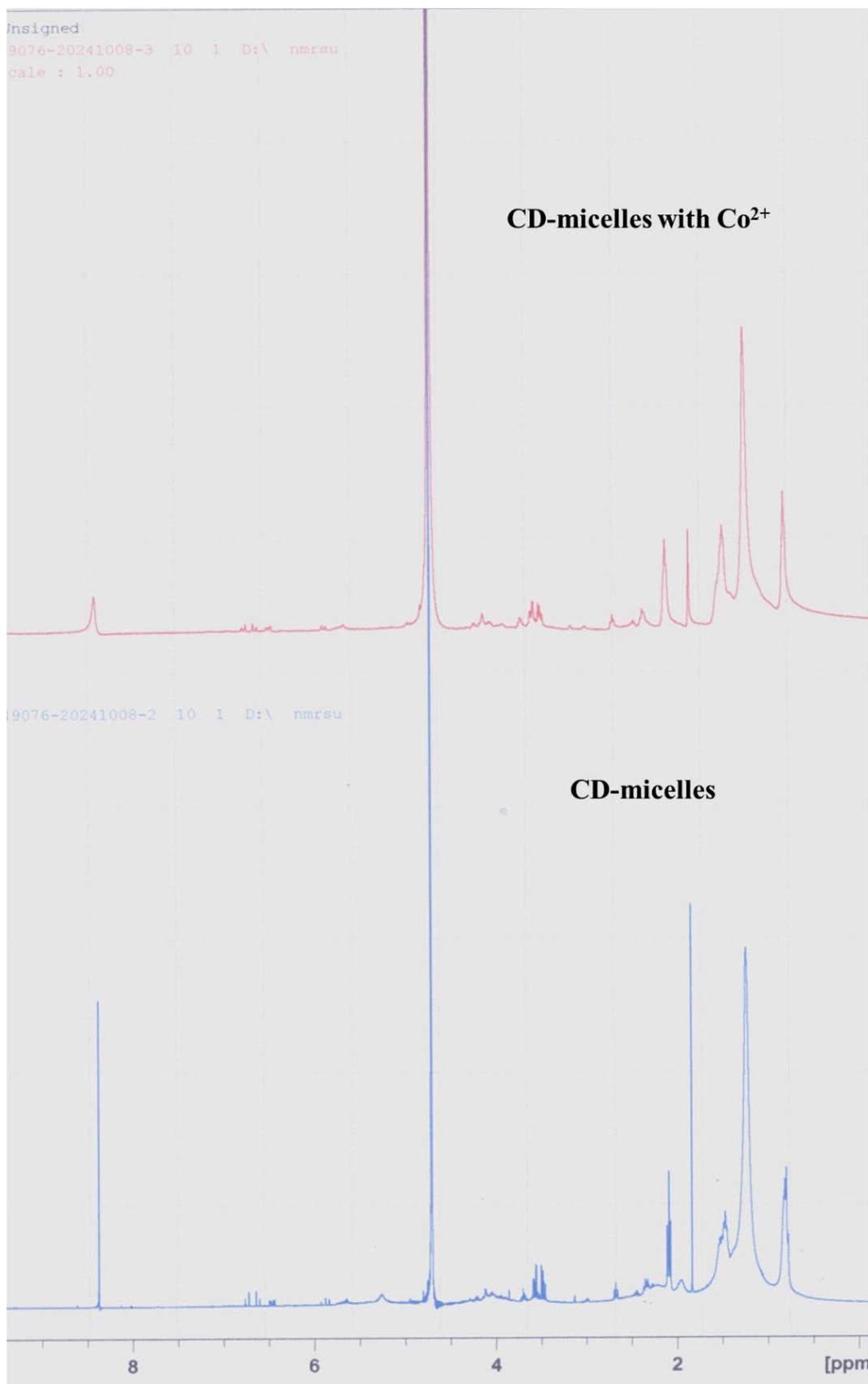


Figure S5. <sup>1</sup>H NMR spectra of the CD-micelles without (down) and with Co<sup>2+</sup> (up).

