
Supporting Material

SIRT1/Nrf2/NF- κ B Signaling Mediates Anti-Inflammatory and Anti-Apoptotic Activities of Oleanolic Acid in a Mouse Model of Acute Hepatorenal Damage

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Dr. Hossam
Sample VS-2-1 CDCl₃

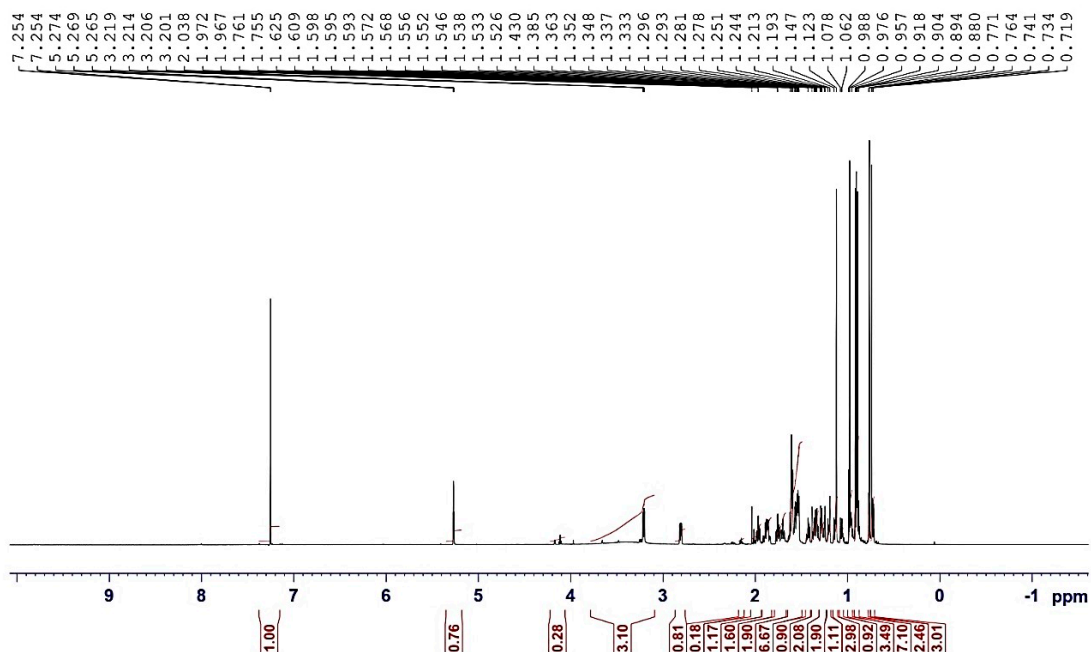


Figure S1: ¹H NMR spectrum of oleanolic acid (CDCl₃, 850 MHz).

Dr. Hossam
Sample VS-2-1 CDCl₃

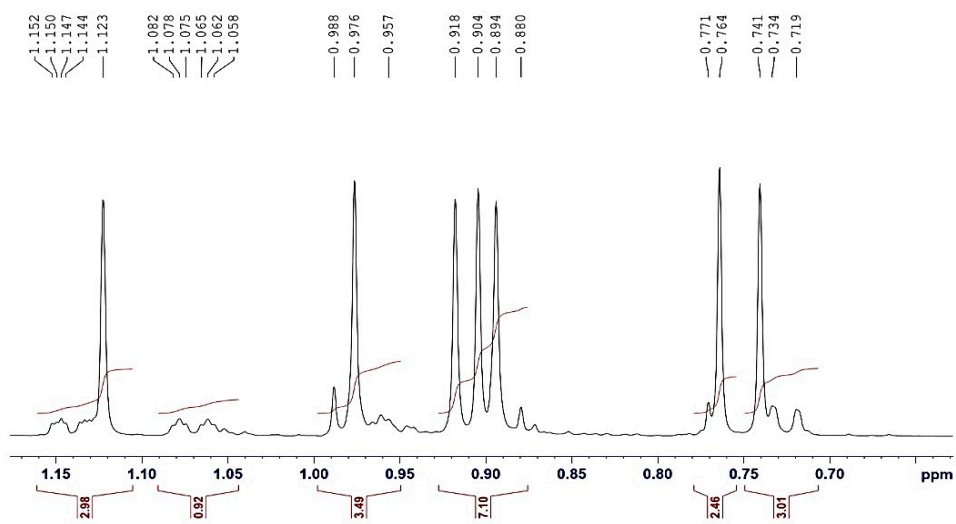


Figure S2: Expansion of ¹H NMR spectrum of oleanolic acid (CDCl₃, 850 MHz).

Dr. Hossam
Sample VS-2-1 CDCL₃

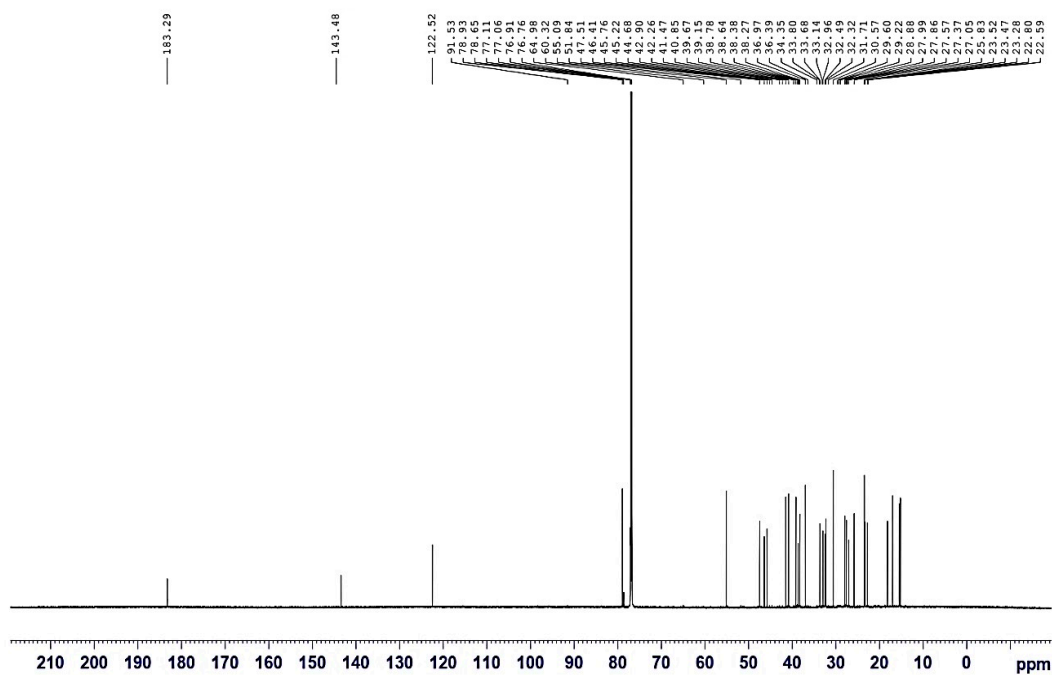


Figure S3: ¹³C NMR spectrum of oleanolic acid (CDCl₃, 214 MHz).

Dr. Hossam
Sample VS-2-1 CDCL₃

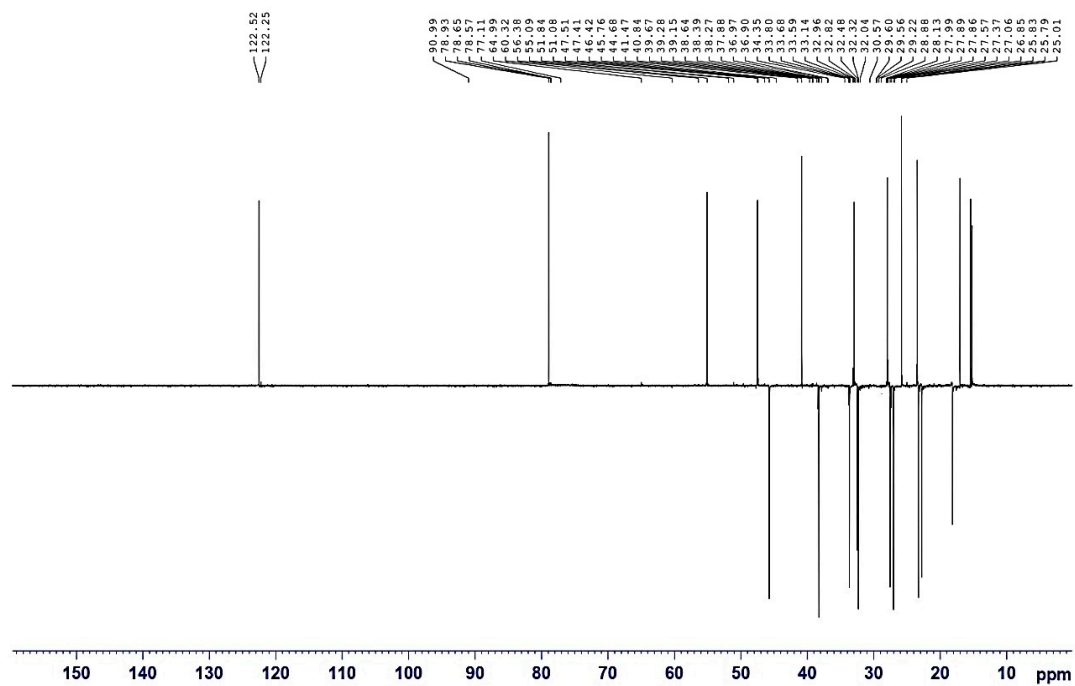


Figure S4: DEPT ¹³C NMR spectrum of oleanolic acid (CDCl₃, 214 MHz).

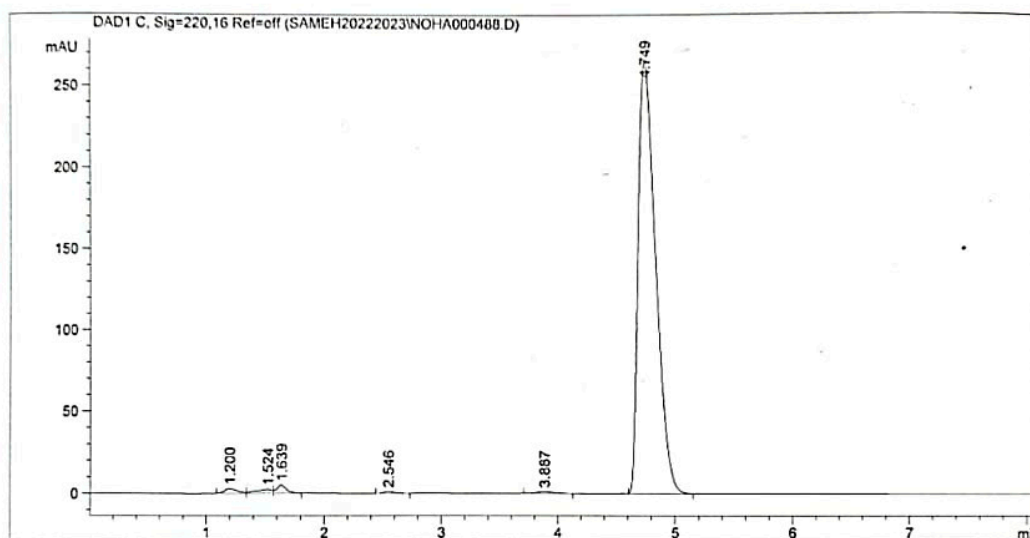
Table S1. NMR spectral data of oleanolic acid (CDCl₃, 850 and 214 MHz).

No.	δ_H (m, J in Hz)	δ_C
1	1.52 m	39.2 CH ₂
	1.08 m	
2	1.72 m	27.1 CH ₂
	1.54 m	
3	3.23 dd (11.2, 4.8)	78.9 CH
4	-	38.2 C
5	0.72 m	55.1 CH
6	1.42 m	18.2 CH ₂
	1.27 m	
7	1.48 m	32.5 CH ₂
	1.32 m	
8	-	38.6 C
9	1.53 m	47.5 CH
10	-	37.0 C
11	1.91 m	23.3 CH ₂
	1.86 m	
12	5.27 t (3.4)	122.5 CH
13	-	143.4 C
14	-	40.9 C
15	1.78 m	27.6 CH ₂
	1.20 m	
16	1.98 m	22.6 CH ₂
	1.62 m	
17	-	46.4 C
18	2.81 dd (13.6, 4.3)	41.5 CH
19	1.60 m	45.8 CH ₂
	1.15 m	
20	-	30.6 C
21	1.42 m	34.4 CH ₂
	1.28 m	
22	1.79 m	32.3 CH ₂
	1.58 m	
23	0.98 s	28.0 CH ₃
24	0.76 s	15.4 CH ₃
25	0.89 s	15.2 CH ₃
26	0.74 s	17.0 CH ₃
27	1.12 s	25.8 CH ₃
28	-	183.3 C
29	0.90 s	33.0 CH ₃
30	0.92 s	23.4 CH ₃

Data File C:\CHEM32\1\DATA\SAMEH20222023\NOHA000488.D
Sample Name: Sample Dr Gamal

```
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Acq. Operator   : SAMEH-NOHA                      Location : Vial 93
Acq. Instrument : Instrument 1
Injection Date  : 5/21/2023 3:09:25 PM             Inj Volume : 1.0 µl

Acq. Method     : C:\CHEM32\1\METHODS\SAMEH-2022-23.M
Last changed    : 5/21/2023 3:07:54 PM by SAMEH-NOHA
                  (modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\SAMEH-2022-23.M
Last changed    : 5/21/2023 3:18:17 PM by SAMEH-NOHA
                  (modified after loading)
Sample Info     : 50 % ACN
                  1 mL/Min
                  Zorbax 250x4.6 mm
=====
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Area Percent Report

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=====
Sorted By      :      Signal
Multiplier:    :      1.0000
Dilution:      :      1.0000
Use Multiplier & Dilution Factor with ISTDs
=====
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Signal 1: DAD1 C, Sig=220,16 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	1.200	BV	0.1152	21.80693	2.91725	0.7729
2	1.524	VV	0.1238	21.22238	2.33968	0.7522
3	1.639	VB	0.0832	27.66283	4.94669	0.9805

Instrument 1 5/21/2023 3:18:38 PM SAMEH-NOHA

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMEH20222023\NOHA000400.D
Sample Name: Sample Dr Gamal

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
4	2.546	BB	0.0950	6.55862	1.04888	0.2325
5	3.887	BB	0.1592	11.08350	1.03271	0.3929
6	4.749	BB	0.1621	2732.97021	265.38626	96.8690

Totals : 2021.30448 277.67147

*** End of Report ***

Figure S5: HPLC chromatogram of oleanolic acid.