

Supplementary Materials

Chemical Constituents of *Callistemon subulatus* and Their Anti-pancreatic Cancer Activity Against Human PANC-1 Cell Line

Juthamart Maneenet, Ahmed M. Tawila, Ashraf M. Omar, Nguyen Duy Phan, Chiharu Ojima, Masahiro Kuroda, Mao Sato, Mio Mizoguchi, Ikue Takahashi and Suresh Awale *

Natural Drug Discovery Laboratory, Institute of Natural Medicine, University of Toyama, 2630 Sugitani, Toyama 930-0194, Japan.

* **Correspondence:** suresh@inm.u-toyama.ac.jp; Tel: +81-76-434-7640. Fax: +81-76-434-7640.

Table of Contents

Figure S1. ^1H NMR spectrum of subulatone A (1)	3
Figure S2. ^{13}C NMR spectrum of subulatone A (1)	3
Figure S3. HMQC spectrum of subulatone A (1)	4
Figure S4. HMBC spectrum of subulatone A (1)	5
Figure S5. HRFABMS spectrum of subulatone A (1)	6
Figure S6. IR spectrum of subulatone A (1)	7
Figure S7. UV spectrum of subulatone A (1)	8
Figure S8. Three independent experiments on the effect of myrtucommulone A (2) on proteins related to the PI3K/Akt/mTOR and autophagy signaling pathways in NDM and DMEM.	9

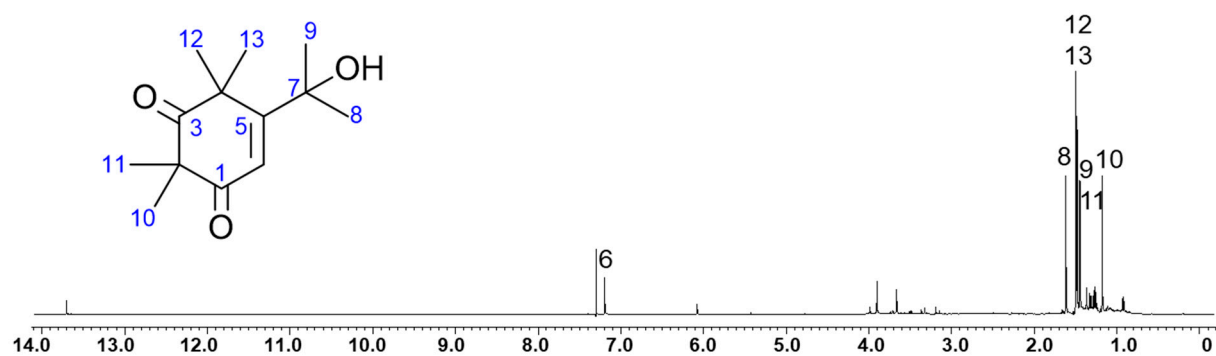


Figure S1. ^1H NMR spectrum of subulatone A (1).

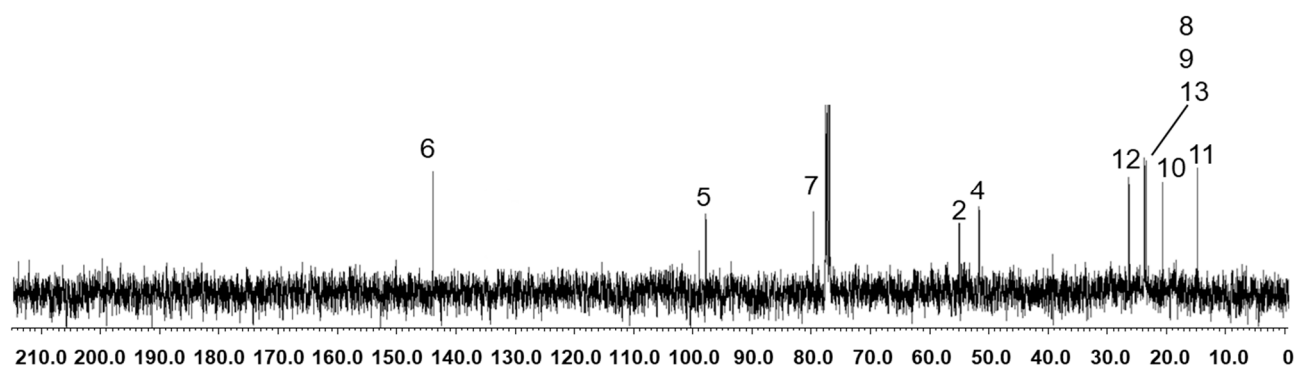


Figure S2. ^{13}C NMR spectrum of subulatone A (1).

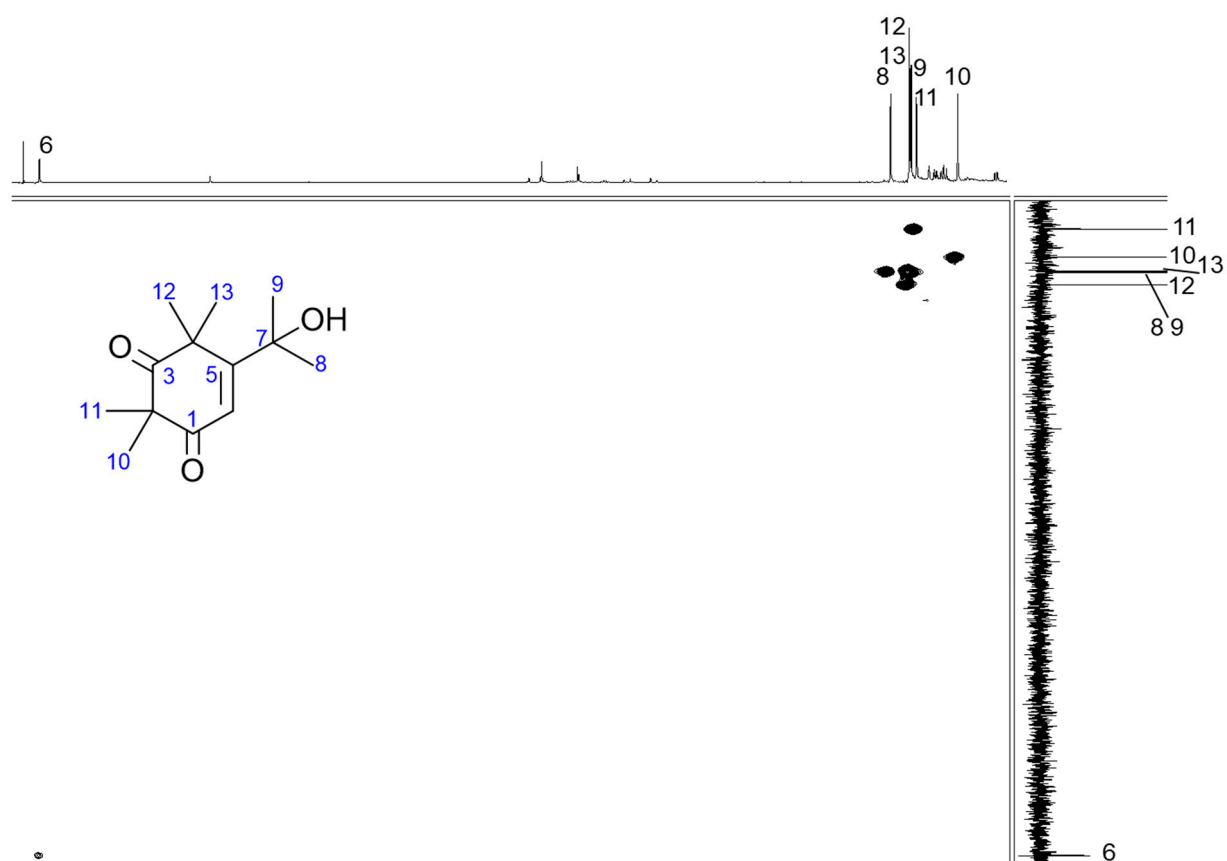


Figure S3. HMQC spectrum of subulatone A (1).

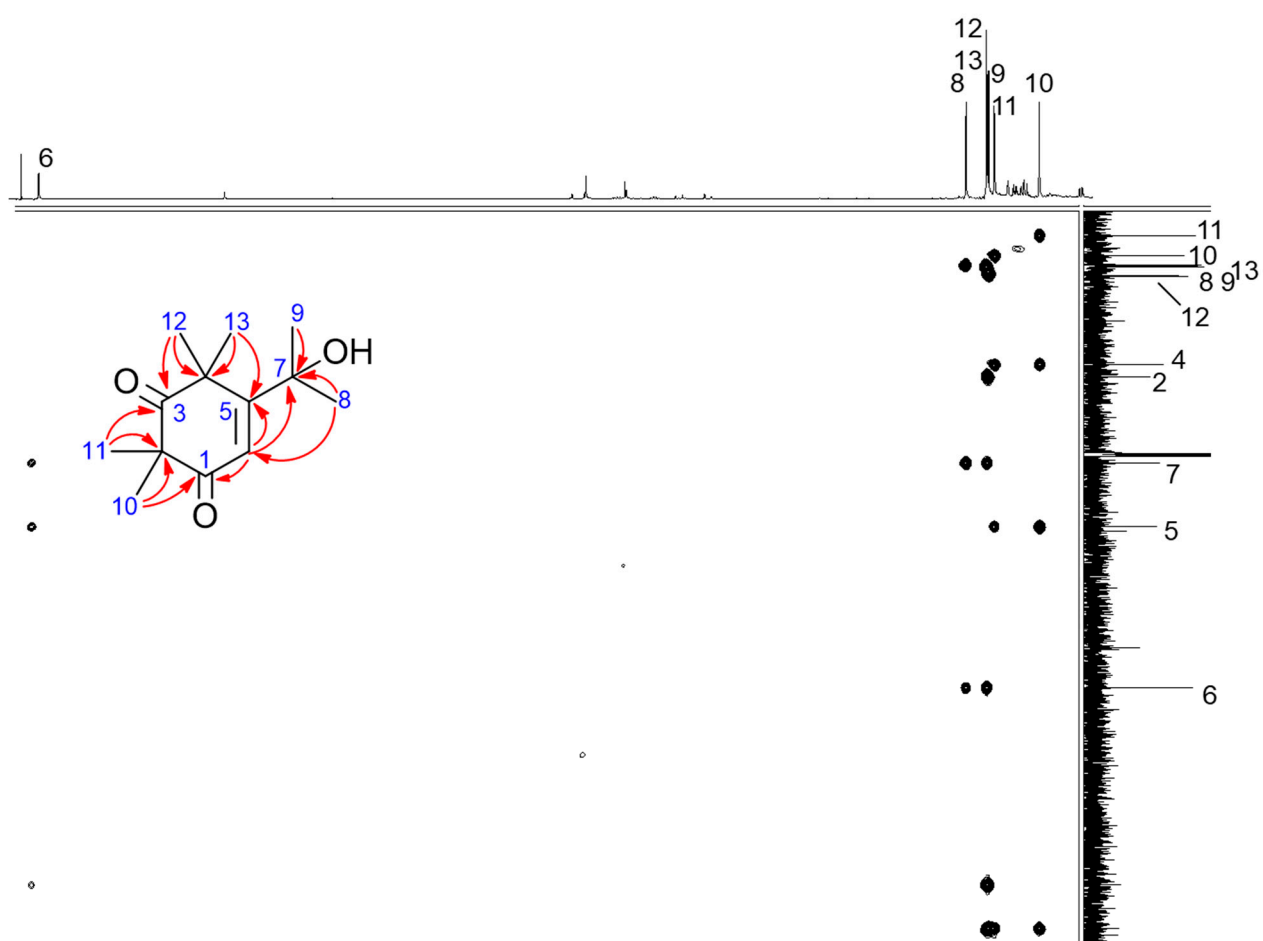
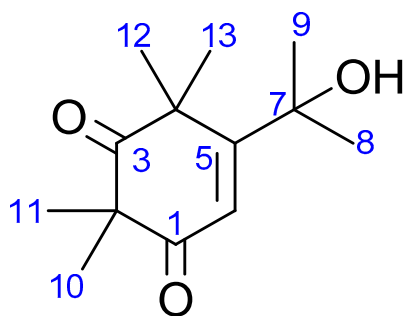


Figure S4. HMBC spectrum of subulatone A (1).



File: Cs-44002	Date Run: 6-17-2020 (Time Run: 12:35:25)				
Sample: --	Ionization mode: EI+				
Instrument: AX505W					
Inlet: Direct	R.T.: 3.1				
Scan: 65					
Base: m/z224; 28%FS TIC: 13825	#Ions: 8				
Selected Isotopes : H C ₁₃ ⁰ ₁₃	Error Limit : 20 mmu	Unsaturation Limits : 0 to 50			
<u>Measured Mass</u>	<u>% Base</u>	<u>Formula</u>	<u>Calculated Mass</u>	<u>Error</u>	<u>Unsaturation</u>
224.21432	100.0%	C ₁₃ H ₂₀ O ₃	224.14000	-0.3	4.0

Figure S5. HRFABMS spectrum of subulatone A (1).

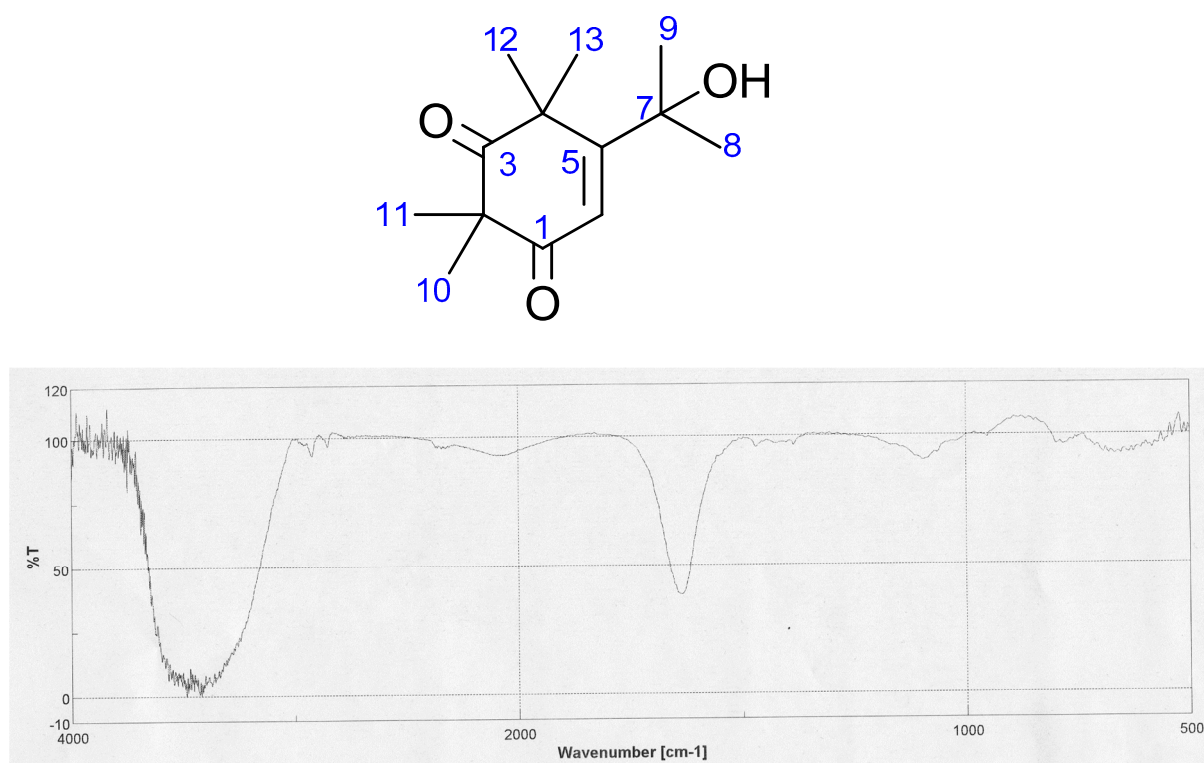
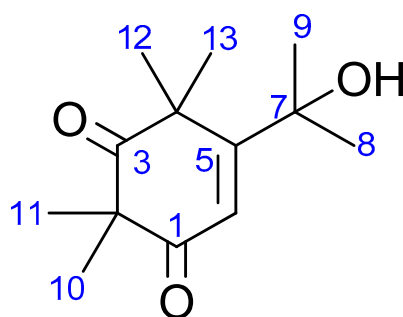
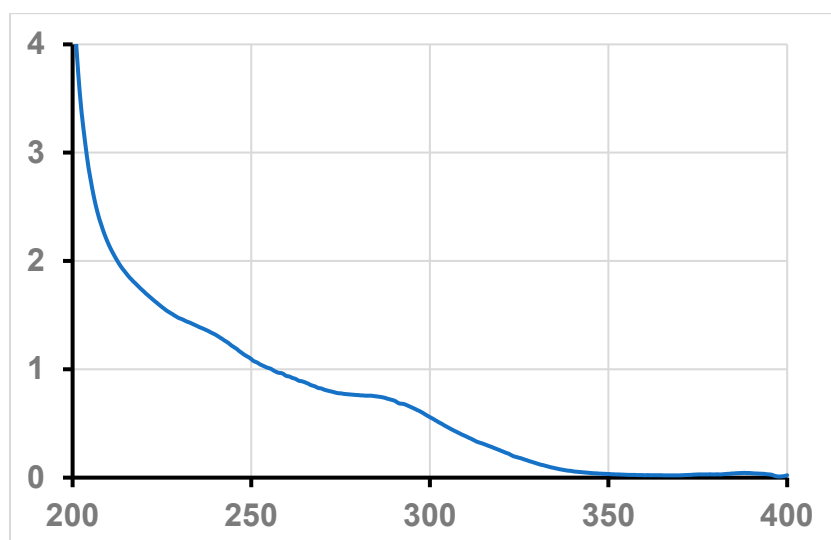


Figure S6. IR spectrum of subulatone A (1).



Peaks	1	2
λ_{max} (nm)	286	238
Absorbance at λ_{max}	2.60	1.35
Log [$\epsilon(\text{M}^{-1}\text{cm}^{-1})$]	4.21	4.48

Figure S7. UV spectrum of subulatone A (1).

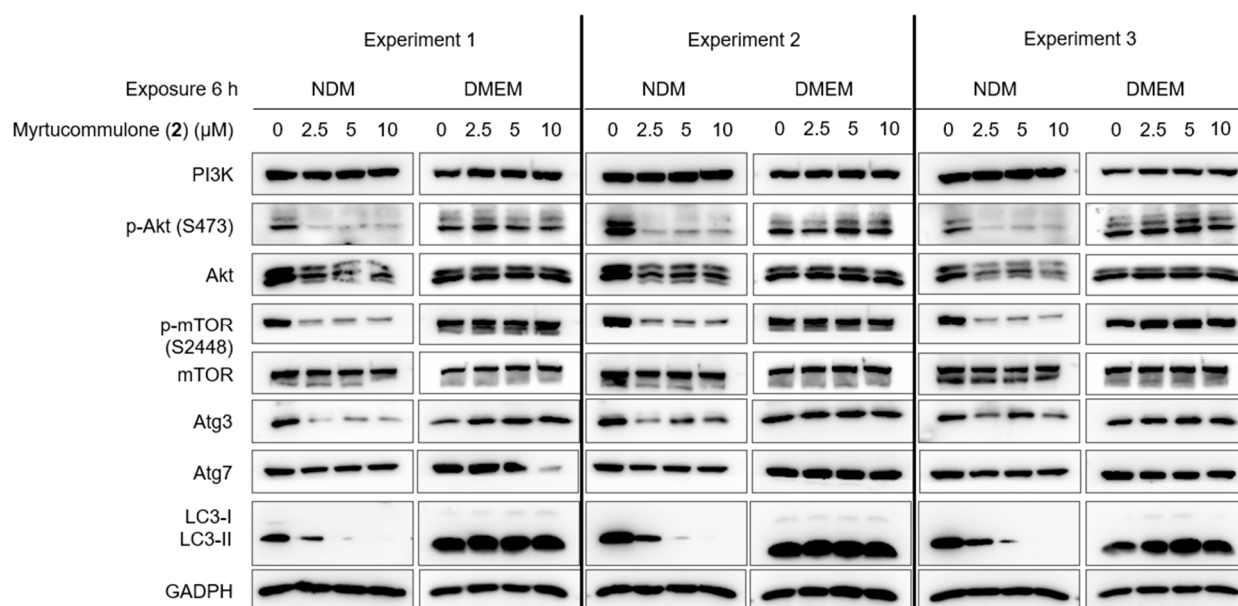


Figure S8. Three independent experiments on the effect of myrtucommulone A (2) on proteins related to the PI3K/Akt/mTOR and autophagy signaling pathways in NDM and DMEM.