

## Supplementary Material

### **Anatolicin, a Highly Potent and Selective Cytotoxic Sesquiterpene Coumarin, from the Root Extract of *Heptaptera anatolica***

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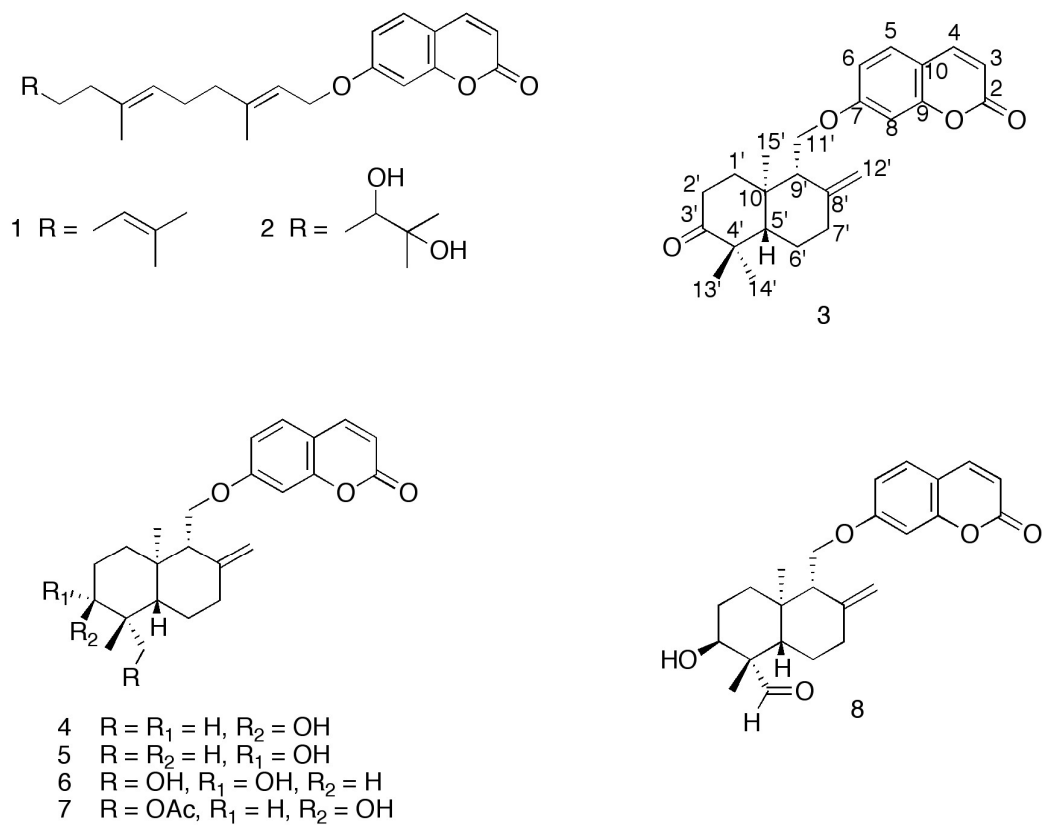
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**Fig. S1** Structures of sesquiterpene coumarins isolated from the root extract of *Heptaptera anatolica*.

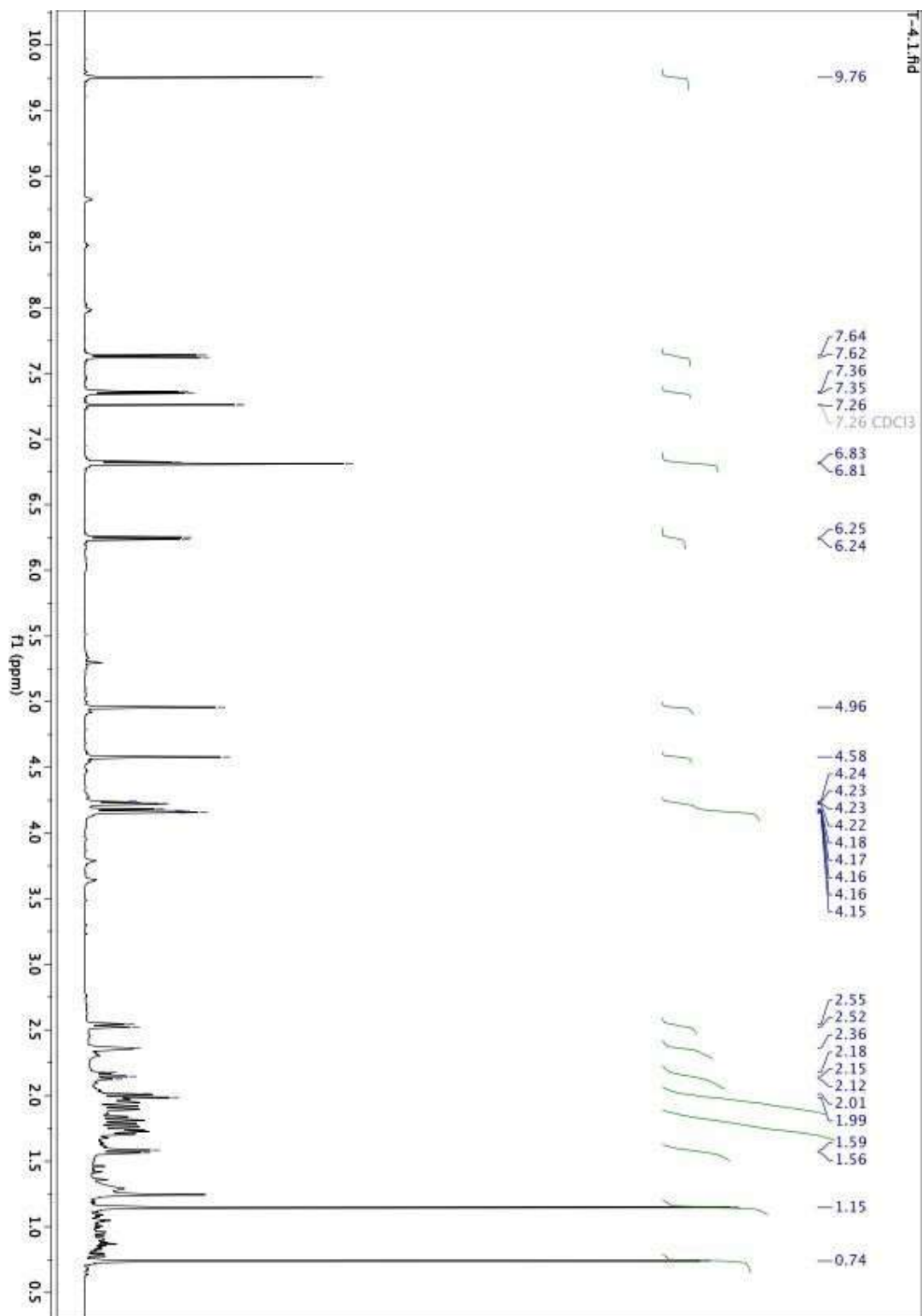


Fig. S2 <sup>1</sup>H NMR spectrum (600 MHz, CDCl<sub>3</sub>) of anaticin (**8**)

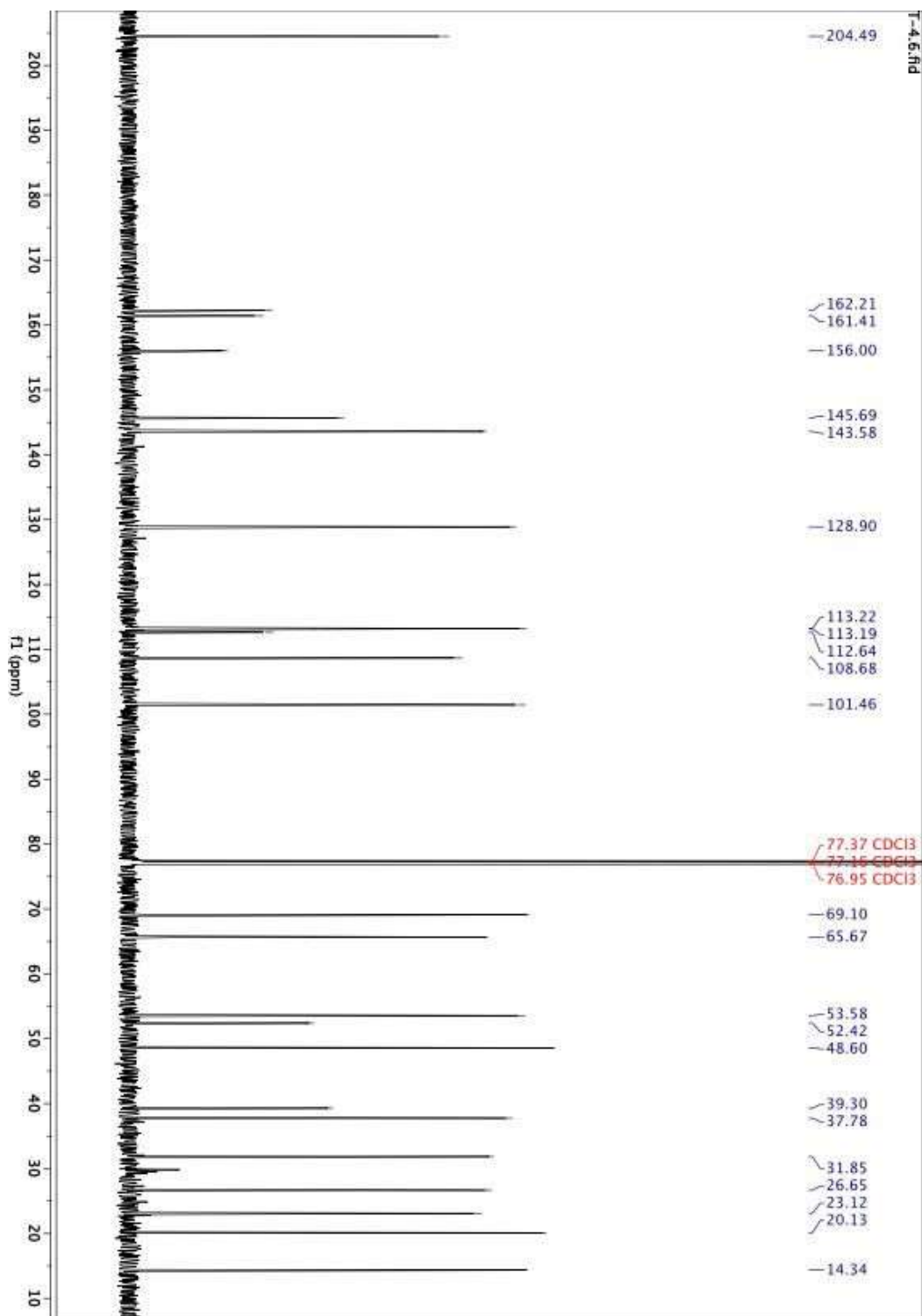
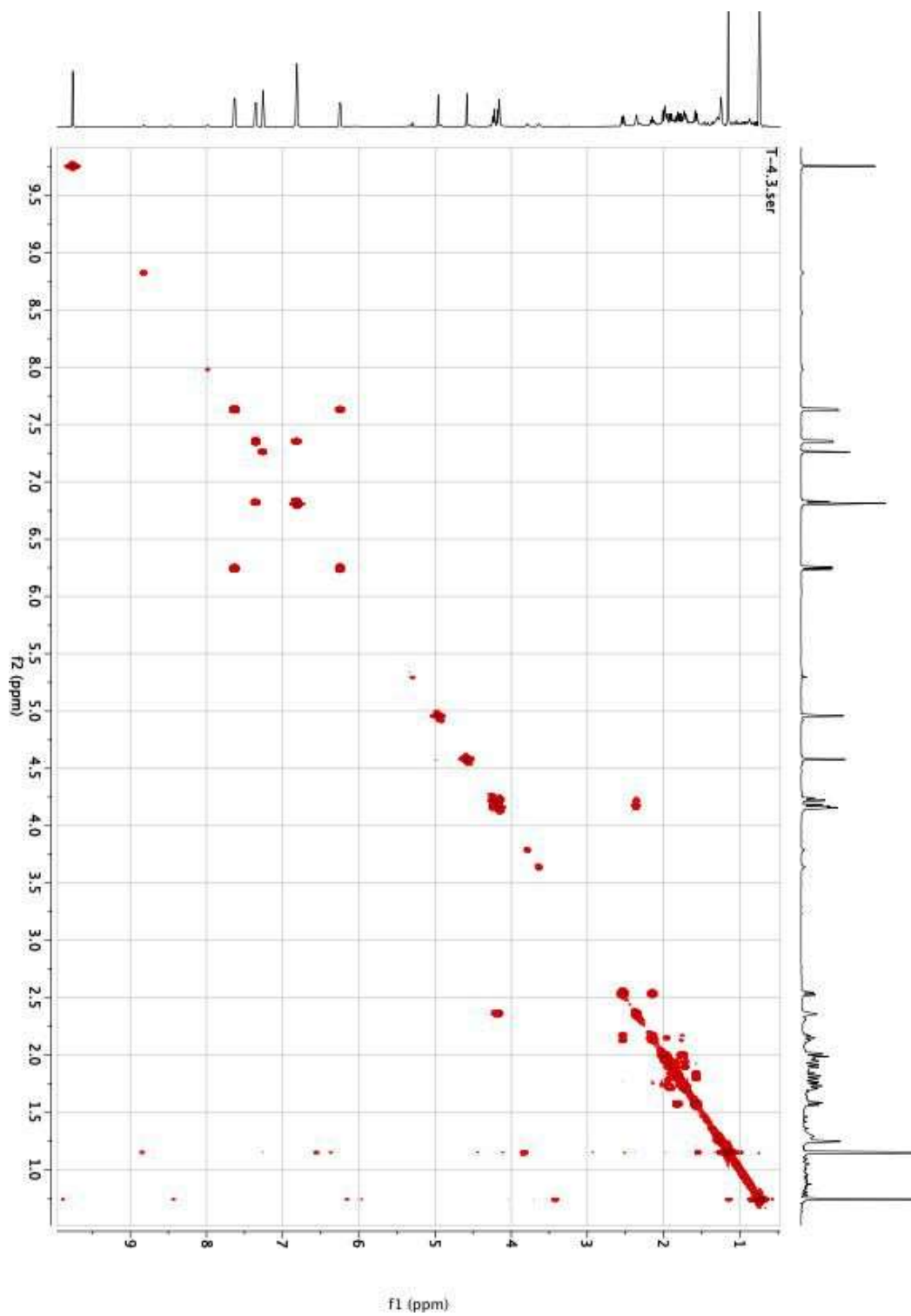


Fig. S3 <sup>13</sup>C NMR spectrum (125 MHz, CDCl<sub>3</sub>) of anaticin (**8**)



**Fig. S4** 2D COSY spectrum of anatoxicin (**8**)

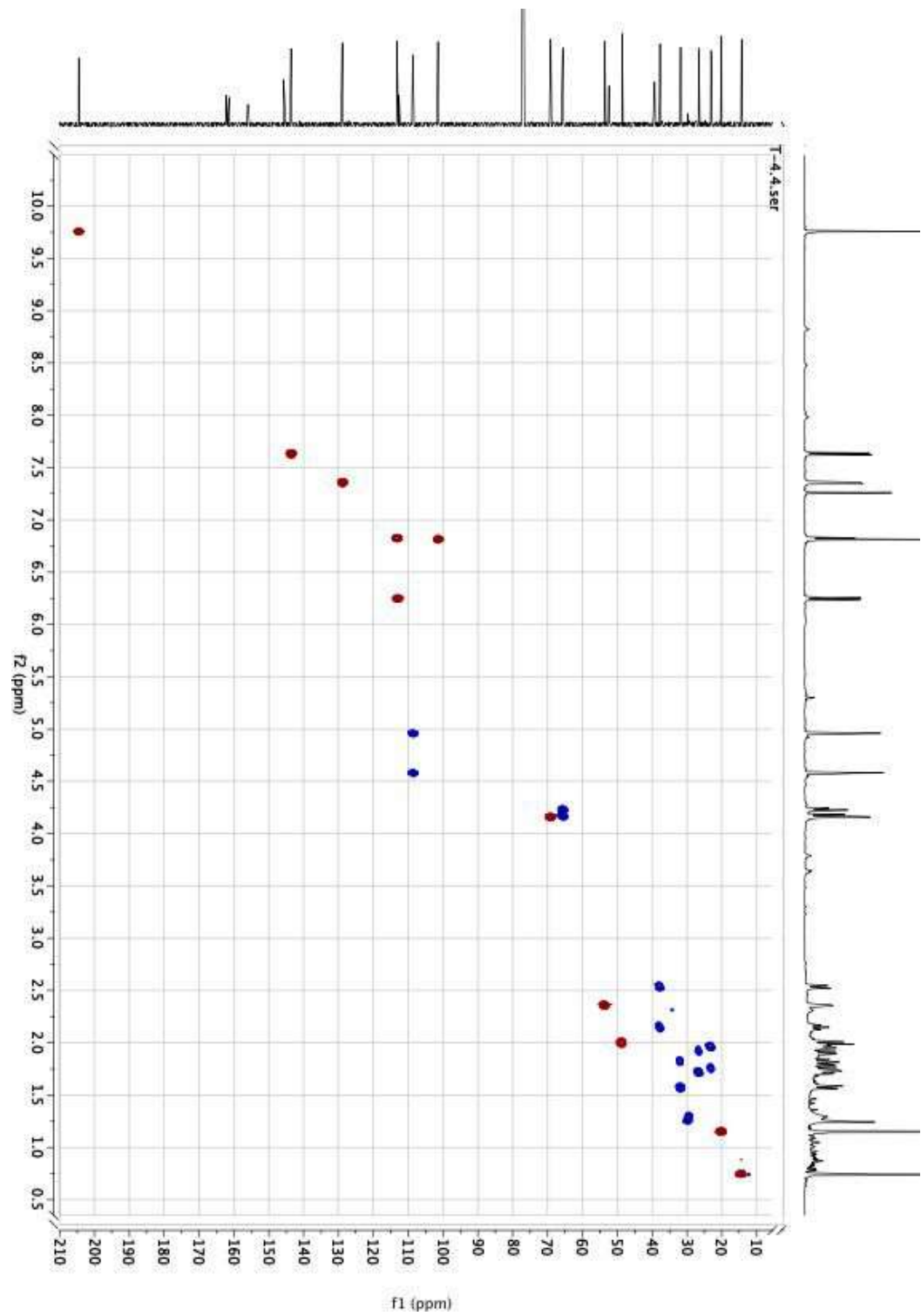
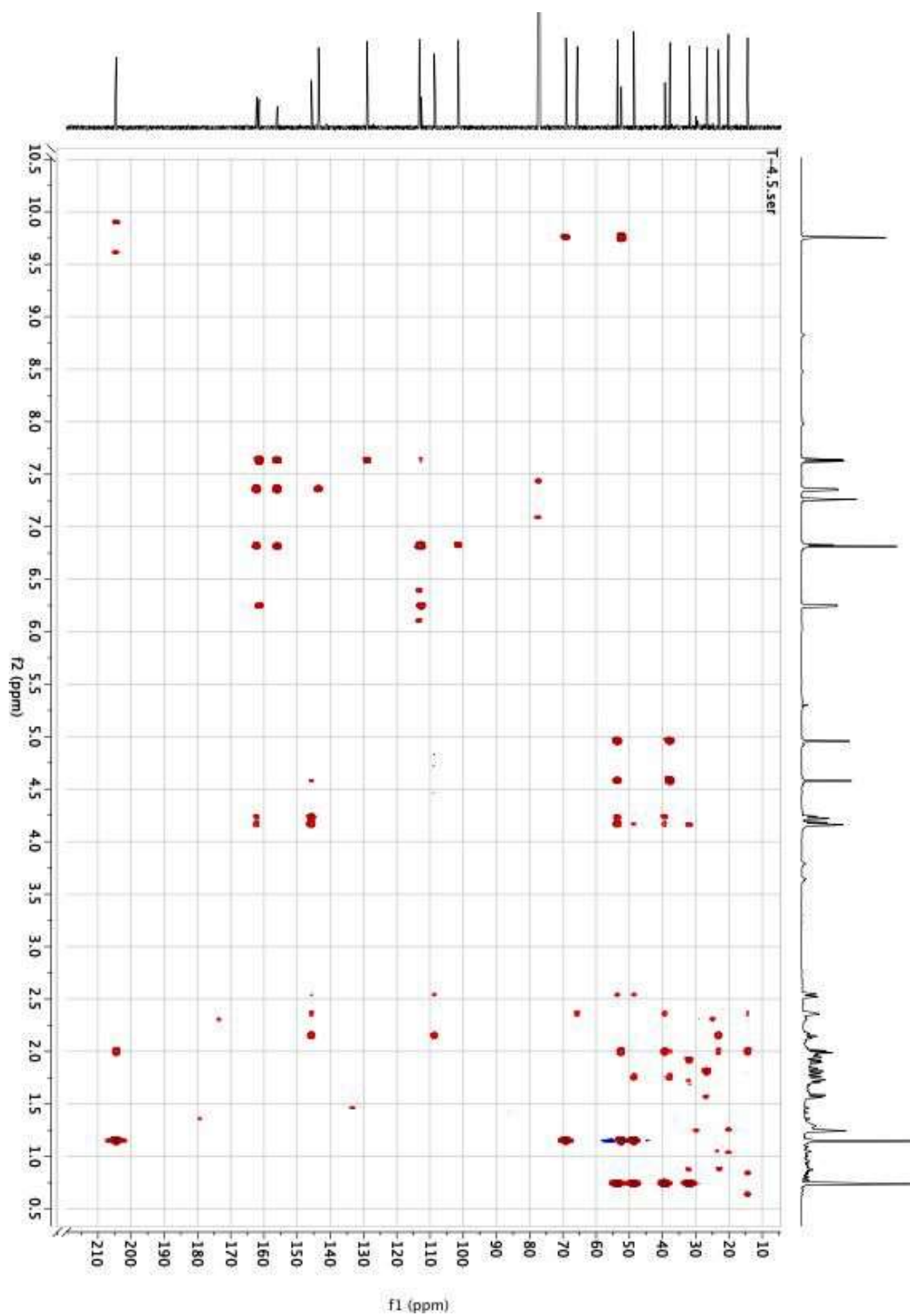
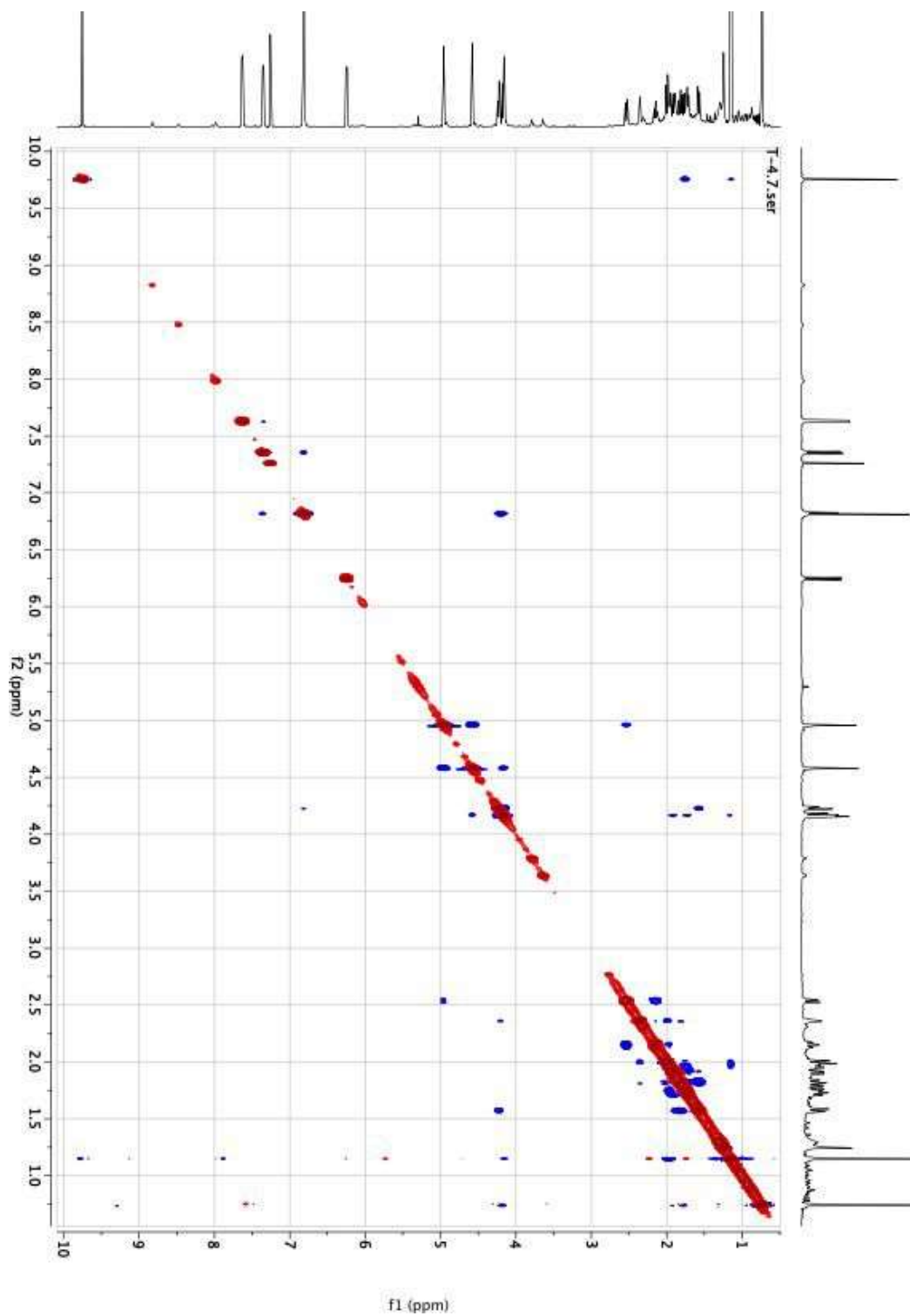


Fig. S5 2D HSQC spectrum of anaticin (8)



**Fig. S6** 2D HMBC spectrum of anatoxicin (**8**)





**Fig. S7** 2D NOESY spectrum of anaticin (**8**)

## Qualitative Compound Report

Data File	1011069F.d	Sample Name	1011069F
Sample Type	Sample	Position	Vial 41
Instrument Name	Instrument 1	User Name	Heidi
Acq Method	SMacms_DESI(+)_Centroid.m	Acquired Time	1/15/2018 11:21:35 AM
IRM Calibration Status	Success	DA Method	Heidi.m
Comment			

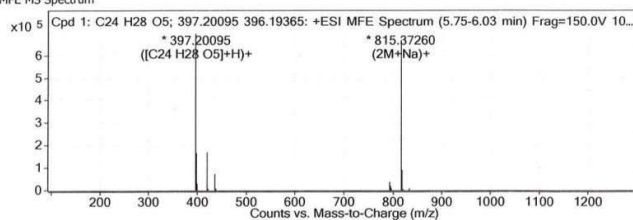
Sample Group		Info.	
Stream Name	LC 1	Acquisition SW	6200 series TOF/6500 series
		Version	Q-TOF B.06.01 (B6172 SP1)

### Compound Table

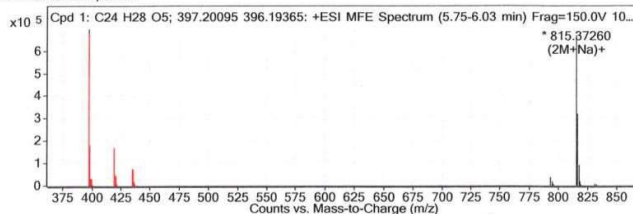
Compound Label	RT	Mass	Formula	MFG Formula	MFG Diff (ppm)	DB Formula
Cpd 1: C24 H28 O5; 397.20095 396.19365	5.81	396.19365	C24 H28 O5	C24 H28 O5	0.05	C24 H28 O5

Compound Label	m/z	RT	Algorithm	Mass
Cpd 1: C24 H28 O5; 397.20095 396.19365	397.20095	5.81	Find by Molecular Feature	396.19365

### MFE MS Spectrum



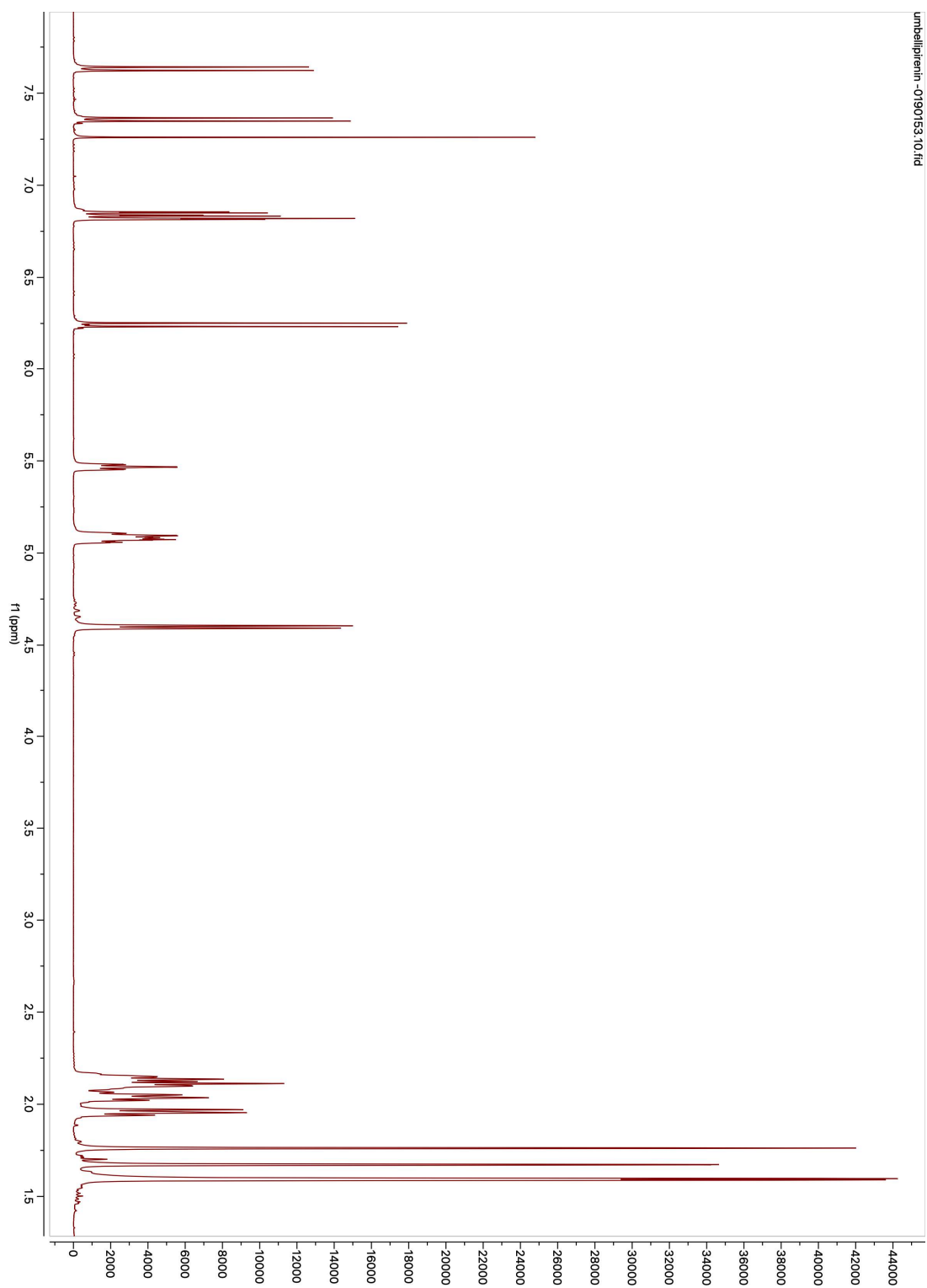
### MFE MS Zoomed Spectrum



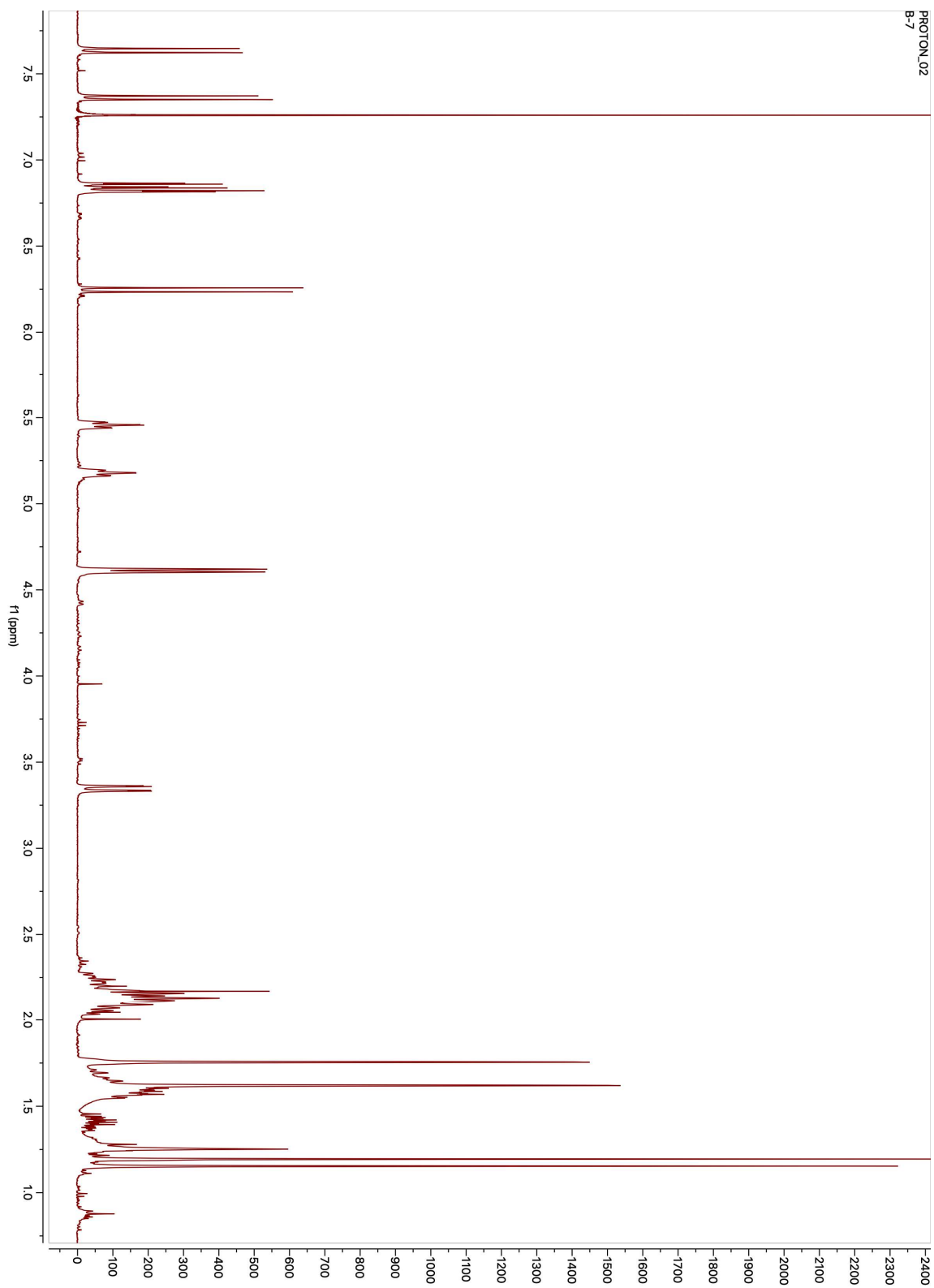
### MS Spectrum Peak List

m/z	z	Abund	Formula	Ion
397.20095	1	695393.69	C24 H28 O5	(M+H)+
398.20425	1	164220.08	C24 H28 O5	(M+H)+
399.20696	1	26898.86	C24 H28 O5	(M+H)+
419.18266	1	169149.11	C24 H28 O5	(M+Na)+
420.18617	1	41114.52	C24 H28 O5	(M+Na)+
435.15636	1	72662.35	C24 H28 O5	(M+K)+

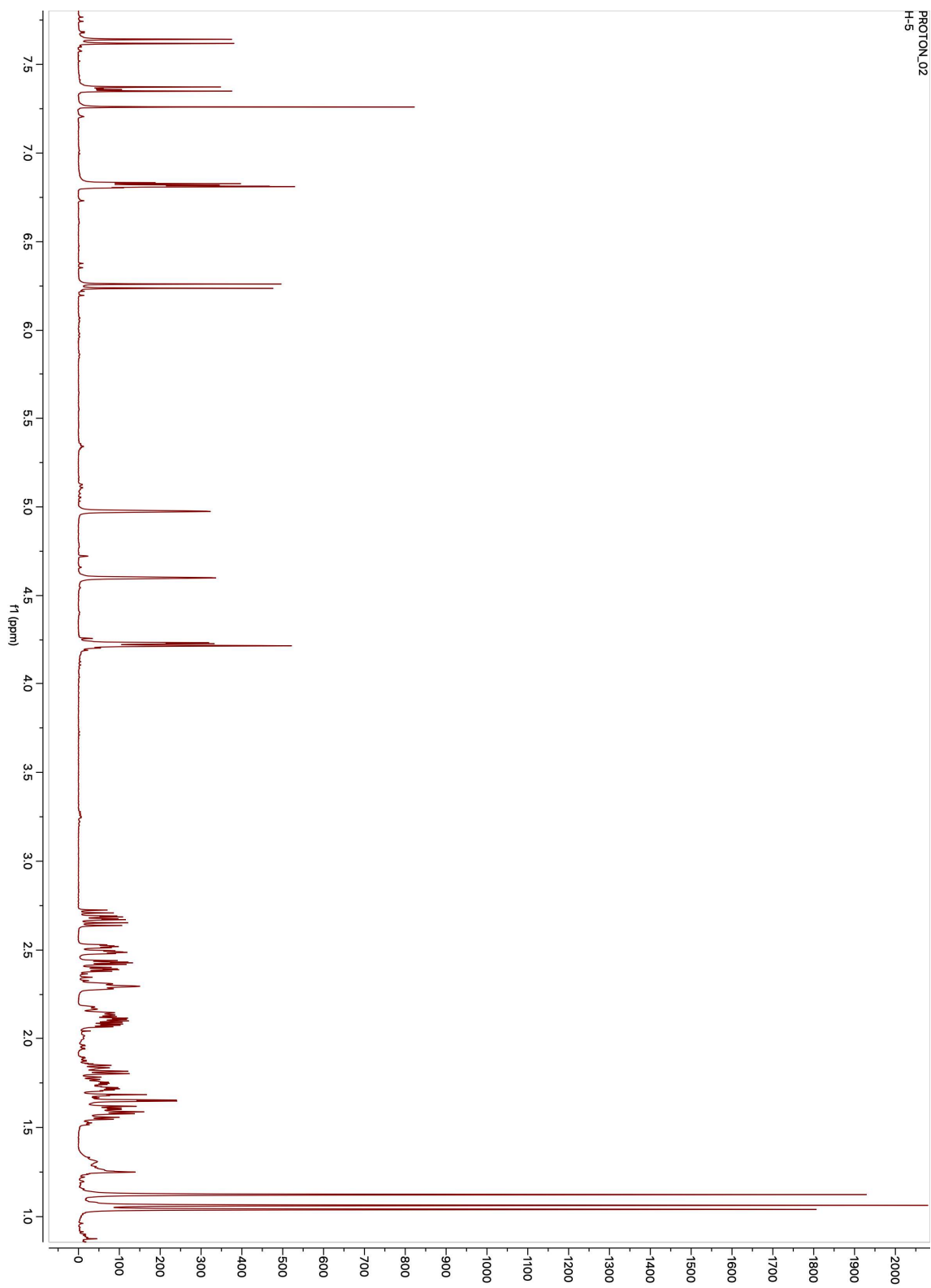
**Fig. S8** HRESIMS spectrum of anaticin (**8**)



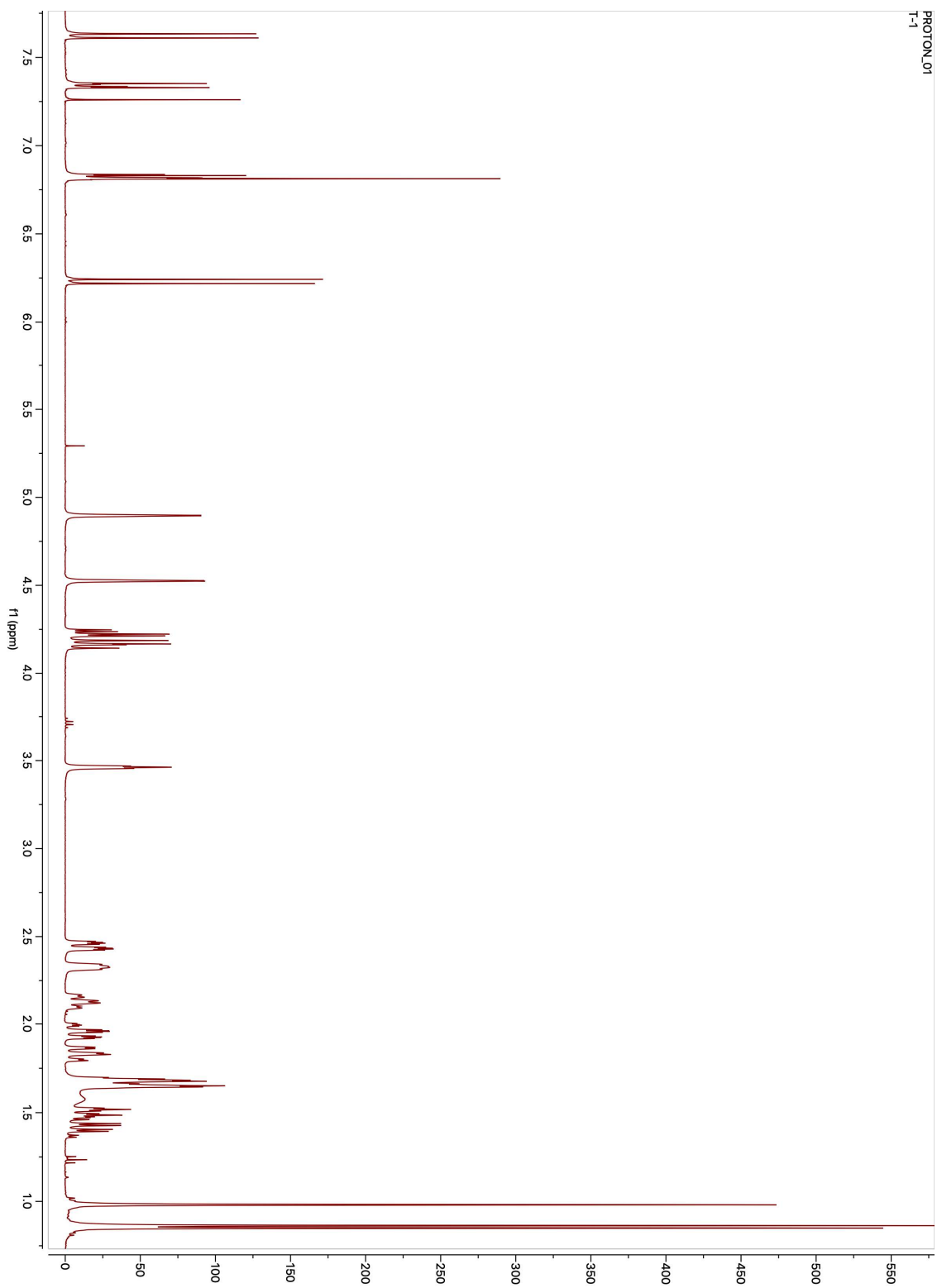
**Fig. S9**  $^1\text{H}$  NMR spectrum of Umbelliprenin (**1**)



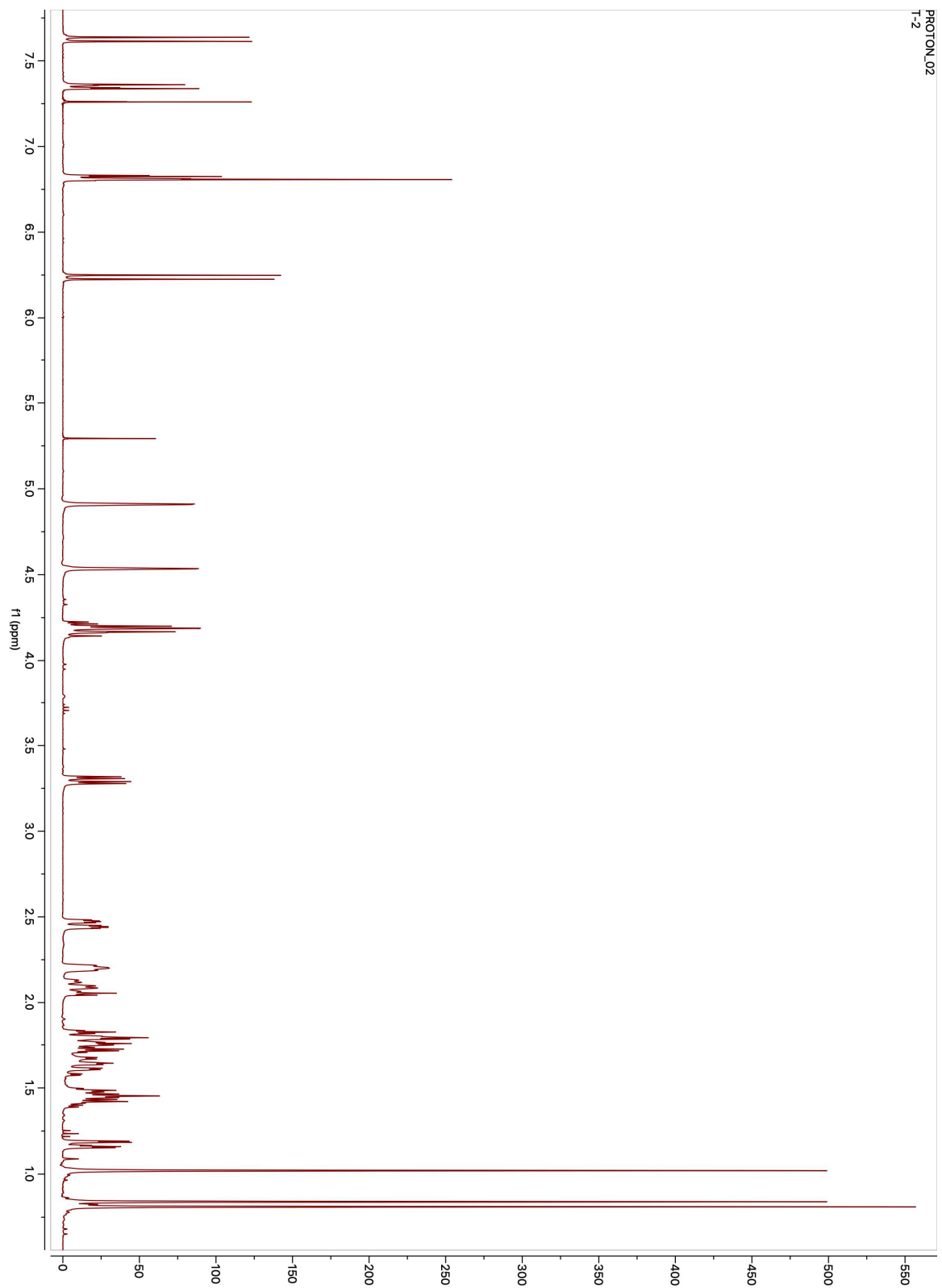
**Fig. S10** <sup>1</sup>H NMR spectrum of Karatavicinol (**2**)



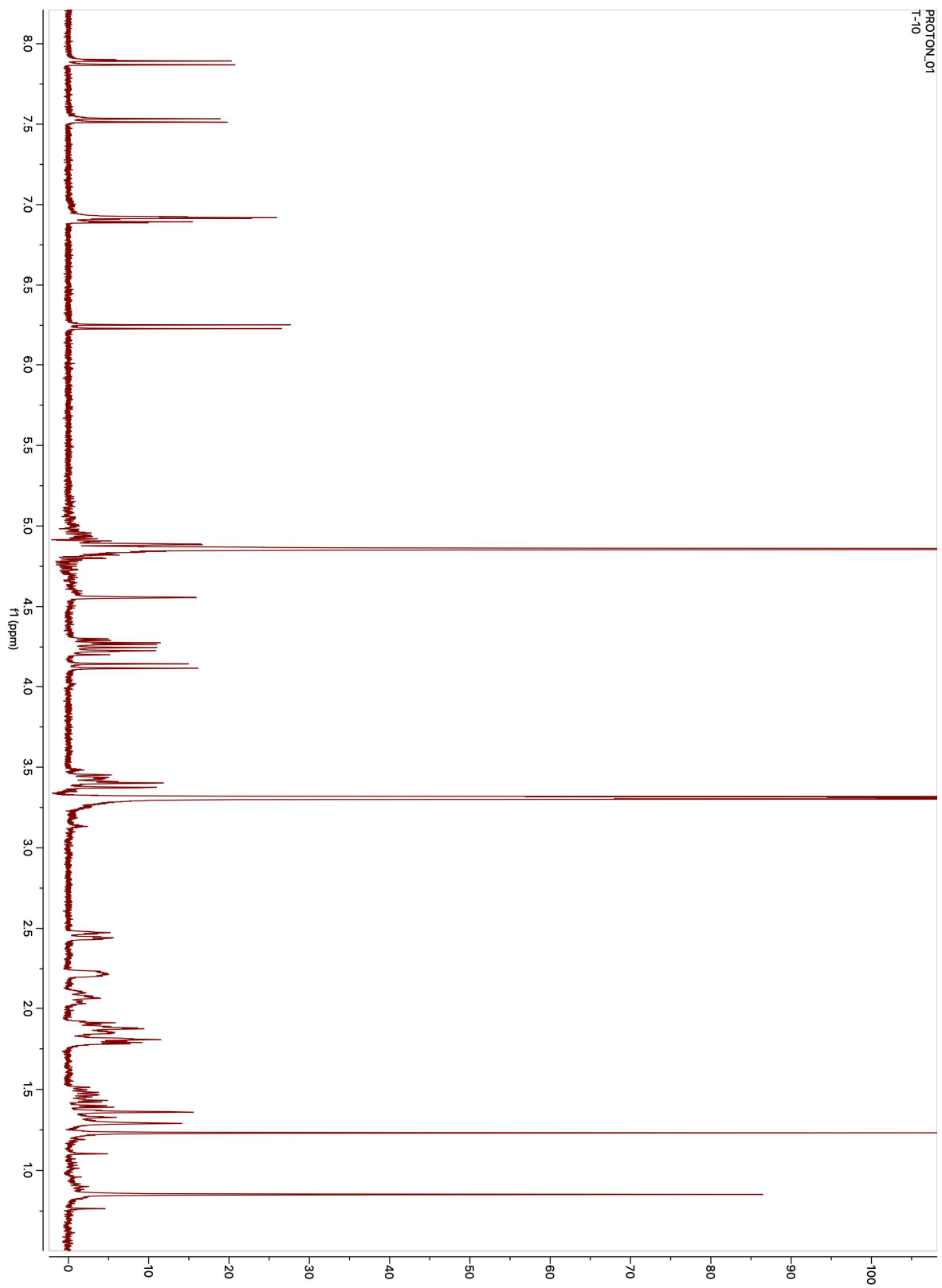
**Fig. S11**  $^1\text{H}$  NMR spectrum of Badrakemone (**3**)



**Fig. S12**  $^1\text{H}$  NMR spectrum of Badrakemin (**4**)

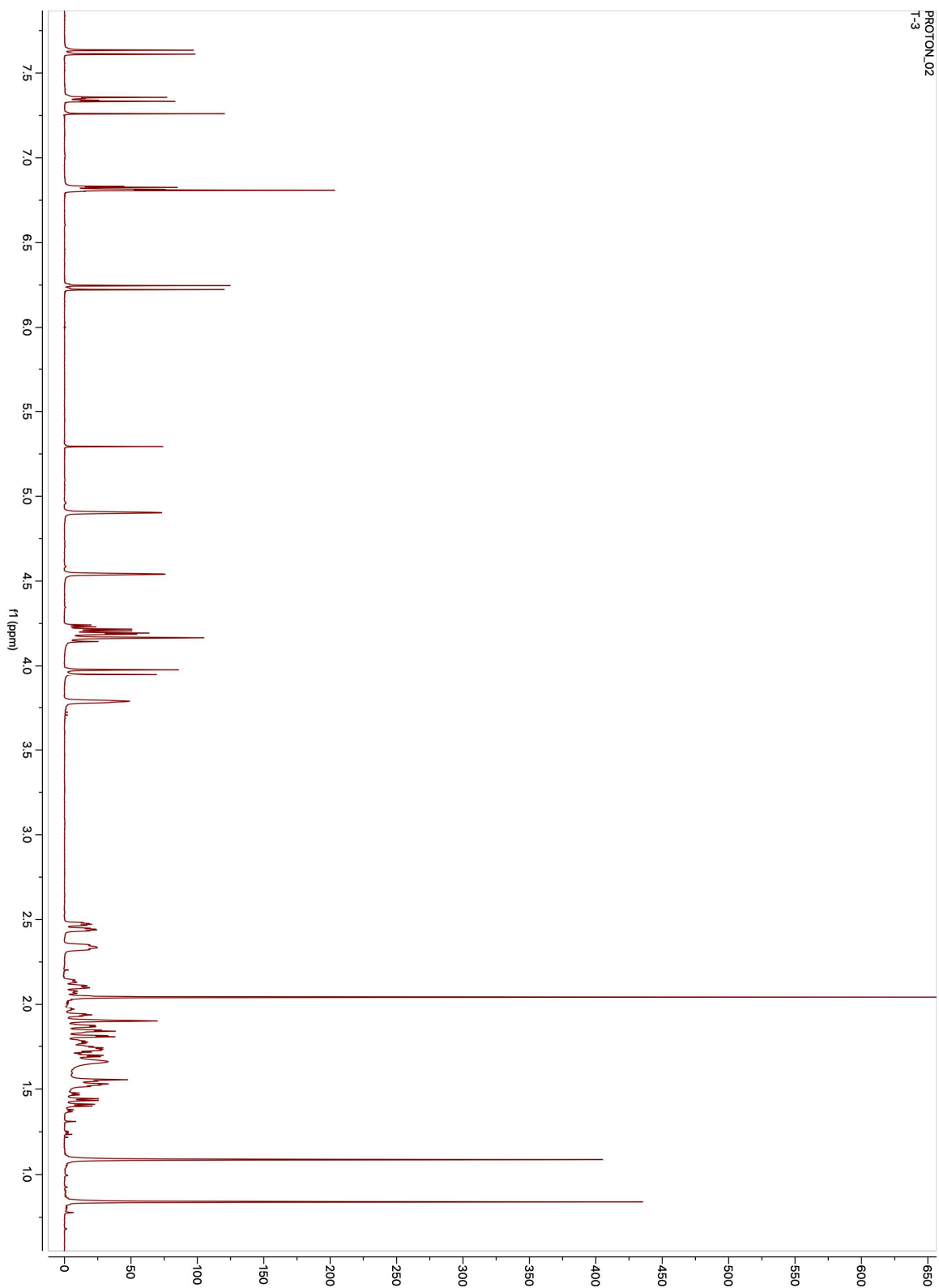


**Fig. S13**  $^1\text{H}$  NMR spectrum of Colladonin (5)



**Fig. S14** <sup>1</sup>H NMR spectrum of 14'-Hydroxycolladonin (**6**)





**Fig. S15** <sup>1</sup>H NMR spectrum of 14'-Acetoxybadrakemin (7)