Supporting Information

Didymellanosine, A New Decahydrofluorene Analogue, and Ascolactone C from *Didymella* sp. IEA-3B.1, an Endophyte of *Terminalia catappa*

Ni P. Ariantari, a,b Elena Ancheeva, Marian Frank, Fabian Stuhldreier, Dieter Meier, Yvonne Gröner, Irene Reimche, Micole Teusch, Sebastian Wesselborg, Werner E. G. Müller, Rainer Kalscheuer, Zhen Liu, A, Peter Proksch,

^aInstitute of Pharmaceutical Biology and Biotechnology, Heinrich Heine University Düsseldorf, Universitätsstrasse 1, 40225 Düsseldorf, Germany. E-mail: zhenfeizi0@sina.com (Z.L.), proksch@uni-duesseldorf.de (P.P.)

^bDepartment of Pharmacy, Faculty of Mathematics and Natural Sciences, Udayana University, 80361 Bali, Indonesia

^cInstitute of Molecular Medicine I, Medical Faculty, Heinrich Heine University Düsseldorf, Universitätsstrasse 1, 40225 Düsseldorf, Germany

^dDepartment of Biomedical Sciences, Institute of Health Research and Education, University of Osnabrück, Germany

^eInstitute for Physiological Chemistry, University Medical Center of the Johannes Gutenberg University Mainz, Duesbergweg 6, 55128 Mainz, Germany

^fHubei Key Laboratory of Natural Products Research and Development, College of Biological and Pharmaceutical Sciences, China Three Gorges University, Yichang 443002, People's Republic of China

Table of Contents

	Page
Figure S1. HPLC chromatograms of EtOAc extract of <i>Didymella</i> sp. IEA-3B.1	3
cultured on rice medium (black) compared to the OSMAC culture on rice medium	
with addition of 3.5 g (NH ₄) ₂ SO ₄ (blue) under UV detection at 235 nm.	
Figure S2. An endophytic <i>Didymella</i> sp. IEA-3B.1 cultured on rice medium (A) and	3
on rice medium with addition of 3.5 g (NH ₄) ₂ SO ₄ (B).	
Figure S3. HPLC chromatogram (A) and UV spectrum (B) of compound 1.	4
Figure S4. HRESIMS of compound 1.	4
Figure S5. IR spectrum of compound 1.	5
Figure S6 . ¹ H NMR (600 MHz, DMSO- <i>d</i> ₆) spectrum of compound 1 .	5
Figure S7 . 13 C NMR (125 MHz, DMSO- d_6) spectrum of compound 1 .	6
Figure S8 . ¹ H- ¹ H COSY (600 MHz, DMSO- <i>d</i> ₆) spectrum of compound 1 .	6
Figure S9 . HSQC (600 and 125 MHz, DMSO- d_6) spectrum of compound 1 .	7
Figure S10 . HMBC (600 and 125 MHz, DMSO- d_6) spectrum of compound 1 .	7
Figure S11. NOESY (600 MHz, DMSO-d ₆) spectrum of compound 1.	8
Figure S12. HPLC chromatogram (A) and UV spectrum (B) of compound 4.	8
Figure S13. HRESIMS of compound 4.	9
Figure S14. IR spectrum of compound 4.	9
Figure S15 . ¹ H NMR (600 MHz, (CD ₃) ₂ CO) spectrum of compound 4 .	10
Figure S16 . ¹ H NMR (600 MHz, MeOH- <i>d</i> ₄) spectrum of compound 4 .	10
Figure S17 . ¹ H- ¹ H COSY (600 MHz, (CD ₃) ₂ CO) spectrum of compound 4 .	11
Figure S18. HSQC (600 and 150 MHz, (CD ₃) ₂ CO) spectrum of compound 4.	11
Figure S19. HMBC (600 and 150 MHz, (CD ₃) ₂ CO) spectrum of compound 4.	12
Figure S20. NOESY (600 MHz, (CD ₃) ₂ CO) spectrum of compound 4.	12
Figure S21. HPLC chromatogram (A) and UV spectrum (B) of compound 11.	13
Figure S22. HRESIMS of compound 11.	13
Figure S23 . ¹ H NMR (600 MHz, DMSO- <i>d</i> ₆) spectrum of compound 11 .	14
Figure S24 . 13 C NMR (150 MHz, DMSO- d_6) spectrum of compound 11 .	14
Figure S25 . ¹ H- ¹ H COSY (600 MHz, DMSO- <i>d</i> ₆) spectrum of compound 11 .	15
Figure S26 . HSQC (600 and 150 MHz, DMSO- <i>d</i> ₆) spectrum of compound 11 .	15
Figure S27 . HMBC (600 and 150 MHz, DMSO- d_6) spectrum of compound 11.	16
Figure S28. NOESY (600 MHz, DMSO-d ₆) spectrum of compound 11.	16
Tabel S1 . ¹ H and ¹³ C NMR data ^a (DMSO-d ₆) for compound 11	17

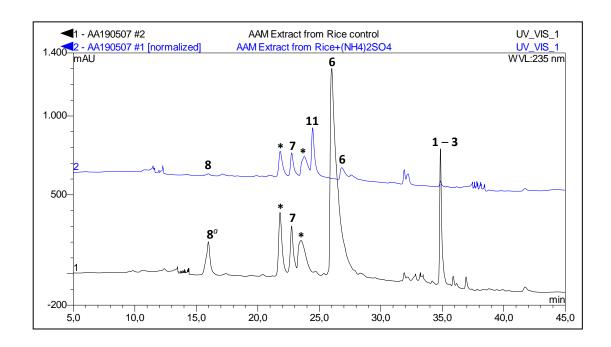


Figure S1. HPLC chromatograms of EtOAc extract of *Didymella* sp. IEA-3B.1 cultured on rice medium (black) compared to the OSMAC culture on rice medium with addition of 3.5 g (NH₄)₂SO₄ (blue) under UV detection at 235 nm. (number refers to compound's number. * unidentified peaks)

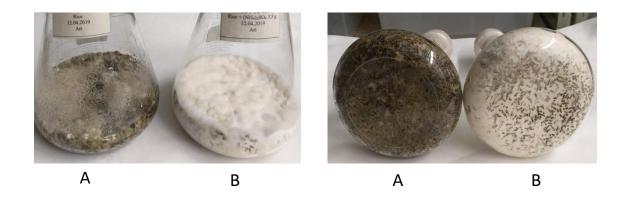
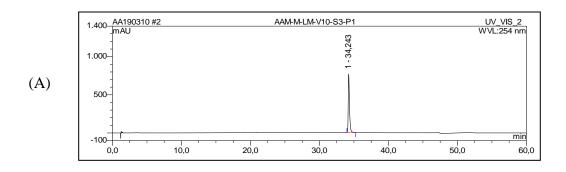


Figure S2. *Didymella* sp. IEA-3B.1 cultured on rice medium (A) and on rice medium with addition of 3.5 g (NH₄)₂SO₄ (B).



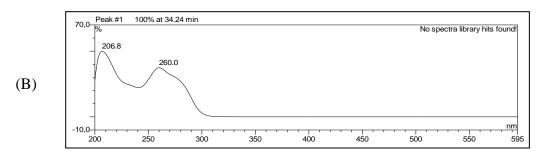


Figure S3. HPLC chromatogram (A) and UV spectrum (B) of compound 1.

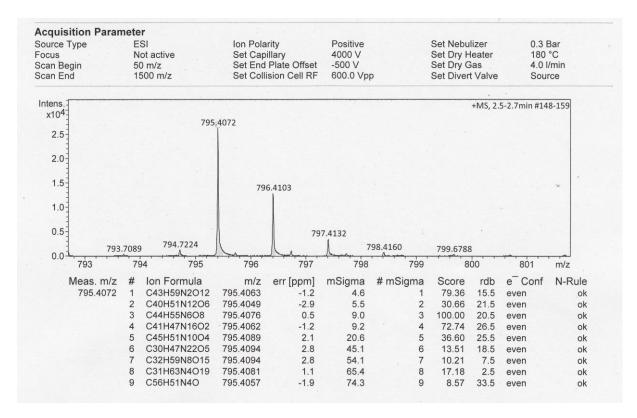


Figure S4. HRESIMS of compound 1.

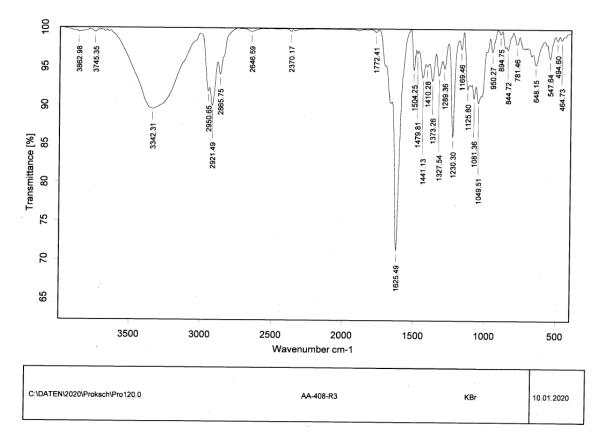


Figure S5. IR spectrum of compound 1.

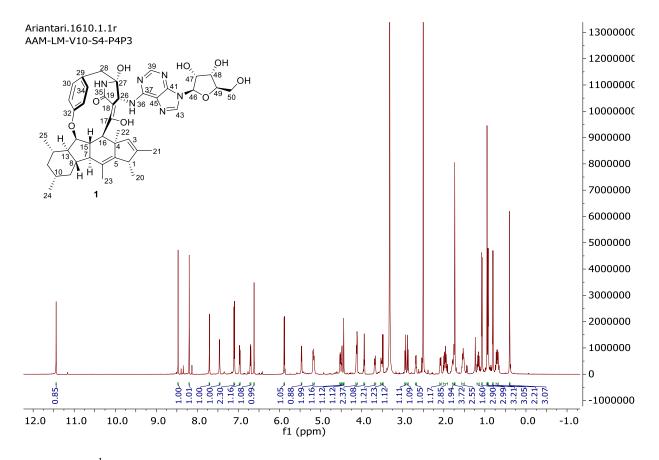


Figure S6. ¹H NMR (600 MHz, DMSO-*d*₆) spectrum of compound 1.

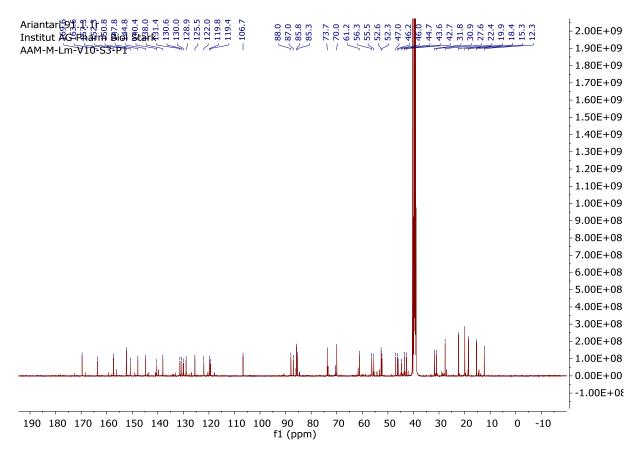


Figure S7. 13 C NMR (125 MHz, DMSO- d_6) spectrum of compound **1**.

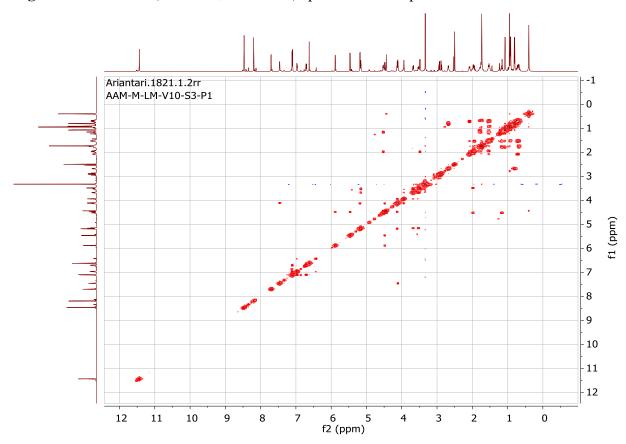


Figure S8. ¹H-¹H COSY (600 MHz, DMSO-*d*₆) spectrum of compound 1.

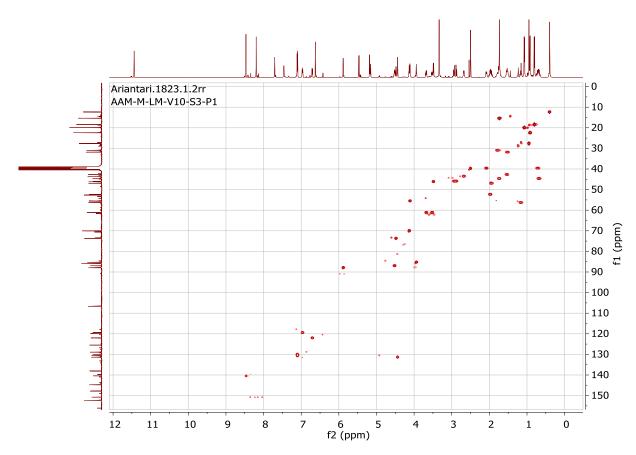


Figure S9. HSQC (600 and 125 MHz, DMSO-d₆) spectrum of compound 1.

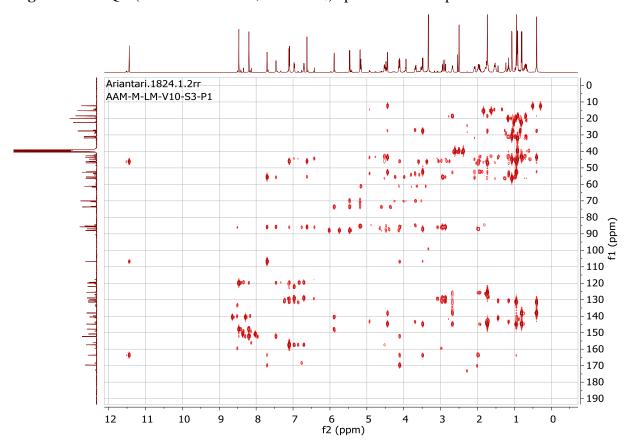


Figure S10. HMBC (600 and 125 MHz, DMSO- d_6) spectrum of compound **1**.

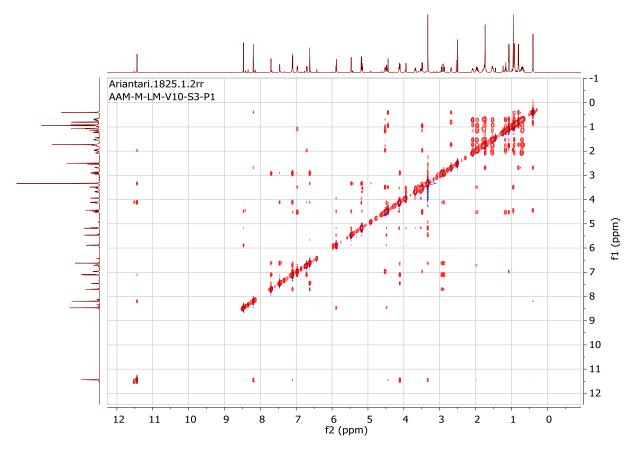
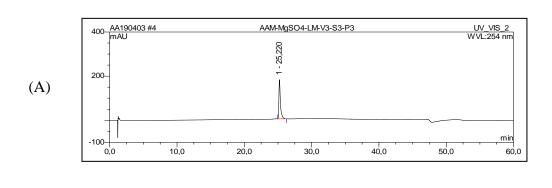


Figure S11. NOESY (600 MHz, DMSO-*d*₆) spectrum of compound 1.



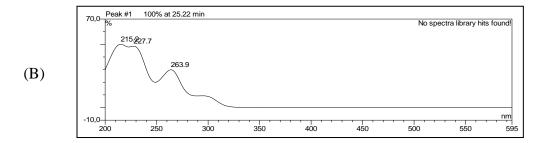


Figure S12. HPLC chromatogram (A) and UV spectrum (B) of compound 4.

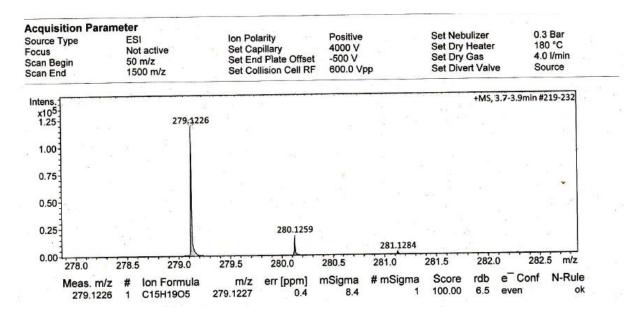


Figure S13. HRESIMS of compound 4.

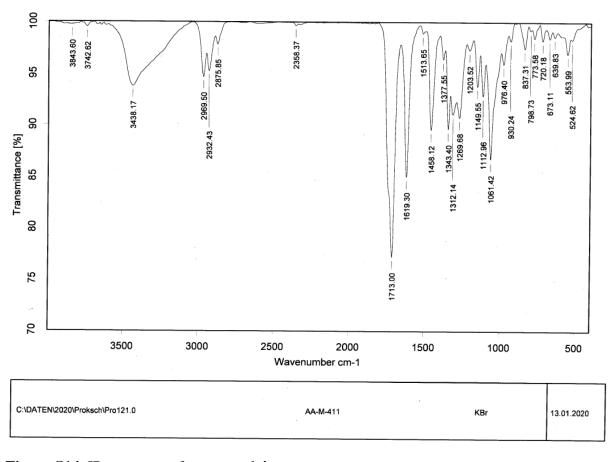


Figure S14. IR spectrum of compound 4.

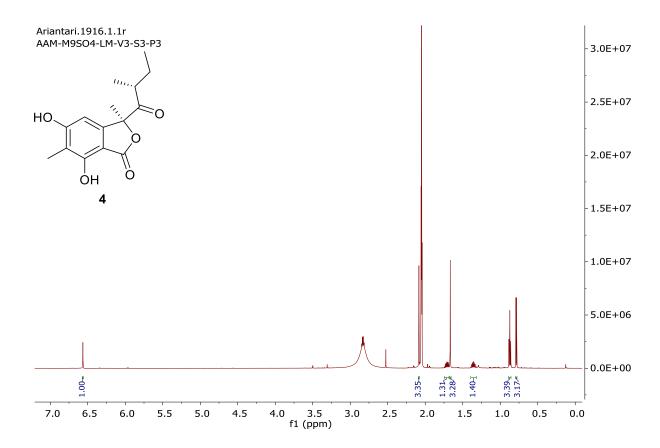


Figure S15. ¹H NMR (600 MHz, (CD₃)₂CO) spectrum of compound 4.

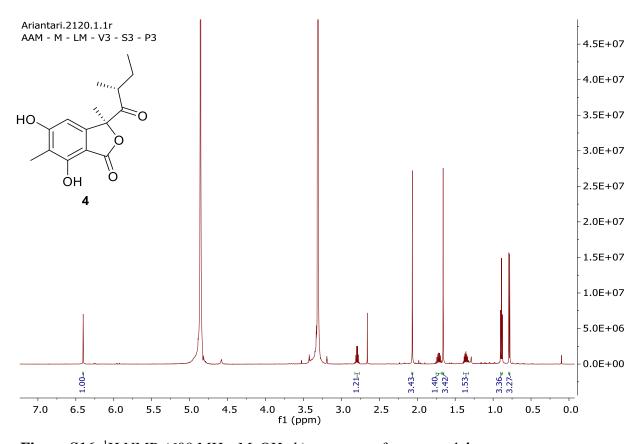


Figure S16. ¹H NMR (600 MHz, MeOH-*d*₄) spectrum of compound **4**.

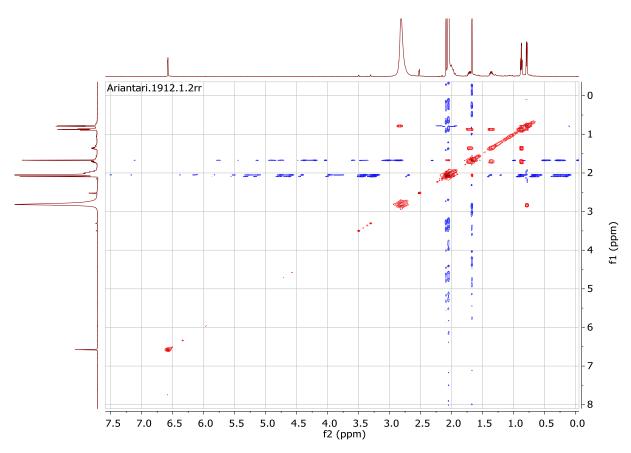


Figure S17. ¹H-¹H COSY (600 MHz, (CD₃)₂CO) spectrum of compound 4.

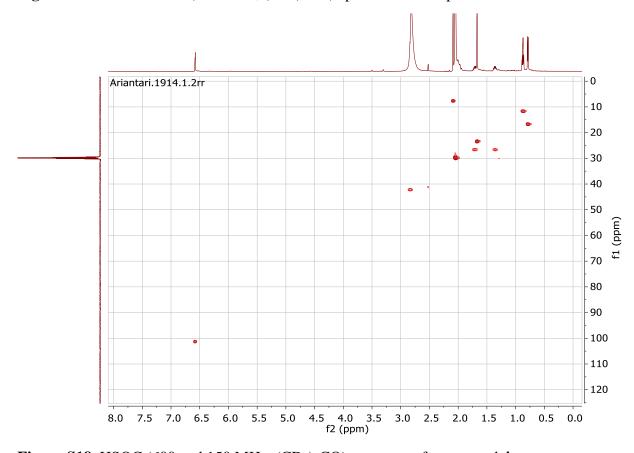


Figure S18. HSQC (600 and 150 MHz, (CD₃)₂CO) spectrum of compound 4.

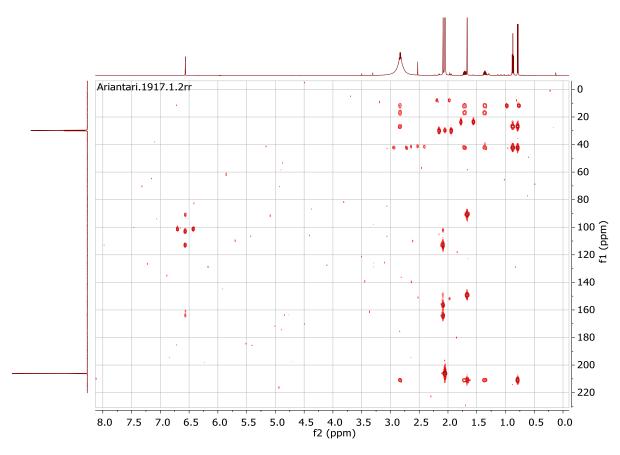


Figure S19. HMBC (600 and 150 MHz, $(CD_3)_2CO$) spectrum of compound 4.

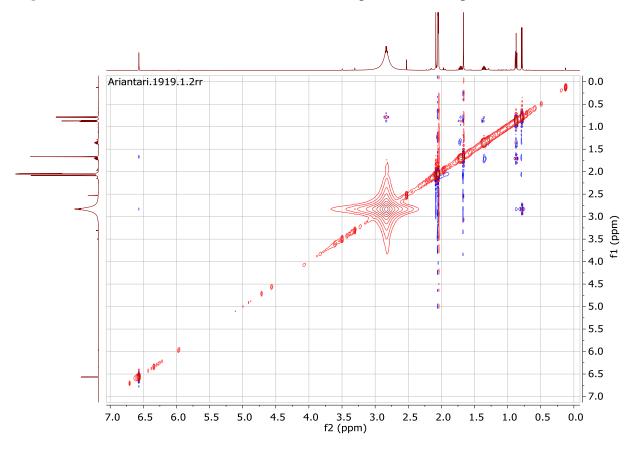
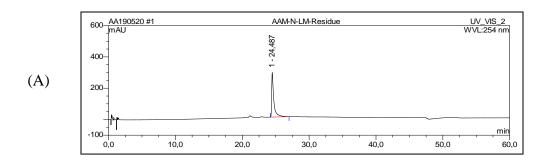


Figure S20. NOESY (600 MHz, (CD₃)₂CO) spectrum of compound 4.



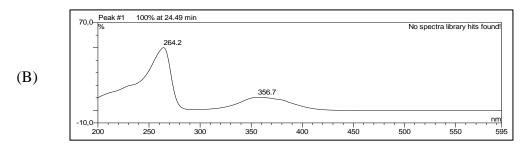


Figure S21. HPLC chromatogram (A) and UV spectrum (B) of compound 11.

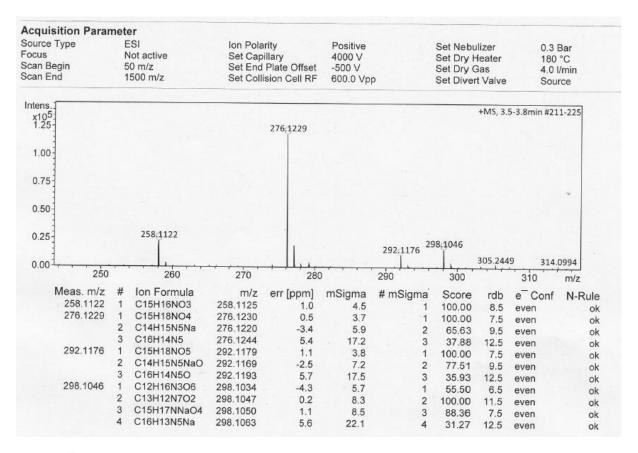


Figure S22. HRESIMS spectrum of compound 11.

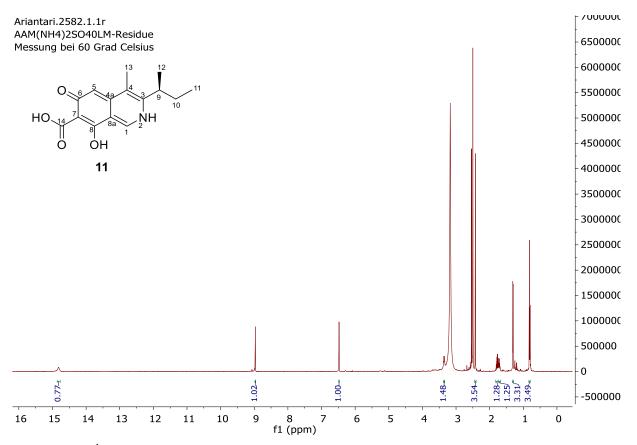


Figure S23. ¹H NMR (600 MHz, DMSO-*d*₆) spectrum of compound 11.

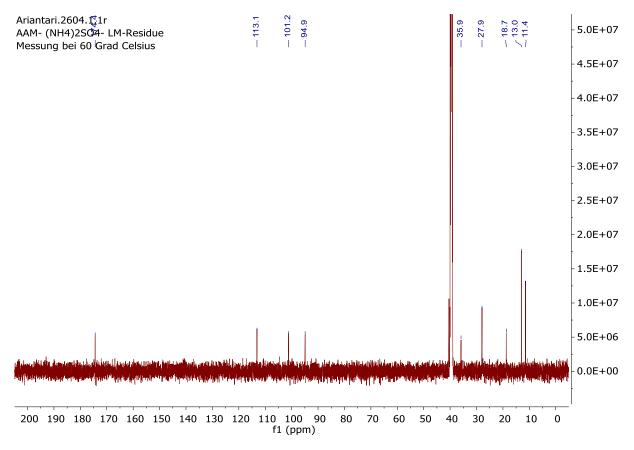


Figure S24. ¹³C NMR (150 MHz, DMSO-*d*₆) spectrum of compound 11.

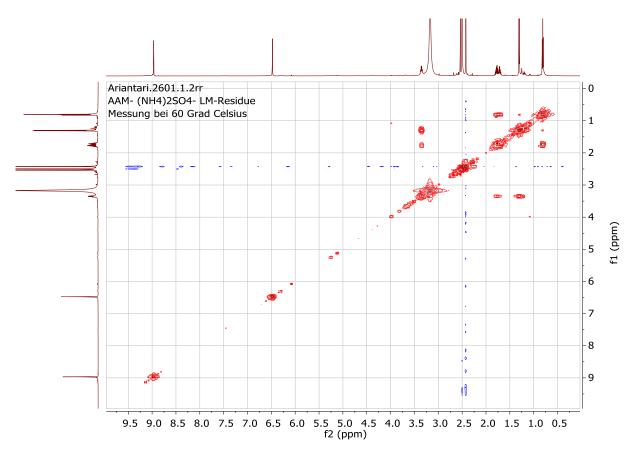


Figure S25. ¹H-¹H COSY (600 MHz, DMSO-*d*₆) spectrum of compound **11**.

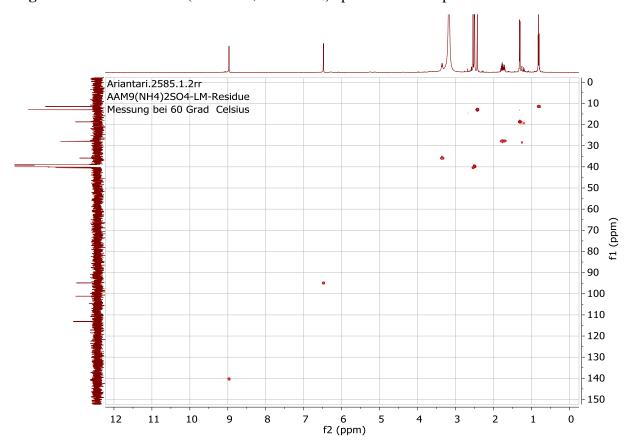


Figure S26. HSQC (600 and 150 MHz, DMSO- d_6) spectrum of compound **11**.

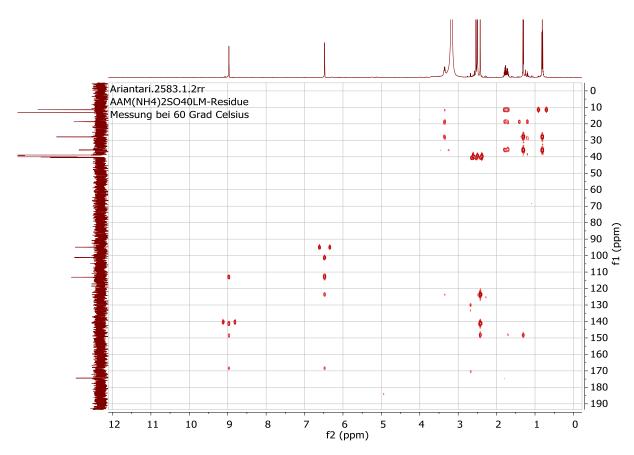


Figure S27. HMBC (600 and 150 MHz, DMSO-d₆) spectrum of compound 11.

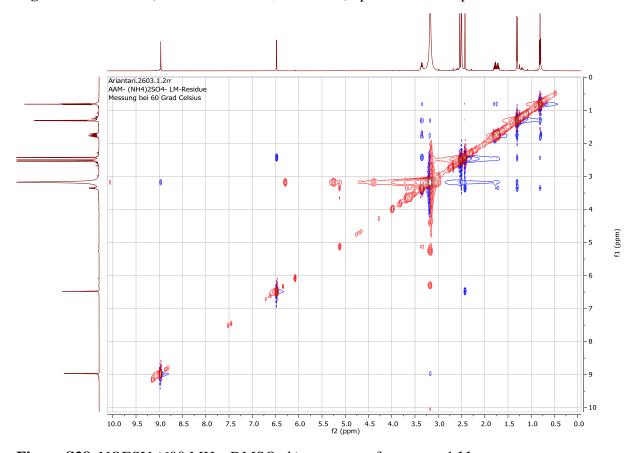


Figure S28. NOESY (600 MHz, DMSO-*d*₆) spectrum of compound 11.

Tabel S1. ¹H and ¹³C NMR data^a (DMSO-d₆) for compound **11**

position	$\delta_{\rm C}$, type ^b	$\delta_{\rm H}(J { m in Hz})$
1	140.3, CH	8.97, s
3	148.7, C	
4	123.7, C	
4a	141.3, C	
5	94.9, CH	6.48, s
6	nd^c	
7	101.2, C	
8	168.3, C	
8a	113.1, C	
9	35.9, CH	3.35, m
10	27.9, CH ₂	1.78, dt (14.0, 7.0)
		1.71, dt (14.0, 7.3)
11	$11.4, CH_3$	0.81, t (7.3)
12	$18.7, CH_3$	1.31, d (7.0)
13	13.0, CH ₃	2.43, s
14	174.4, C	

^a Recorded at 600 MHz (¹H) and 150 MHz (¹³C) at 60°C. ^b Chemical shifts were extracted from HSQC and HMBC.

^c not detected