

Synthesis and Biological Evaluation of Phaeosphaeride A Derivatives as Antitumor Agents

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Copy of ^1H -NMR, ^{13}C -NMR, ^1H - ^1H ROESY and HRMS..... 2-19

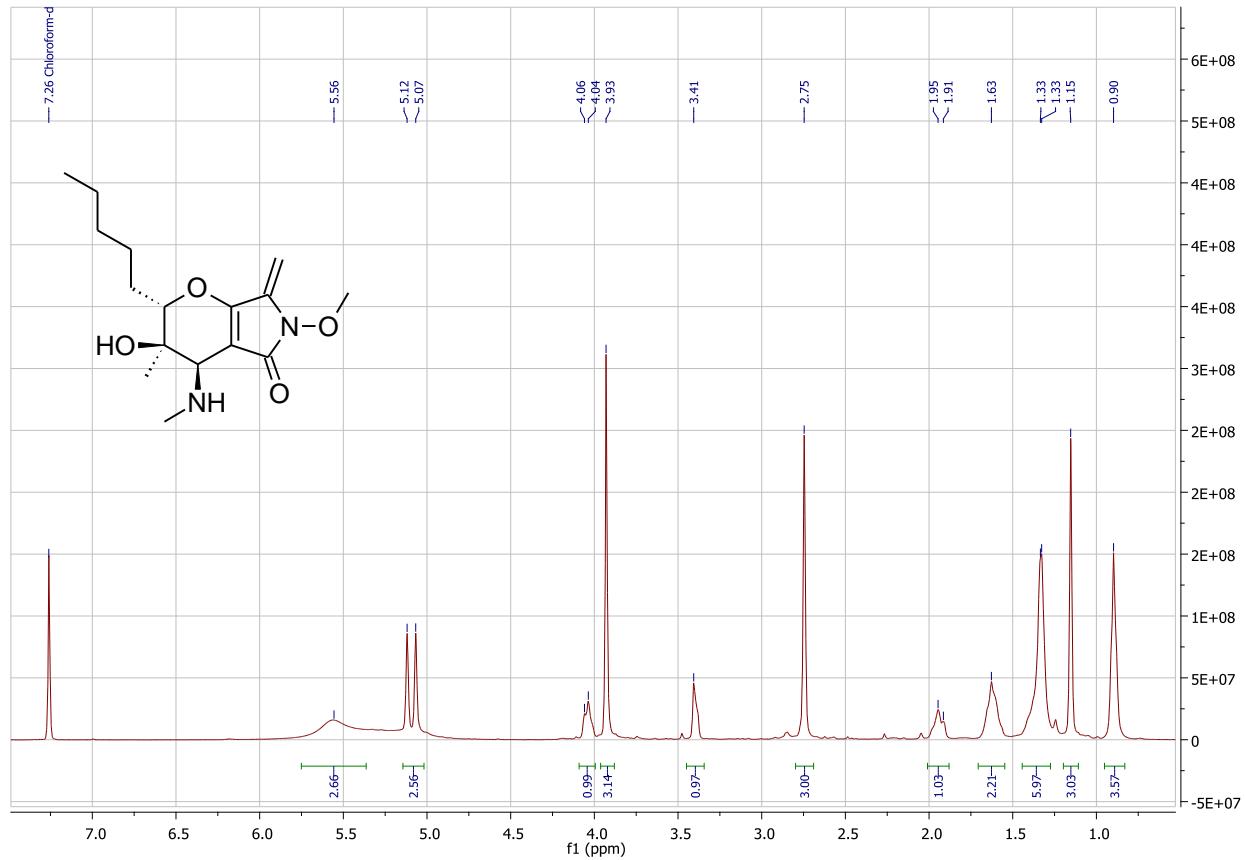


Figure 1. ^1H -NMR of **1**.

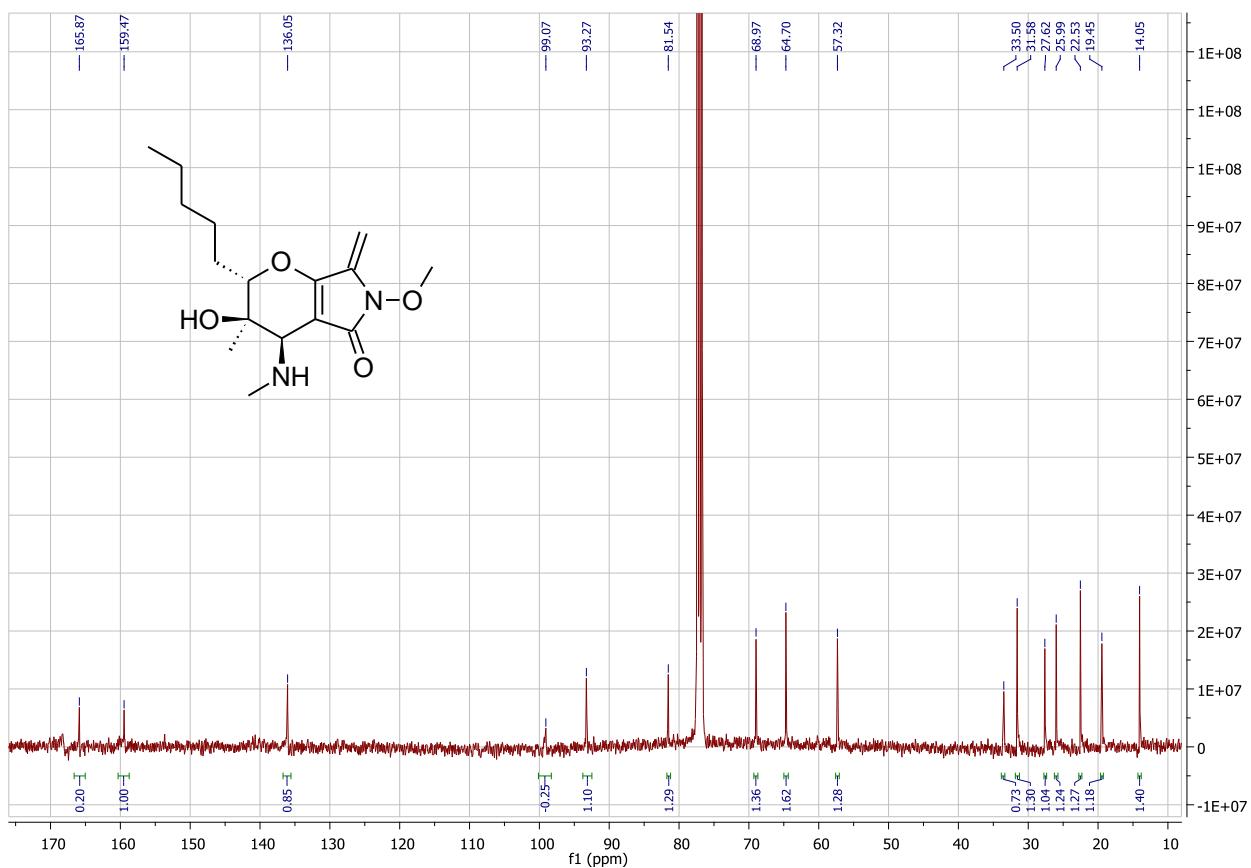


Figure 2. ^{13}C -NMR of **1**.

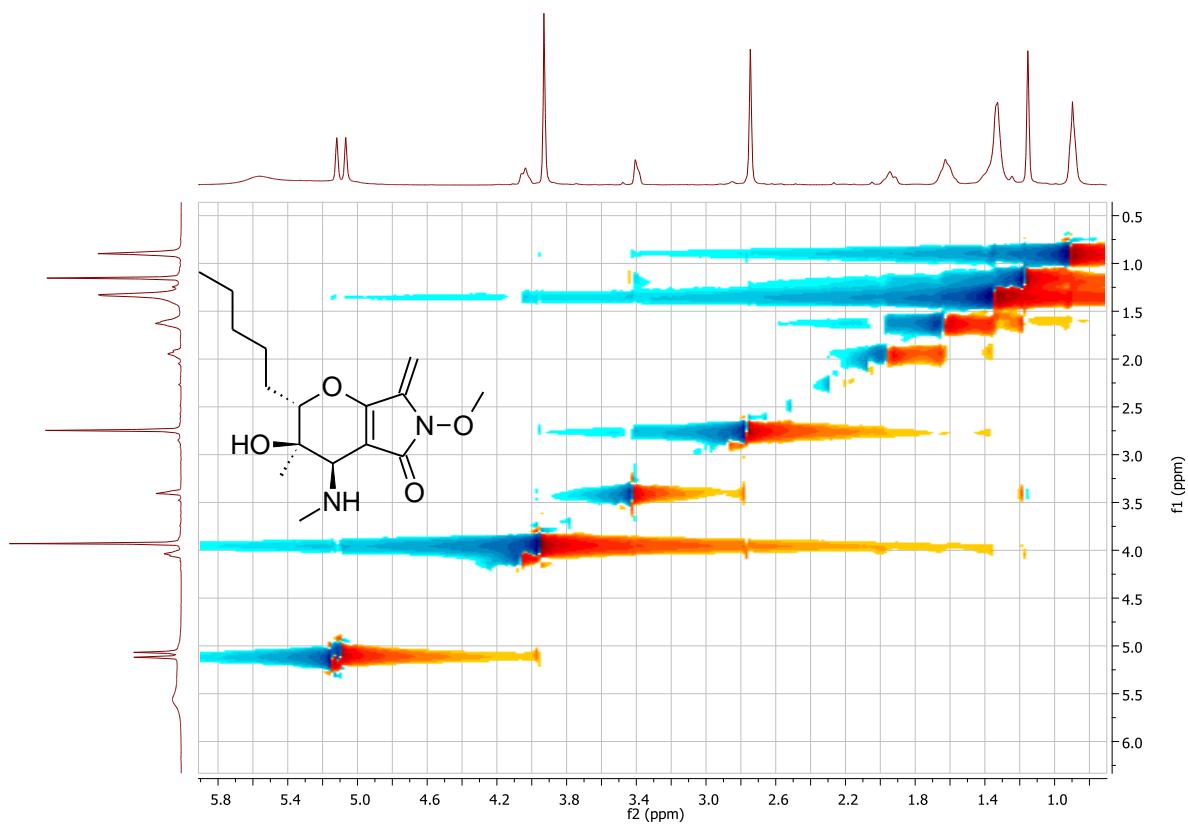


Figure 3. ^1H - ^1H ROESY of **1**.

Display Report

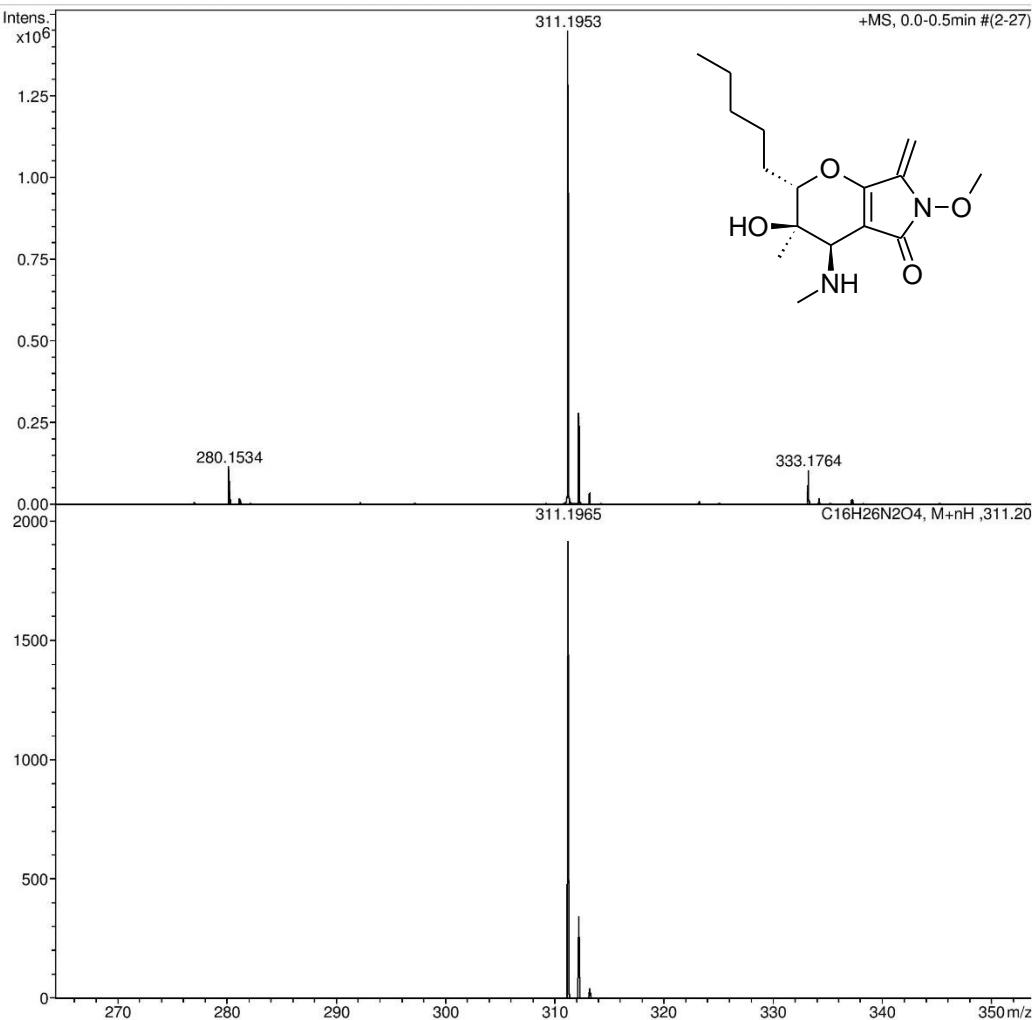
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 Sample Name abz15
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Acquisition Date 08.02.2018 18:59:24
 Operator Bruker Customer
 Instrument / Ser# micrOTOF 10223

Acquisition Parameter

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Focus	Not active			Set Dry Heater	180 °C
Scan Begin	50 m/z	Set Capillary	4500 V	Set Dry Gas	4.0 l/min
Scan End	3000 m/z	Set End Plate Offset	-500 V	Set Divert Valve	Source

**Figure 4.** HRMS of **1**.

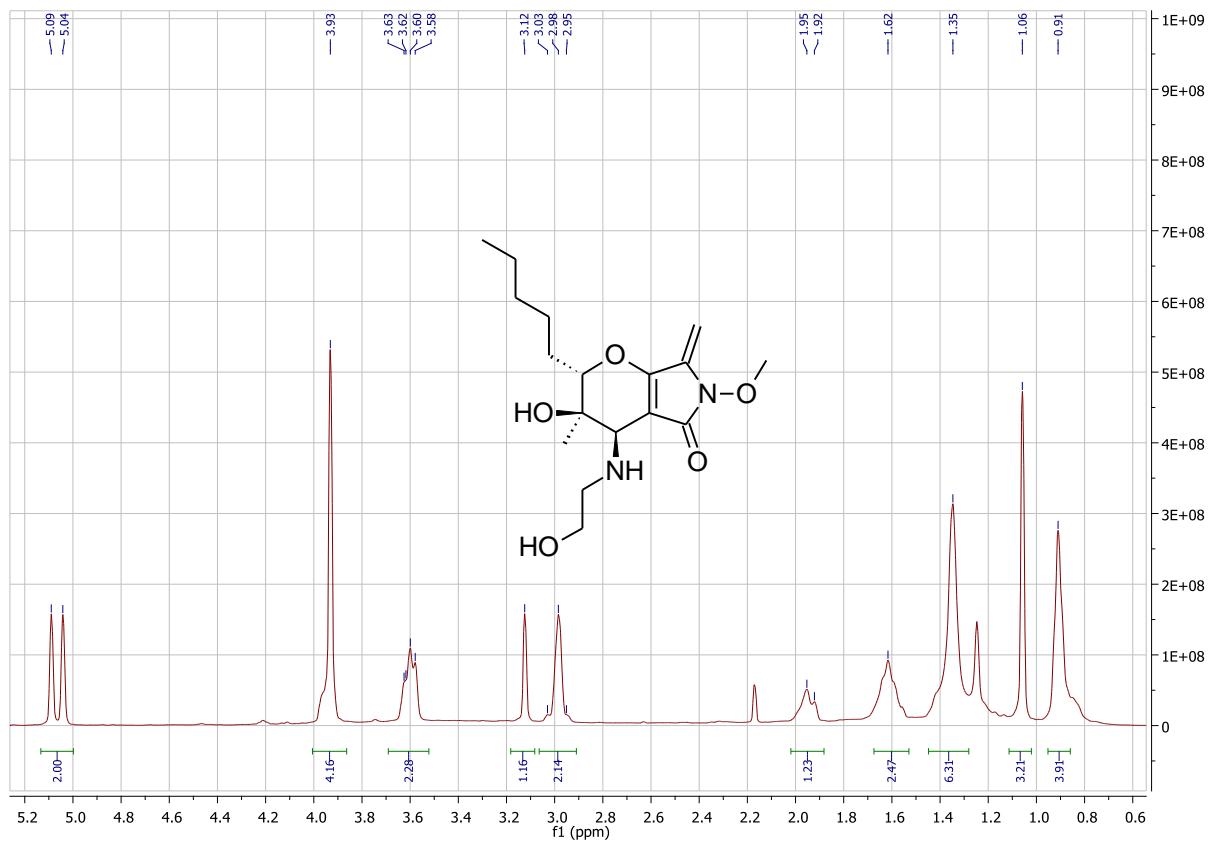


Figure 5. ¹H-NMR of **2**.

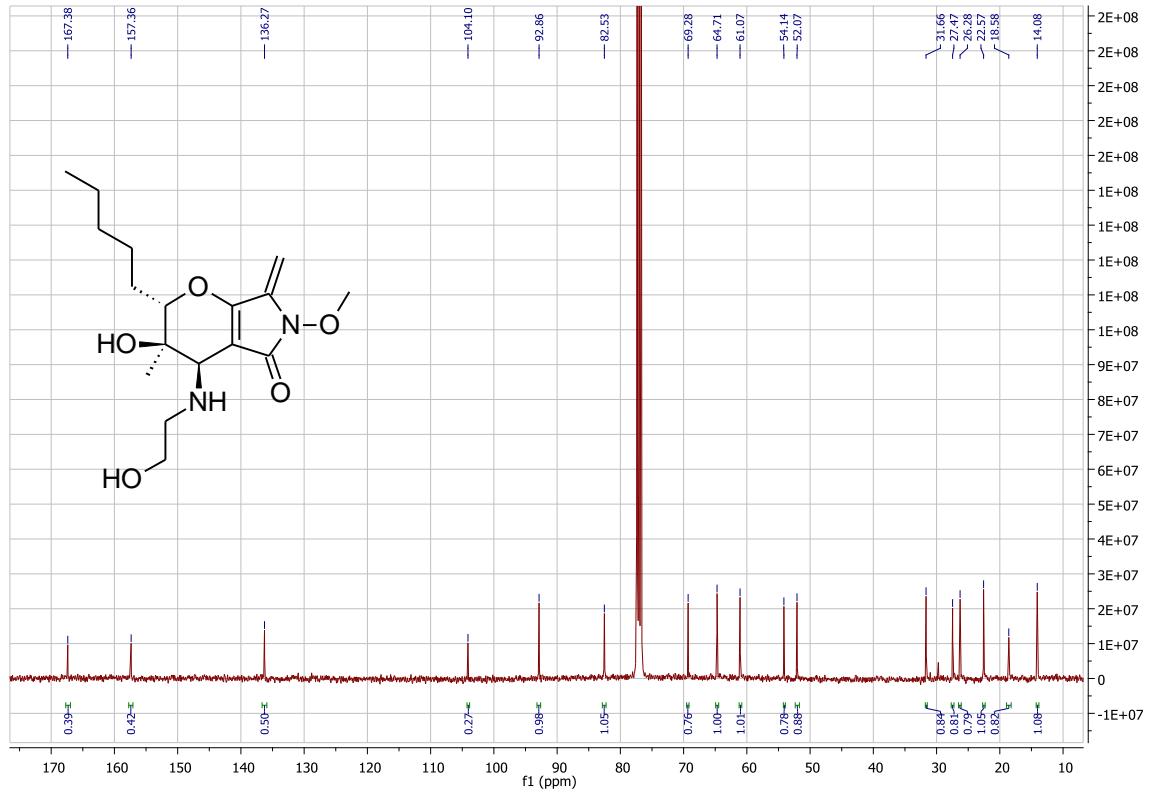


Figure 6. ¹³C-NMR of **2**.

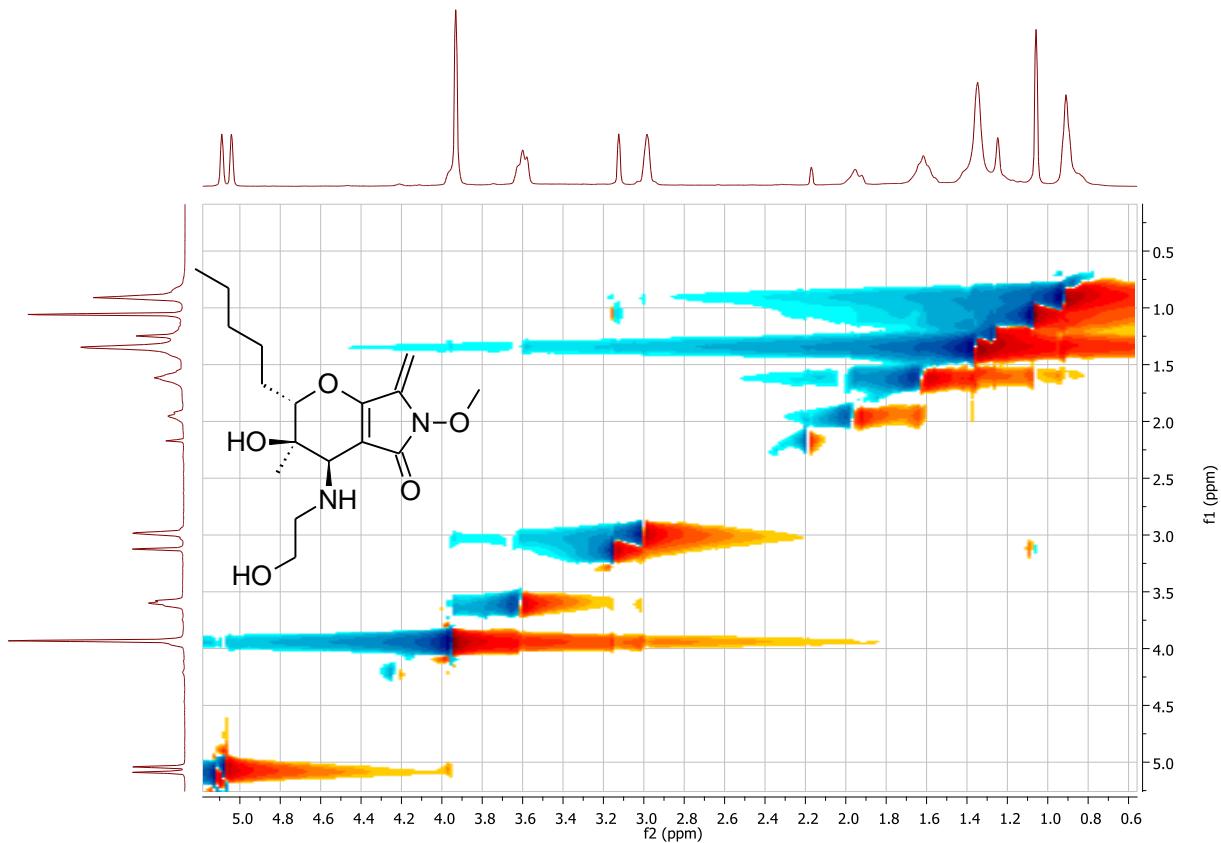


Figure 7. ^1H - ^1H ROESY of 2.

Display Report

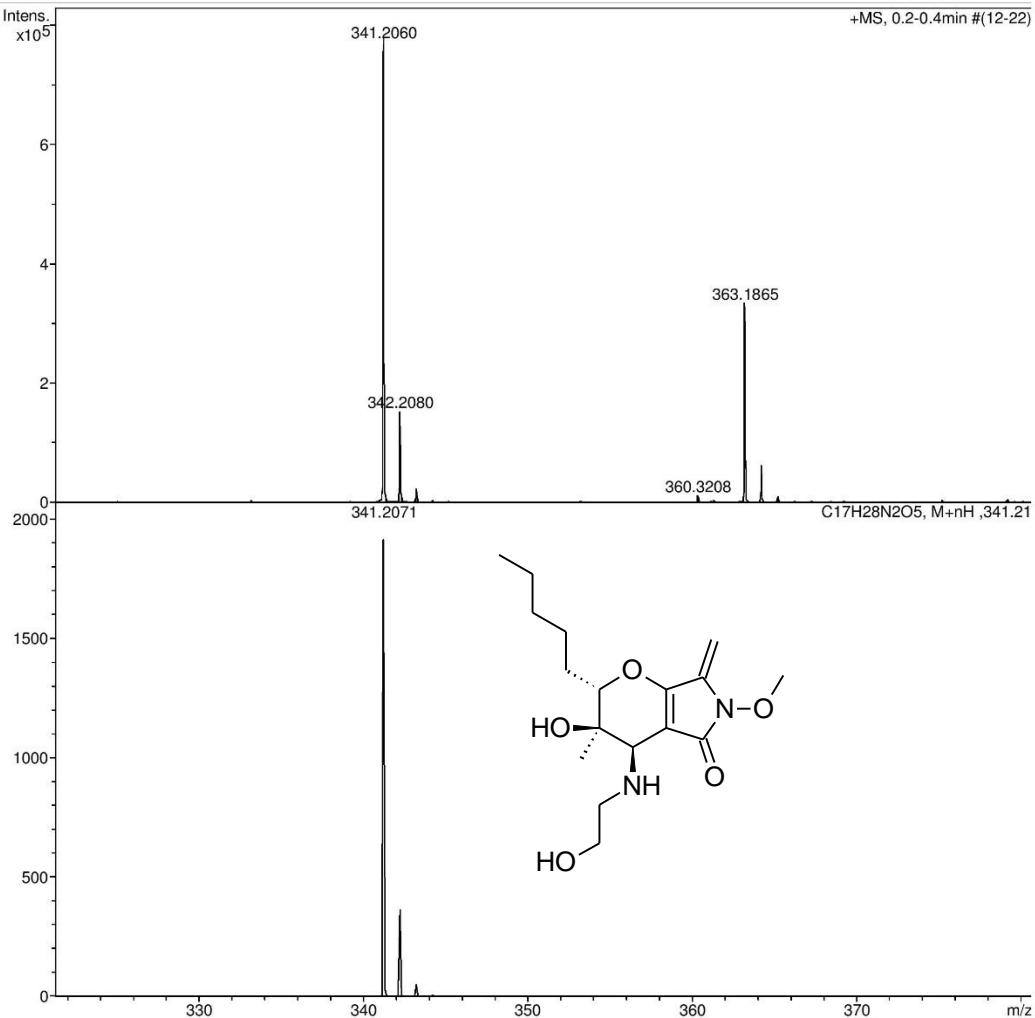
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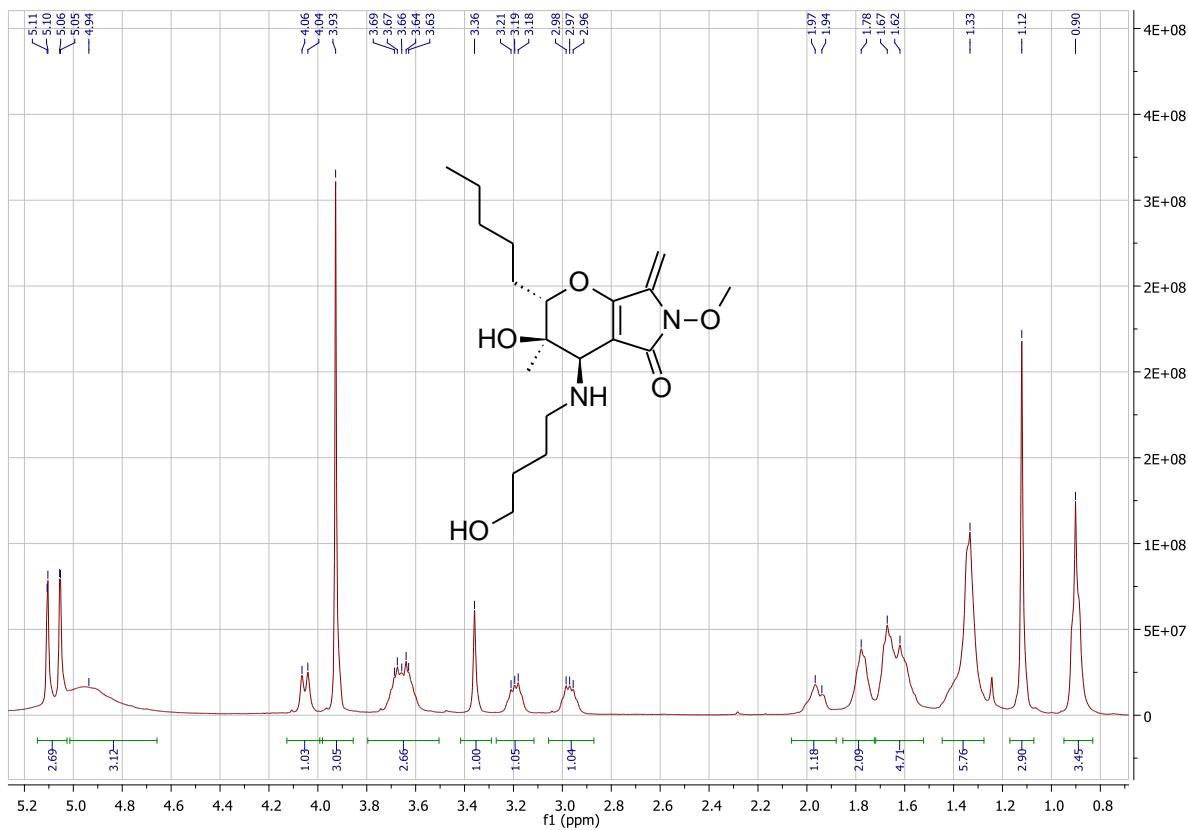
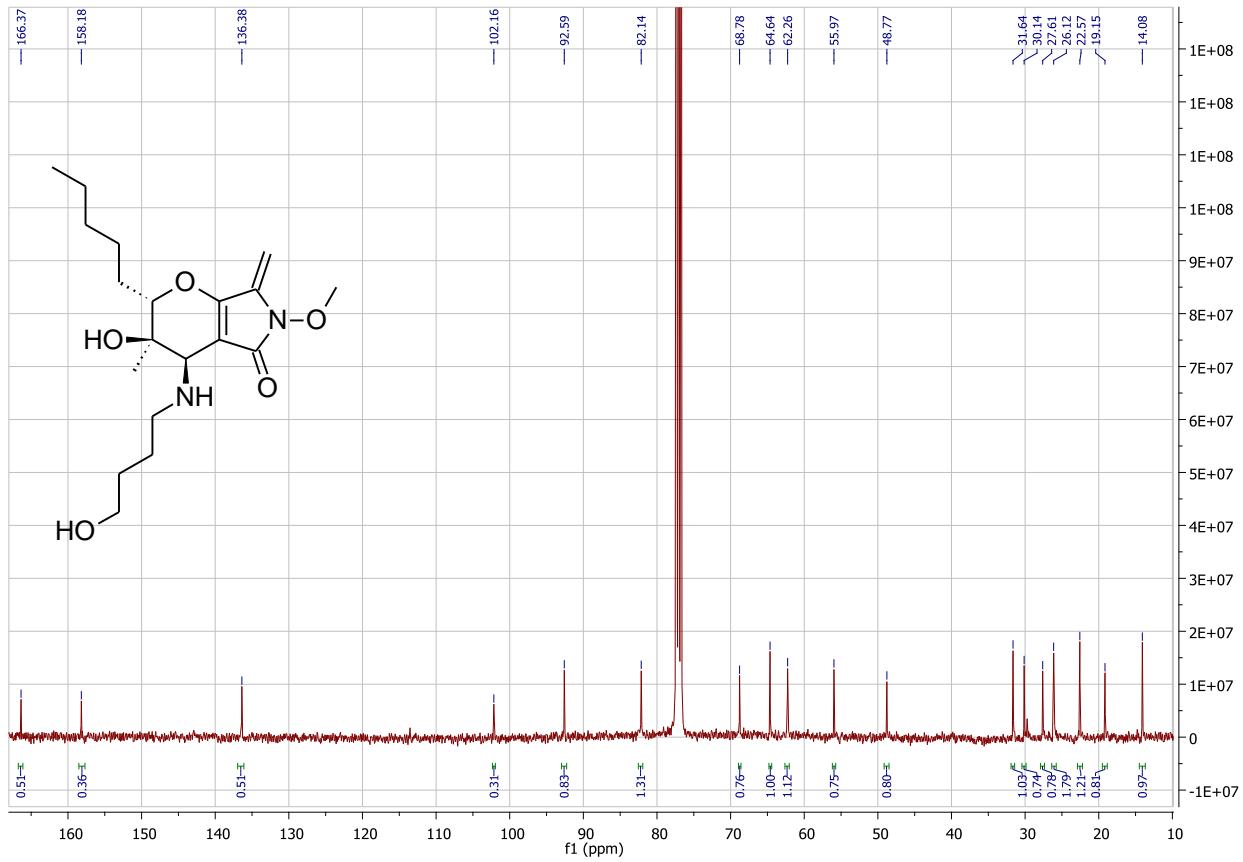
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 Comment MEOH

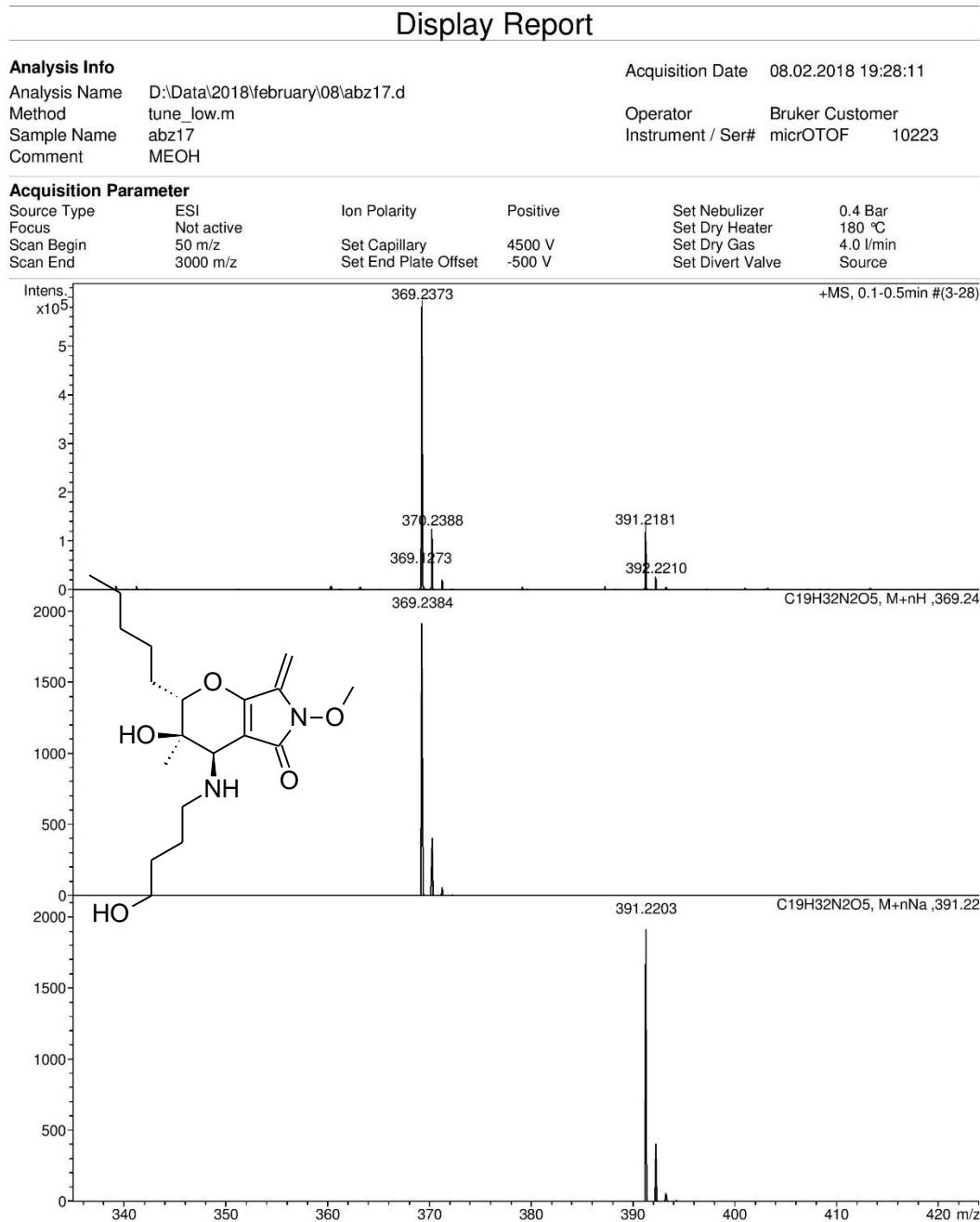
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Scan Begin	50 m/z	Set Capillary	4500 V	Set Dry Gas	4.0 l/min
Scan End	3000 m/z	Set End Plate Offset	-500 V	Set Divert Valve	Source

**Figure 8.** HRMS of **2**.

**Figure 9.** ^1H -NMR of 3.**Figure 10.** ^{13}C -NMR of 3.

**Figure 11.** HRMS of **3**.

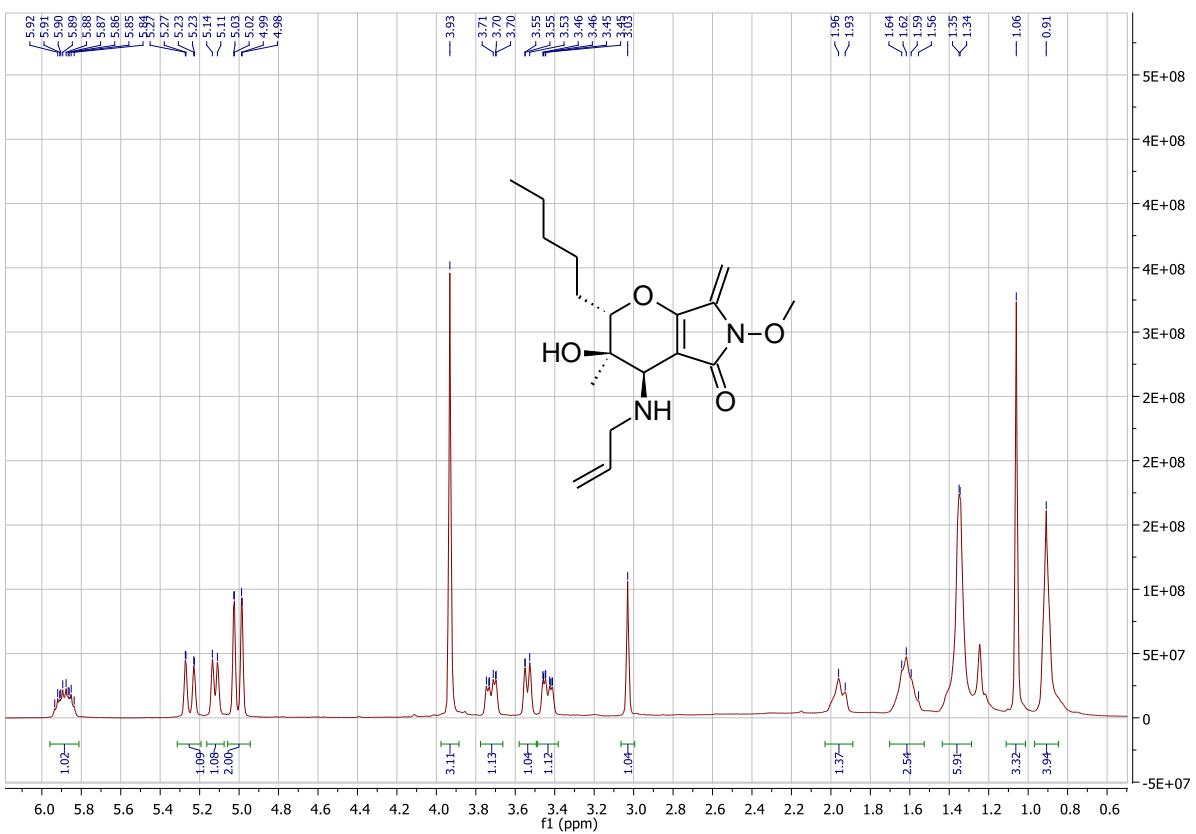


Figure 12. ^1H -NMR of 4.

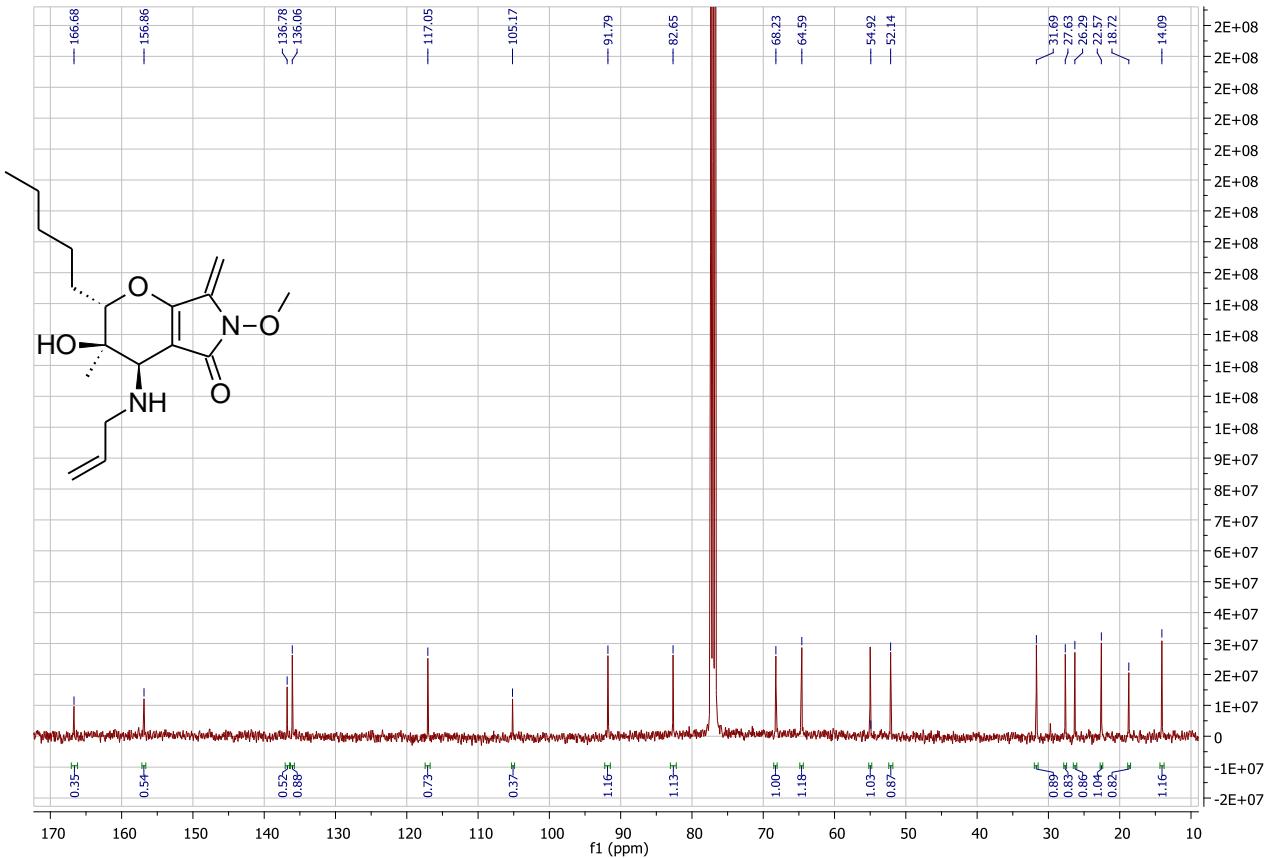


Figure 13. ^{13}C -NMR of 4.

Display Report

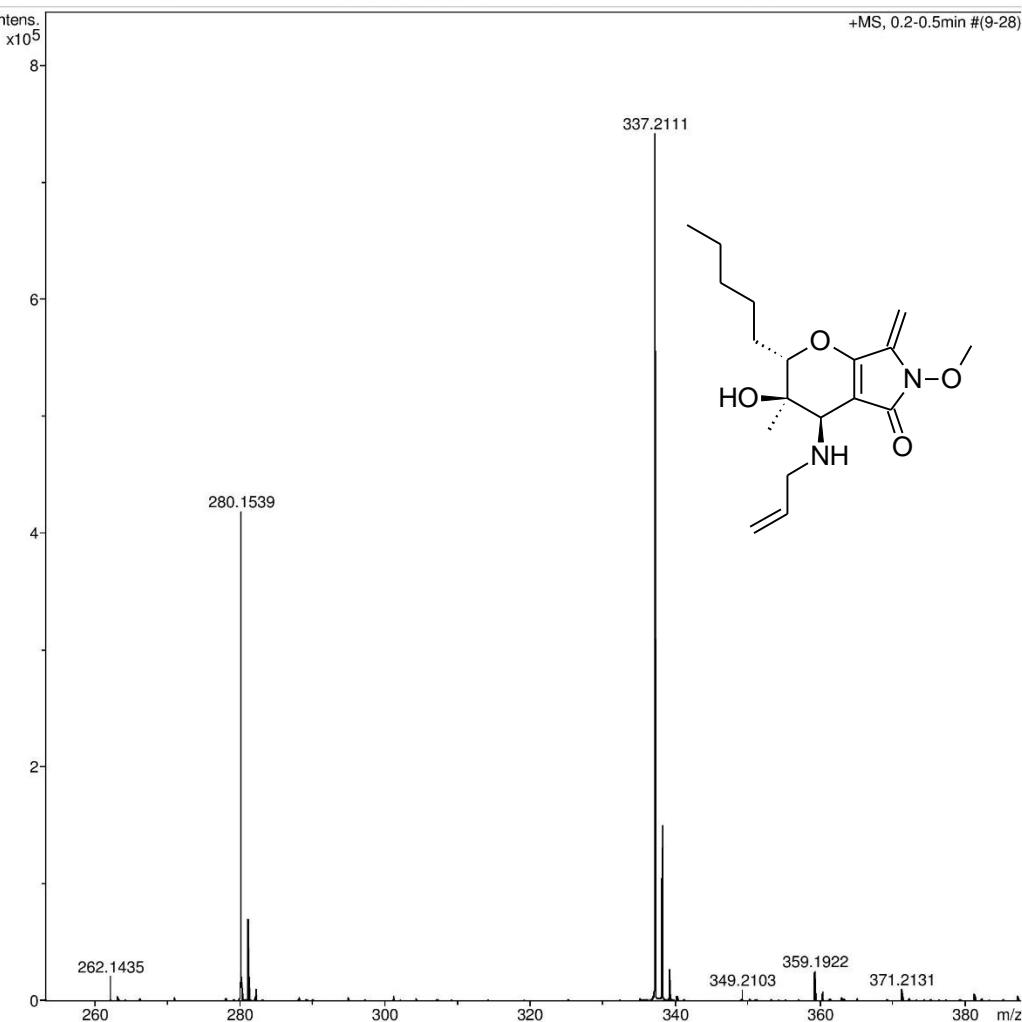
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Acquisition Date 12.02.2018 15:27:58
 Operator Bruker Customer
 Instrument / Ser# micrOTOF 10223

Acquisition Parameter

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Focus	Not active			Set Dry Heater	180 °C
Scan Begin	50 m/z	Set Capillary	4500 V	Set Dry Gas	4.0 l/min
Scan End	1500 m/z	Set End Plate Offset	-500 V	Set Divert Valve	Source

**Figure 14.** HRMS of 4.

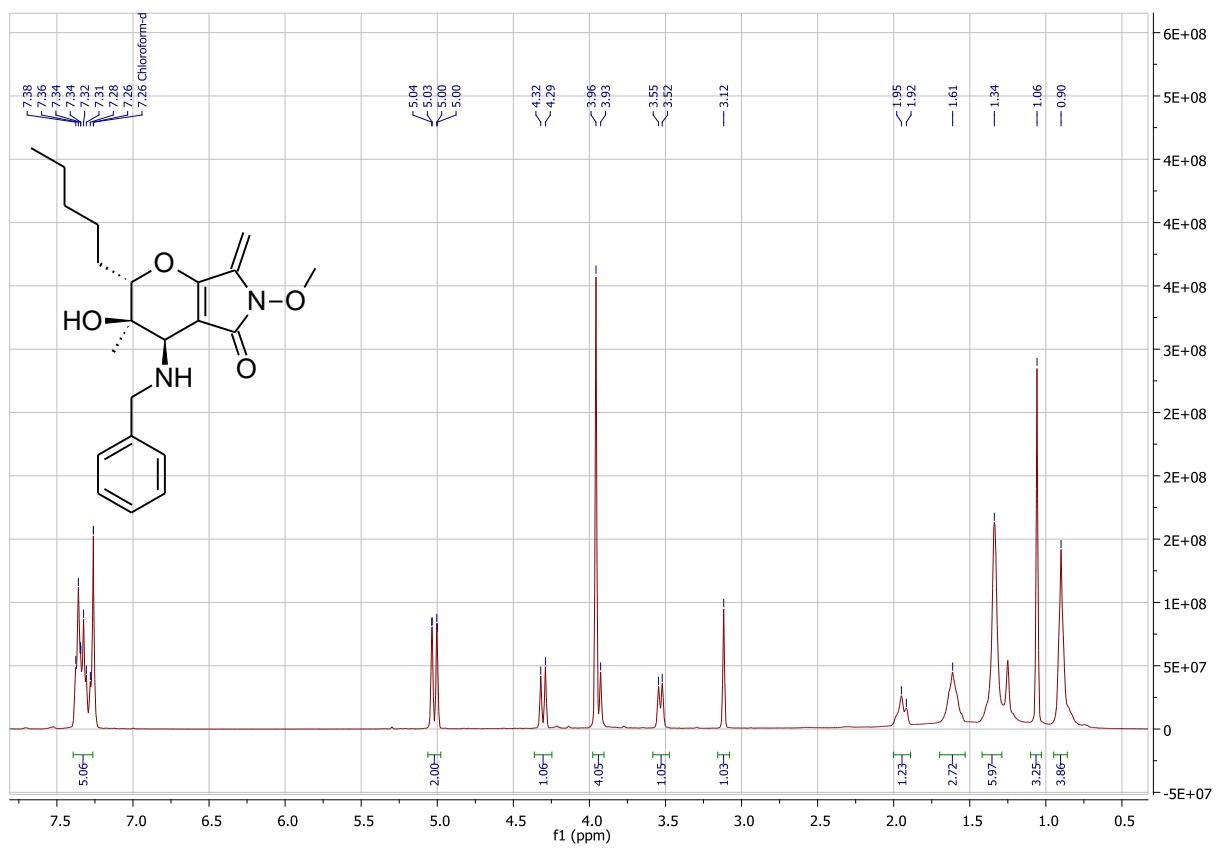


Figure 15. ^1H -NMR of **5**.

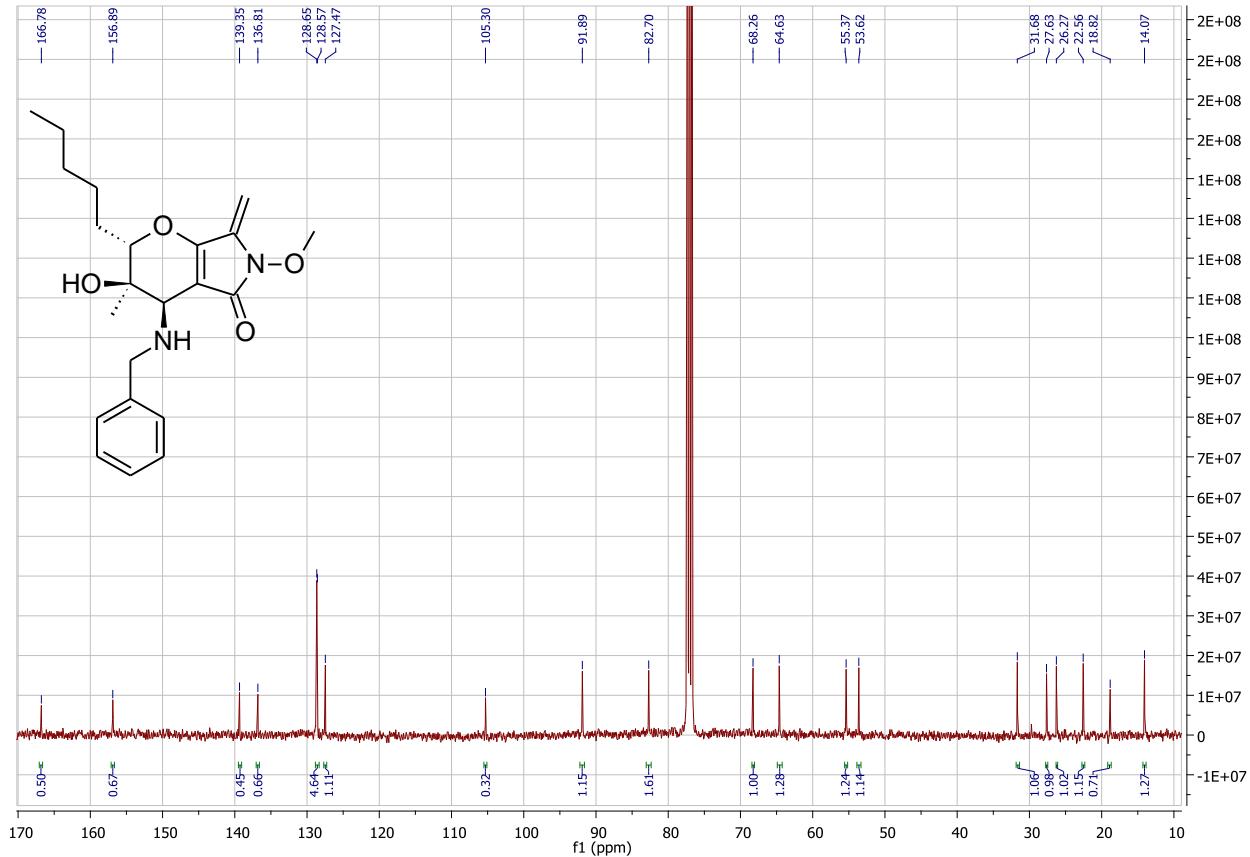


Figure 16. ^{13}C -NMR of **5**.

Display Report

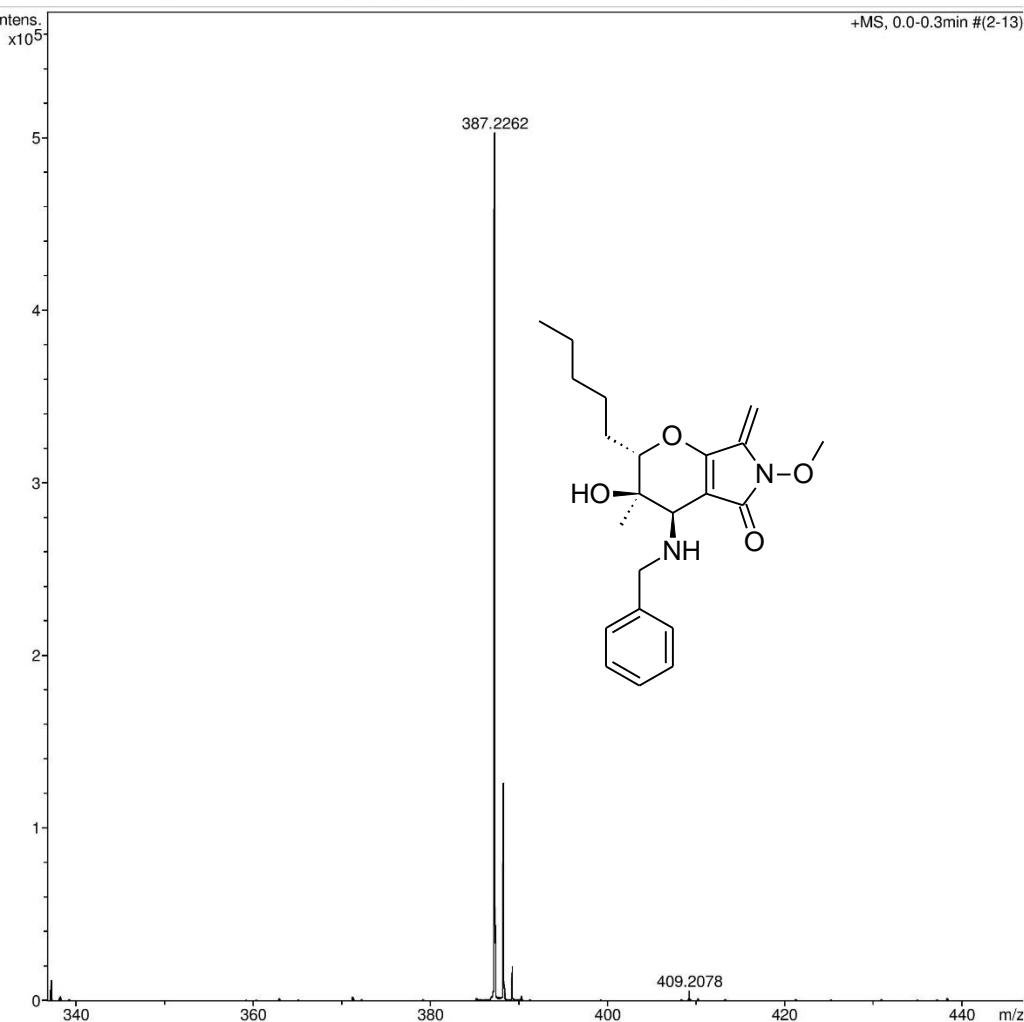
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Acquisition Date 12.02.2018 15:35:22
 Operator Bruker Customer
 Instrument / Ser# micrOTOF 10223

Acquisition Parameter

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Focus	Not active			Set Dry Heater	180 °C
Scan Begin	50 m/z	Set Capillary	4500 V	Set Dry Gas	4.0 l/min
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**Figure 17.** HRMS of **5**.

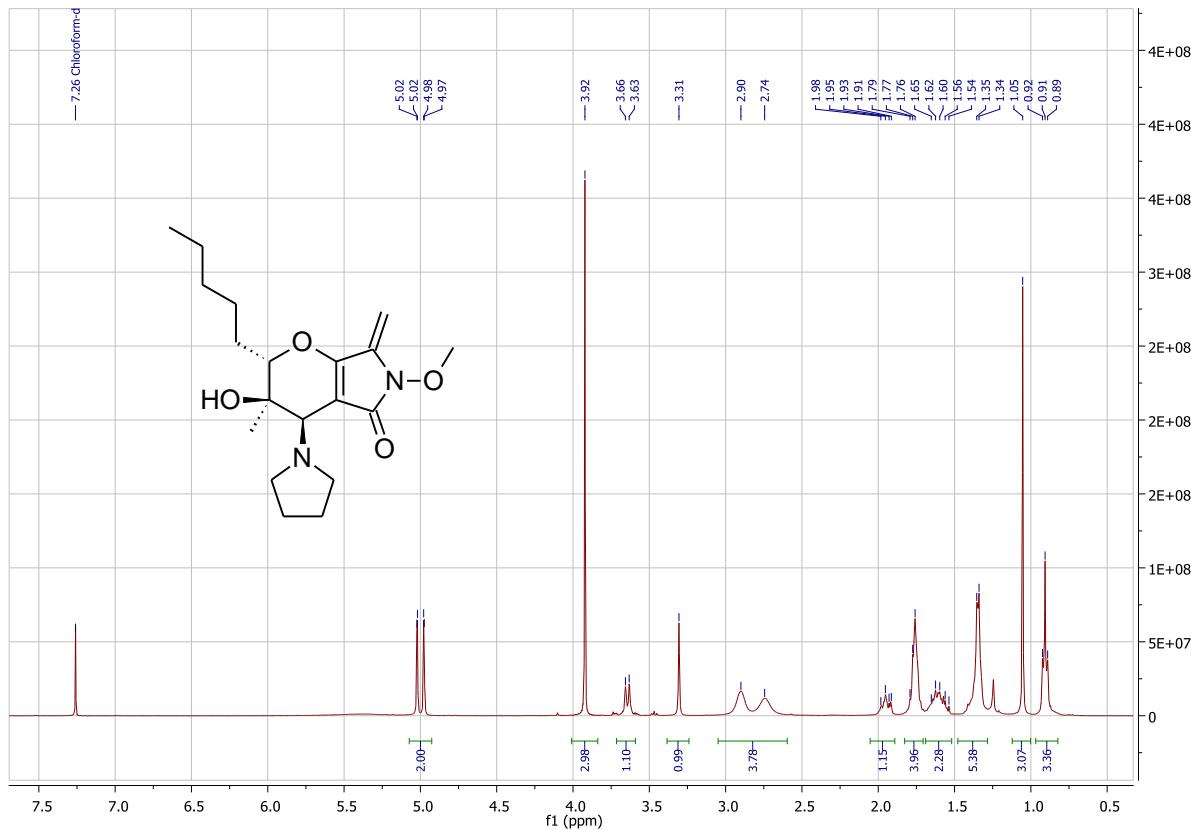


Figure 18. ^1H -NMR of **6**.

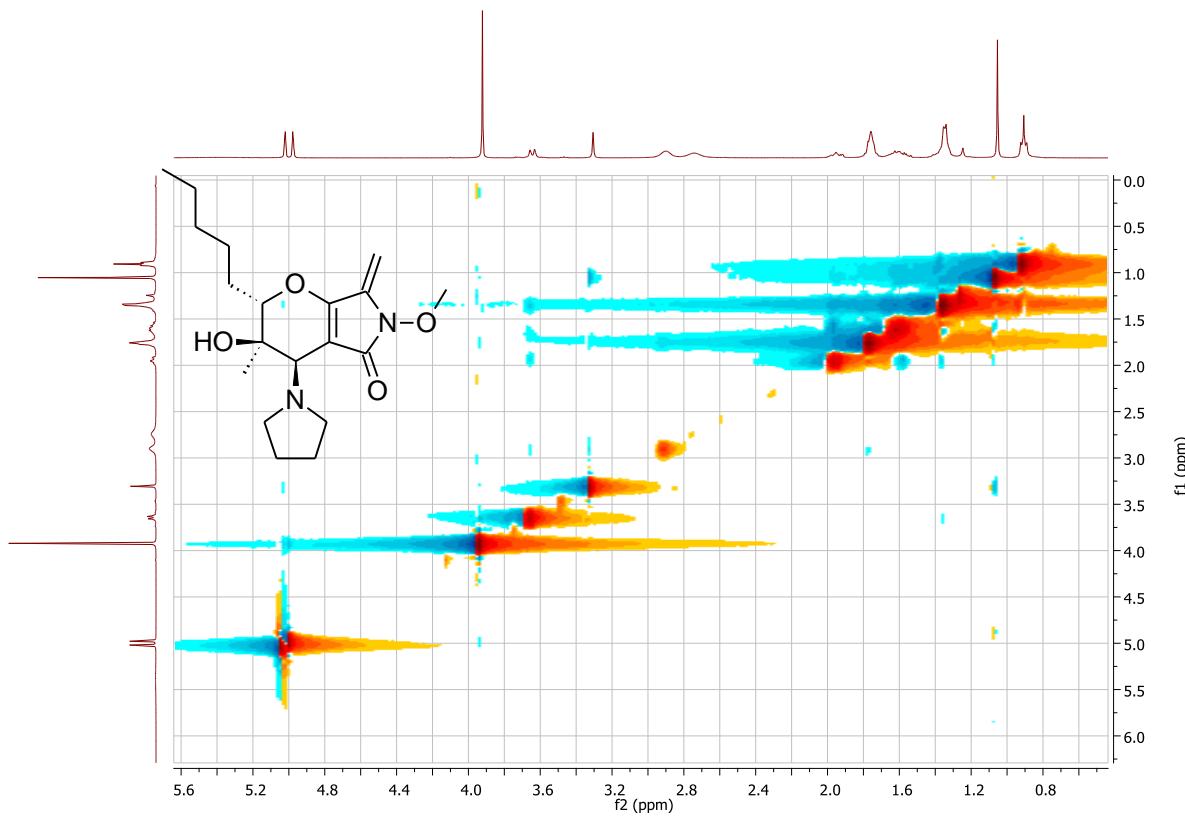


Figure 19. ^1H - ^1H ROESY of **6**.

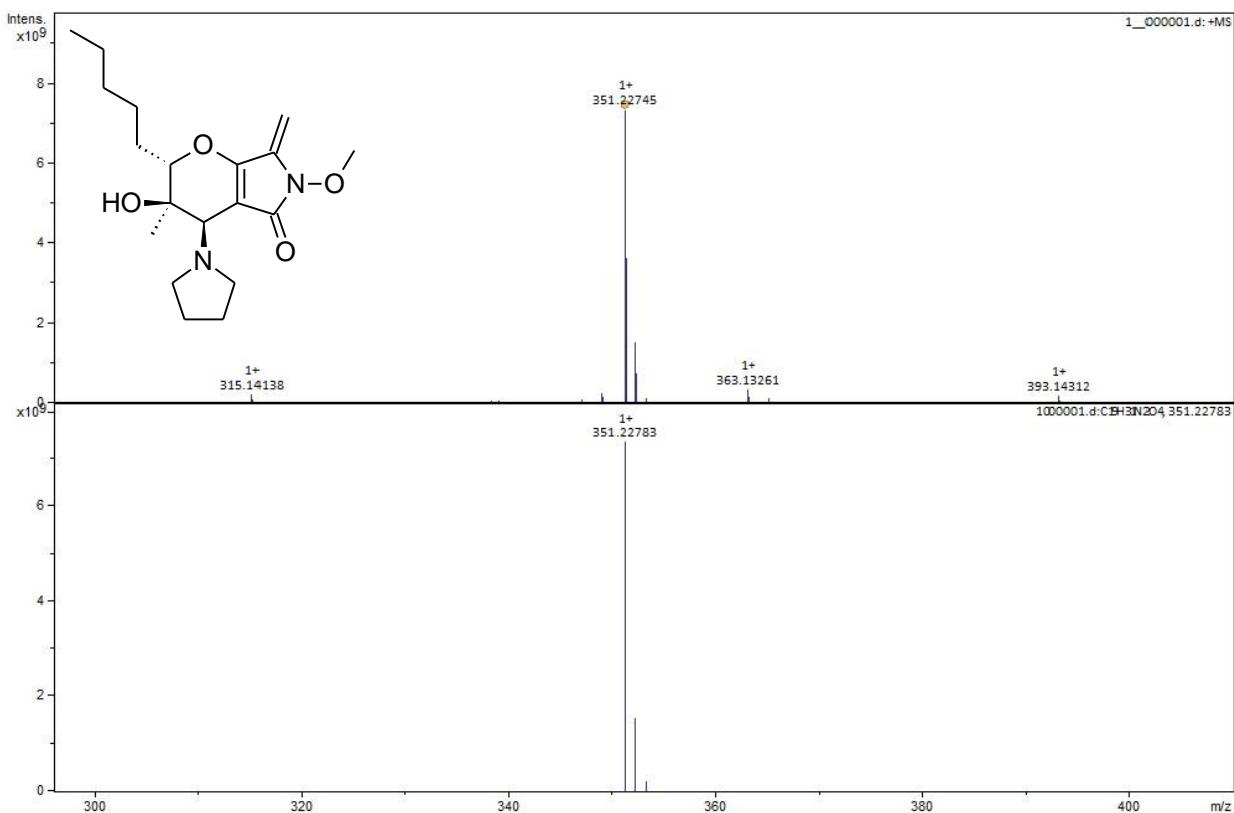


Figure 20. HRMS of **6**.

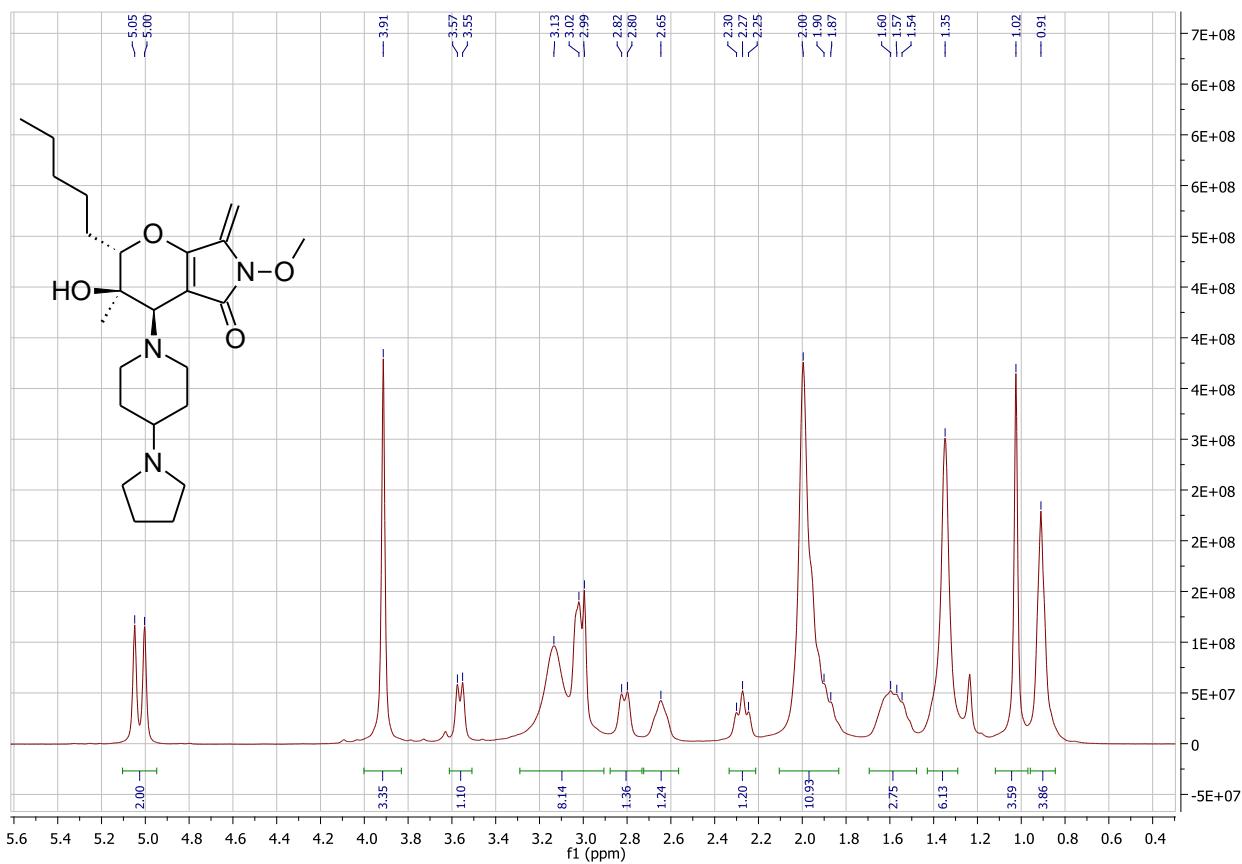


Figure 21. ^1H -NMR of **7**.

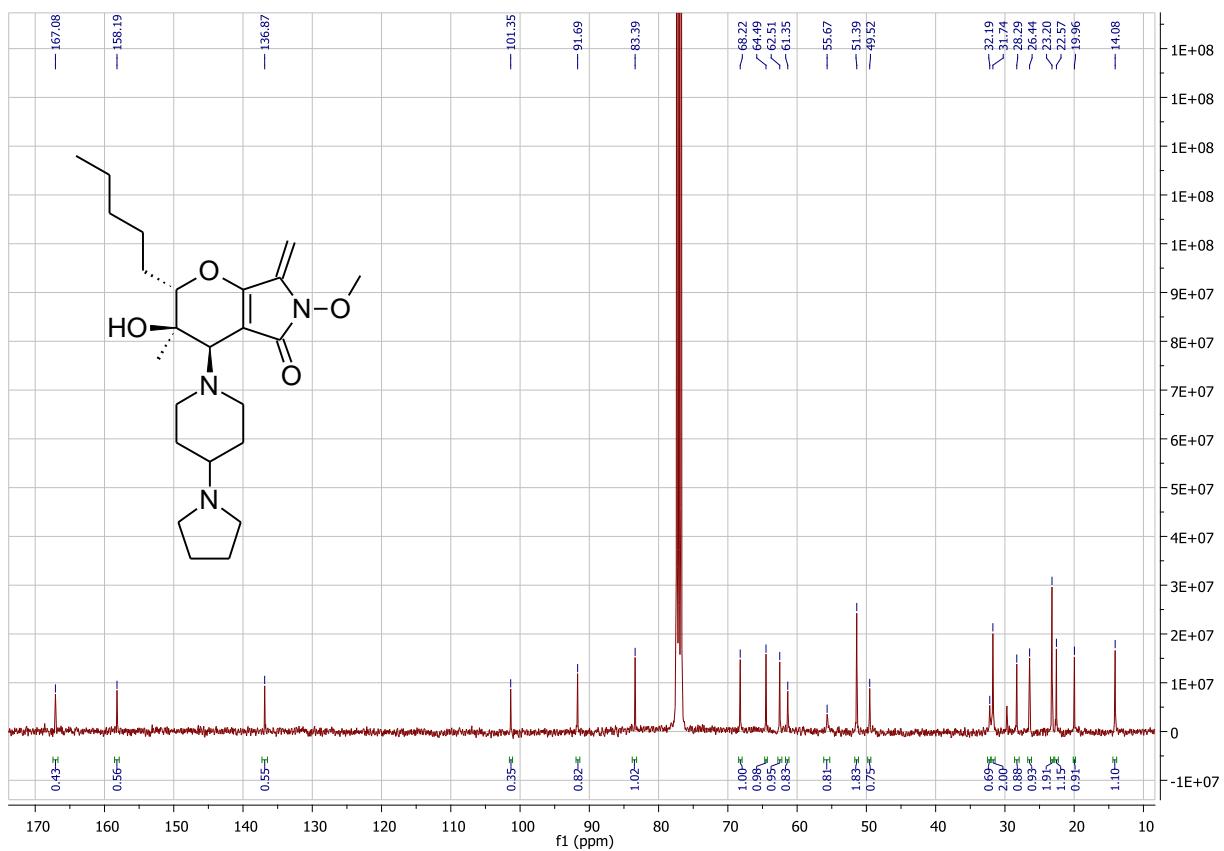


Figure 22. ^{13}C -NMR of 7.

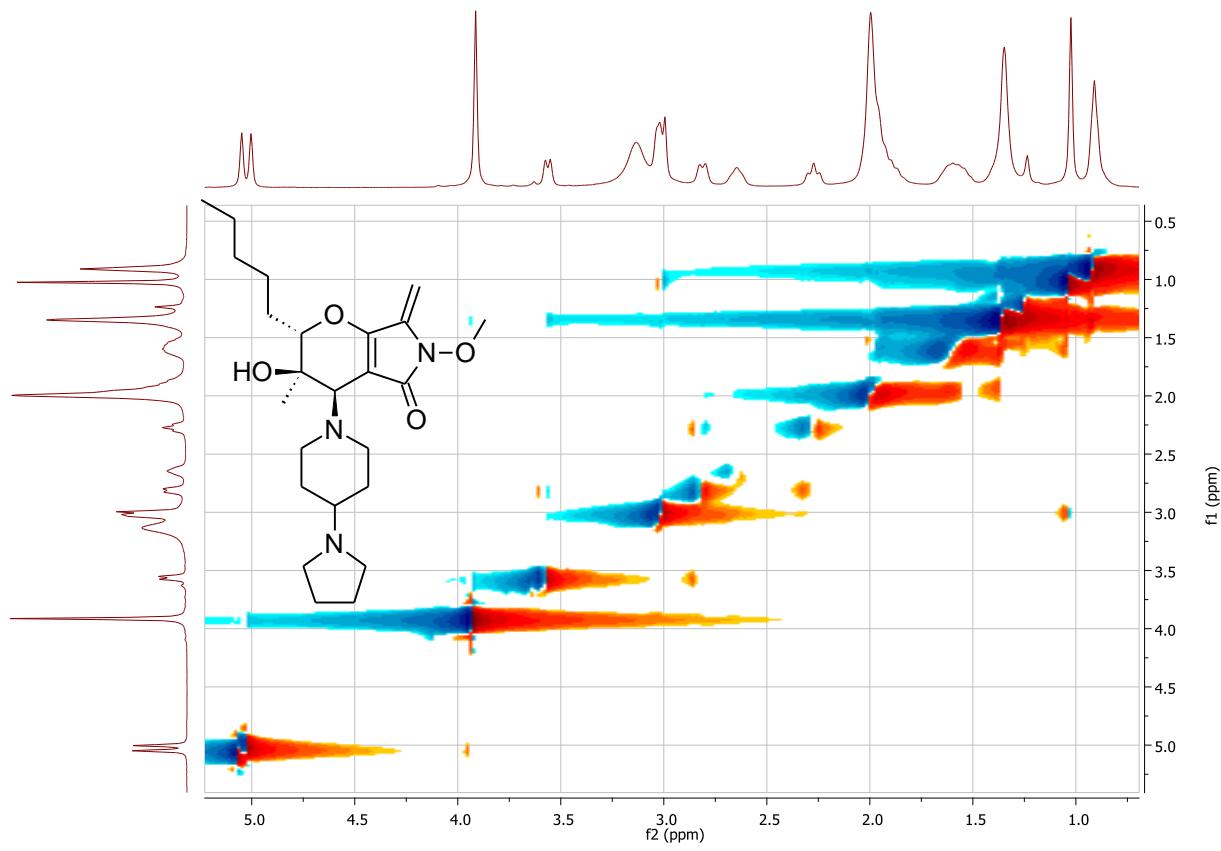


Figure 23. ^1H - ^1H ROESY of 7.

 Display Report

Analysis Info

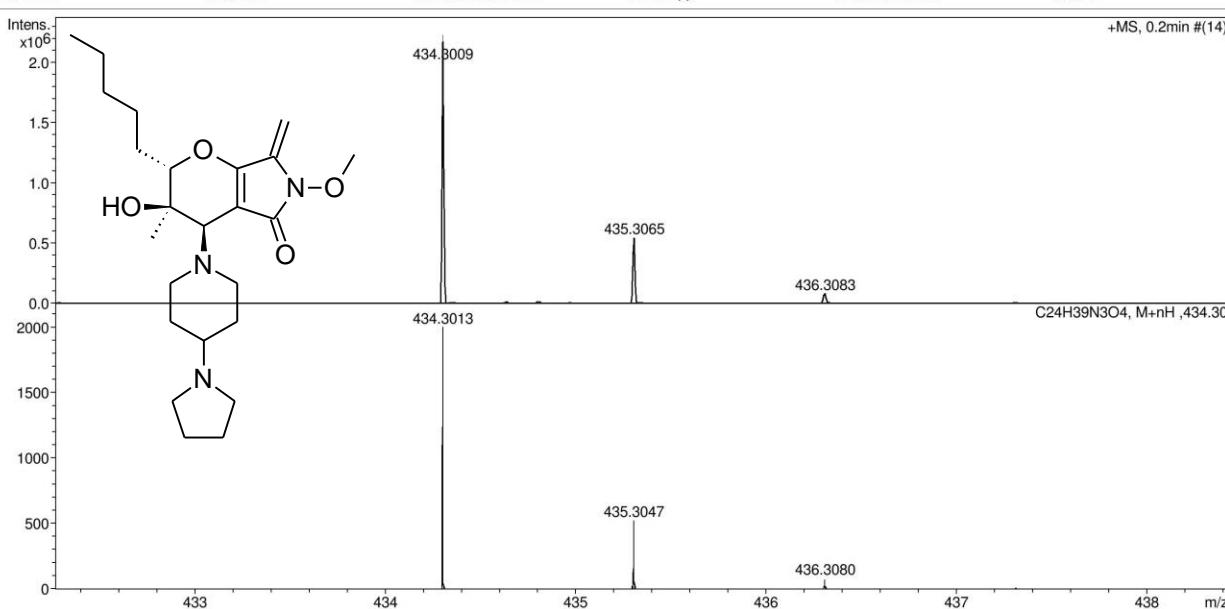
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 Sample Name abz_20_
 Comment

Acquisition Date 2/28/2018 9:03:23 AM

Operator BDAL@DE
 Instrument maXis
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Acquisition Parameter

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Focus Active	Set Capillary 4500 V	Set Dry Heater 180 °C
Scan Begin 50 m/z	Set End Plate Offset -500 V	Set Dry Gas 4.0 l/min
Scan End 1200 m/z	Set Collision Cell RF 300.0 Vpp	Set Divert Valve Source



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Figure 24. HRMS of 7.

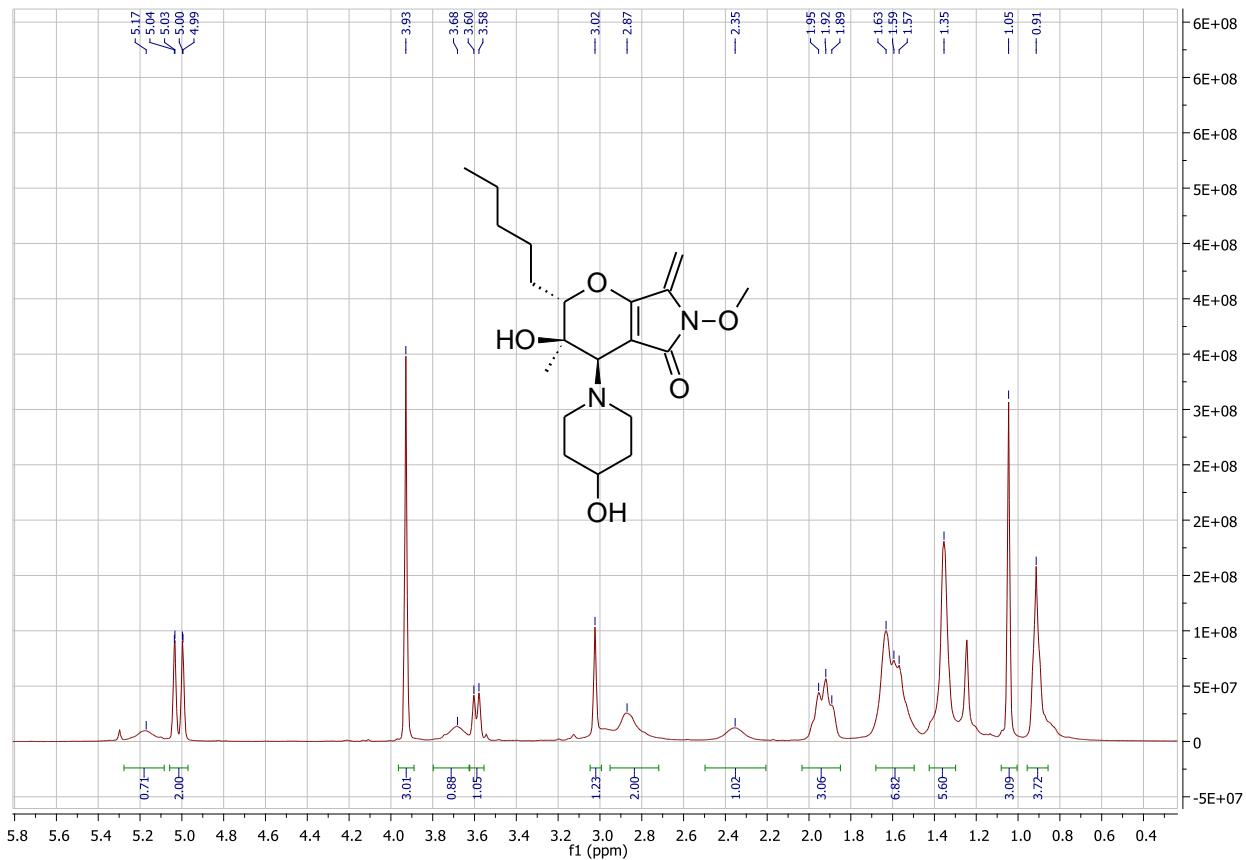


Figure 25. ^1H -NMR of **8**.

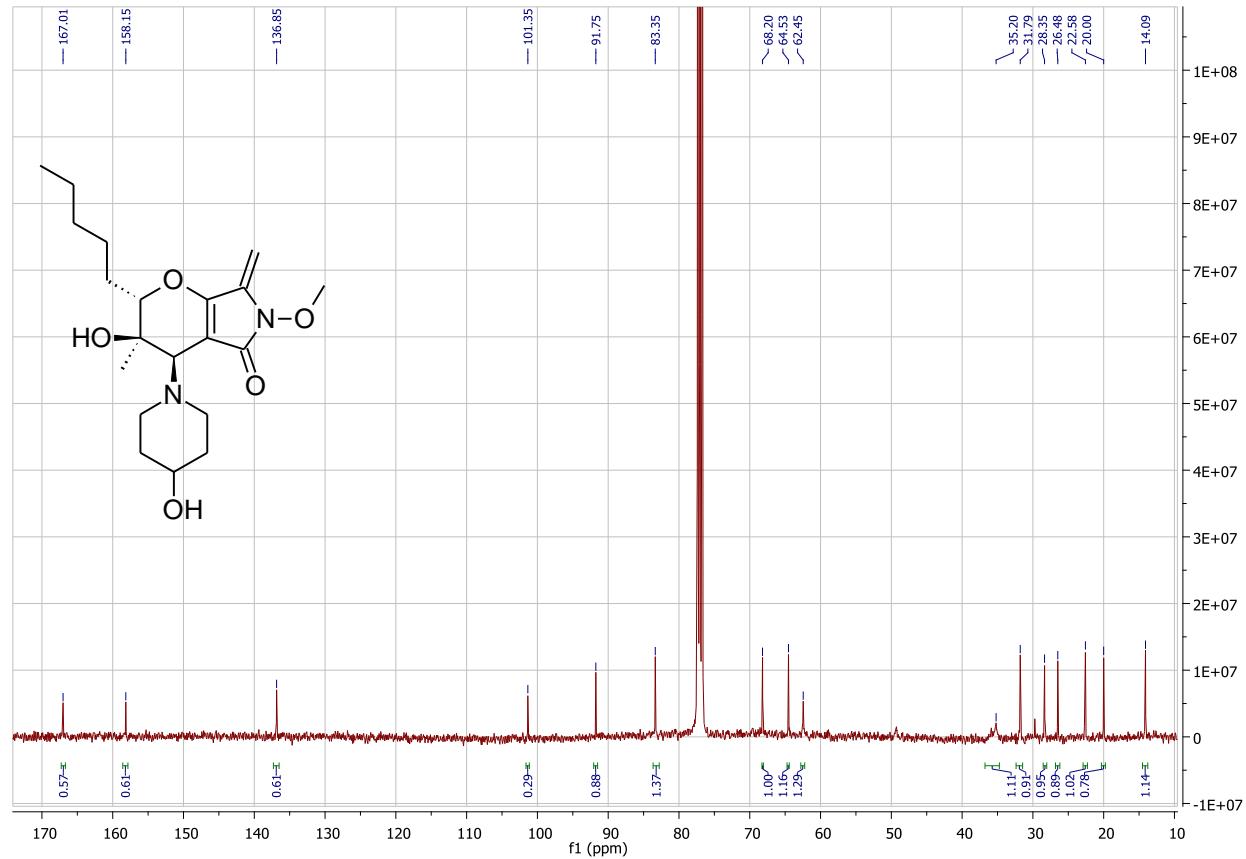
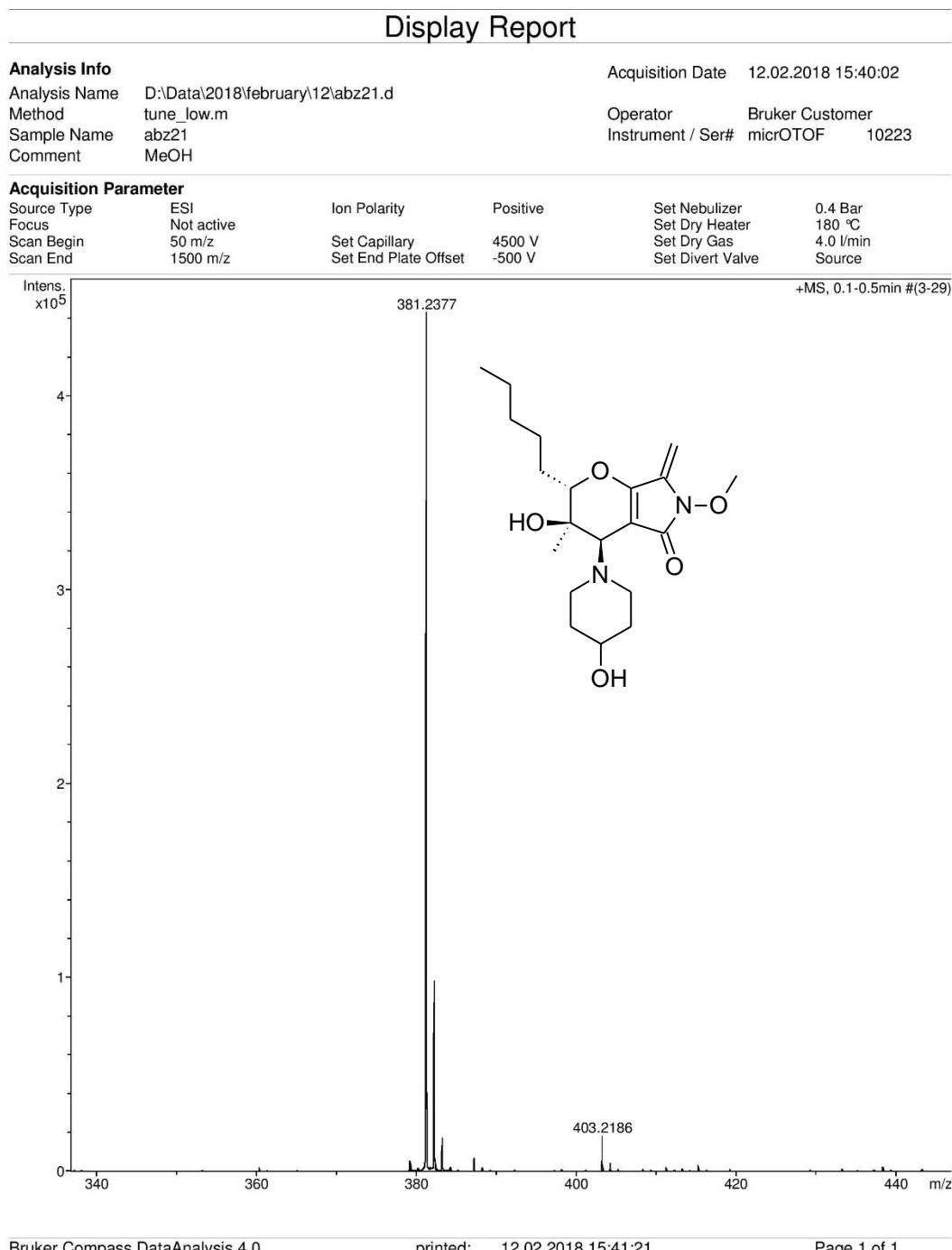


Figure 26. ^{13}C -NMR of **8**.**Figure 27.** HRMS of **8**.