

## SUPPLYMENTARY DATA OF

### **Preparation and Antibacterial Activity of Some New 4-(2-Heterylidenehydrazinyl)-7-Chloroquinoline Derivatives**

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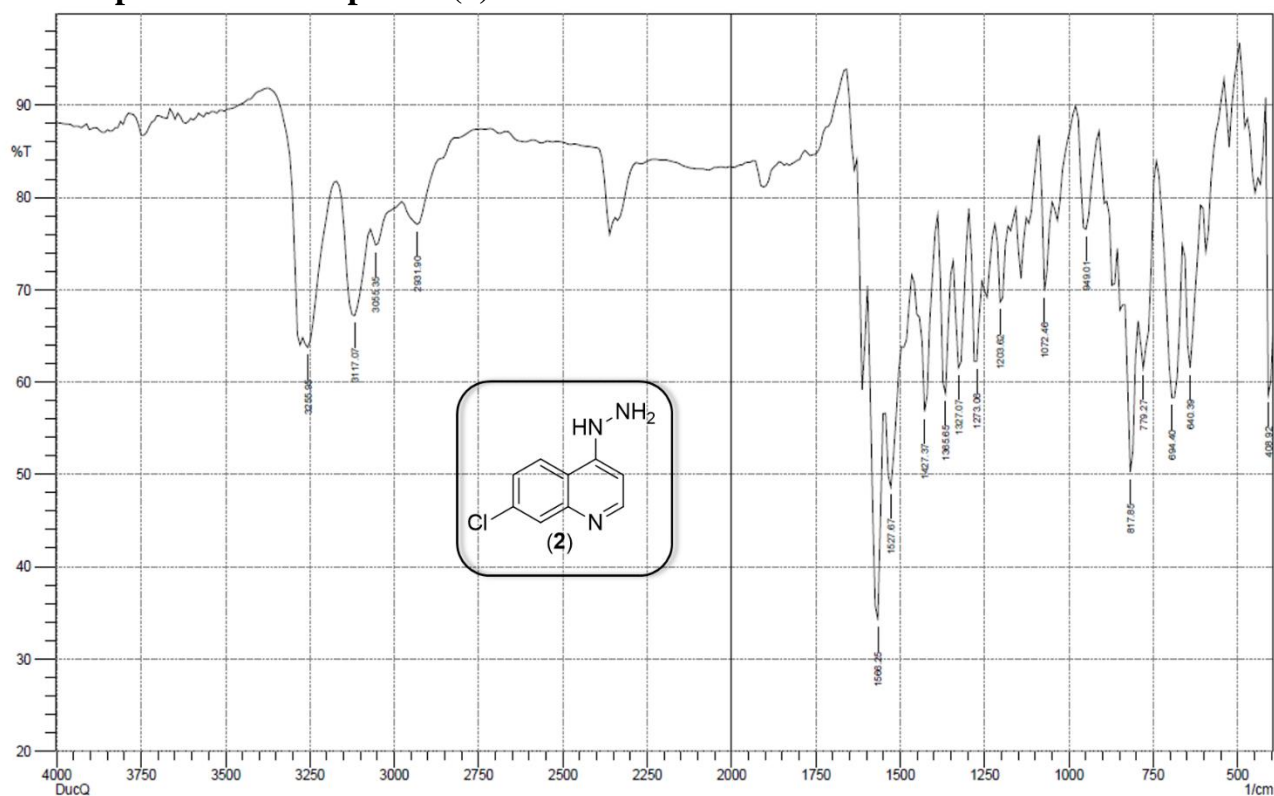
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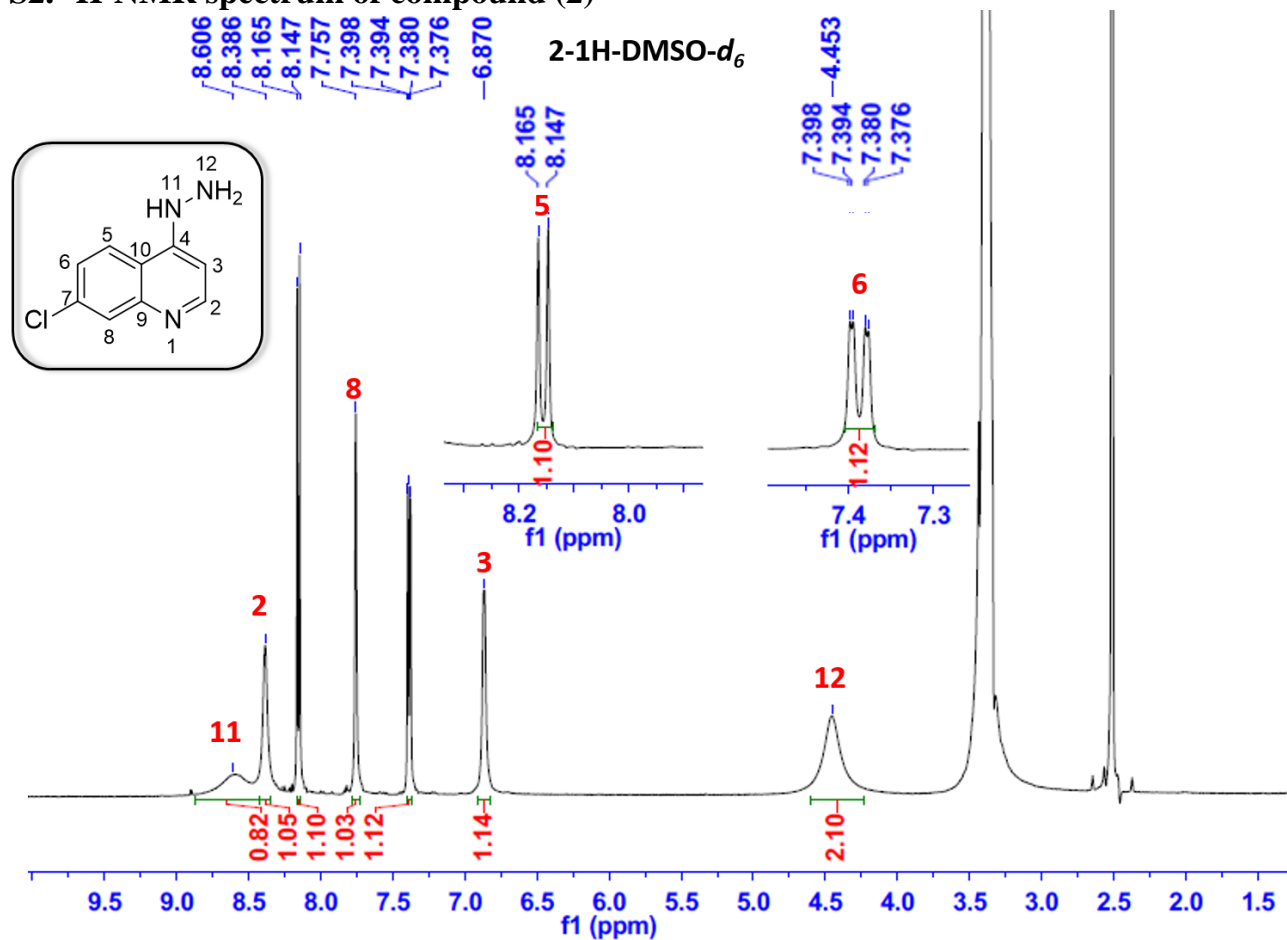
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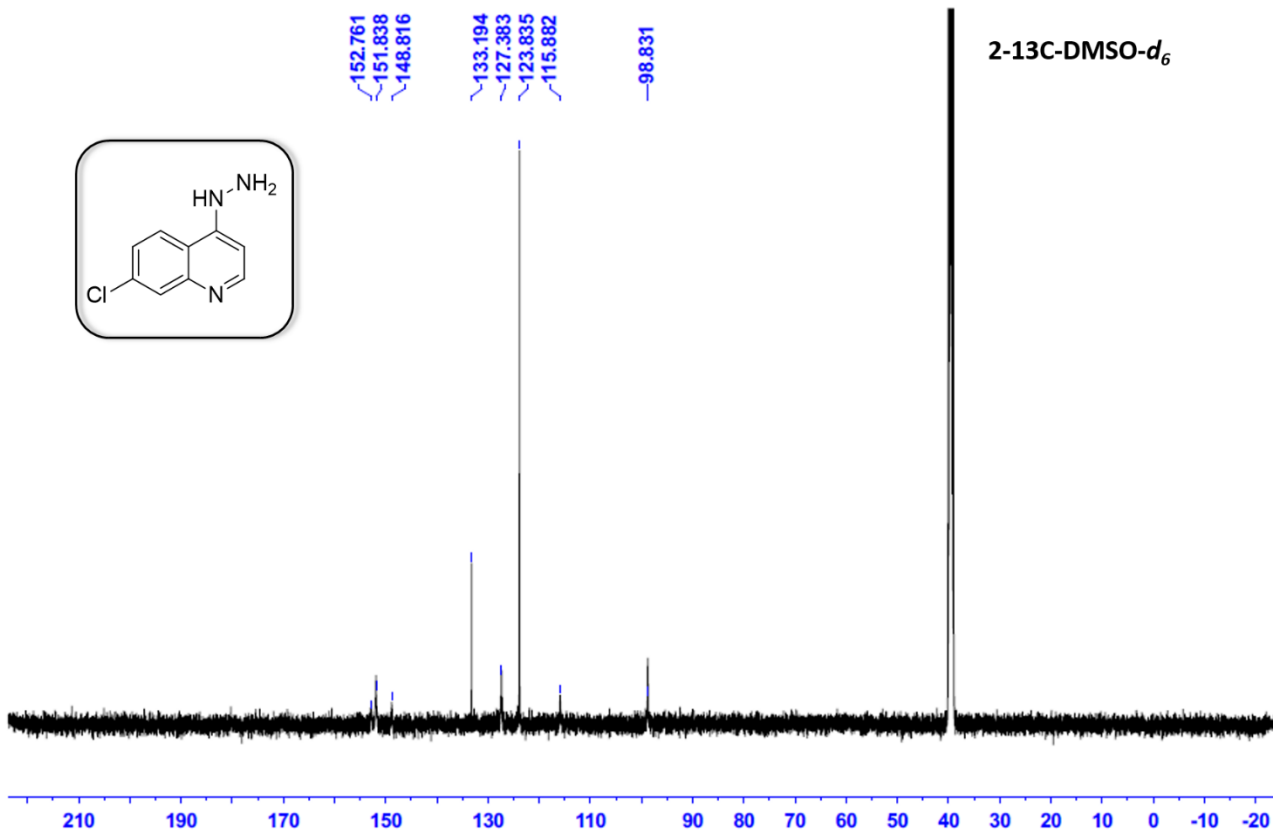
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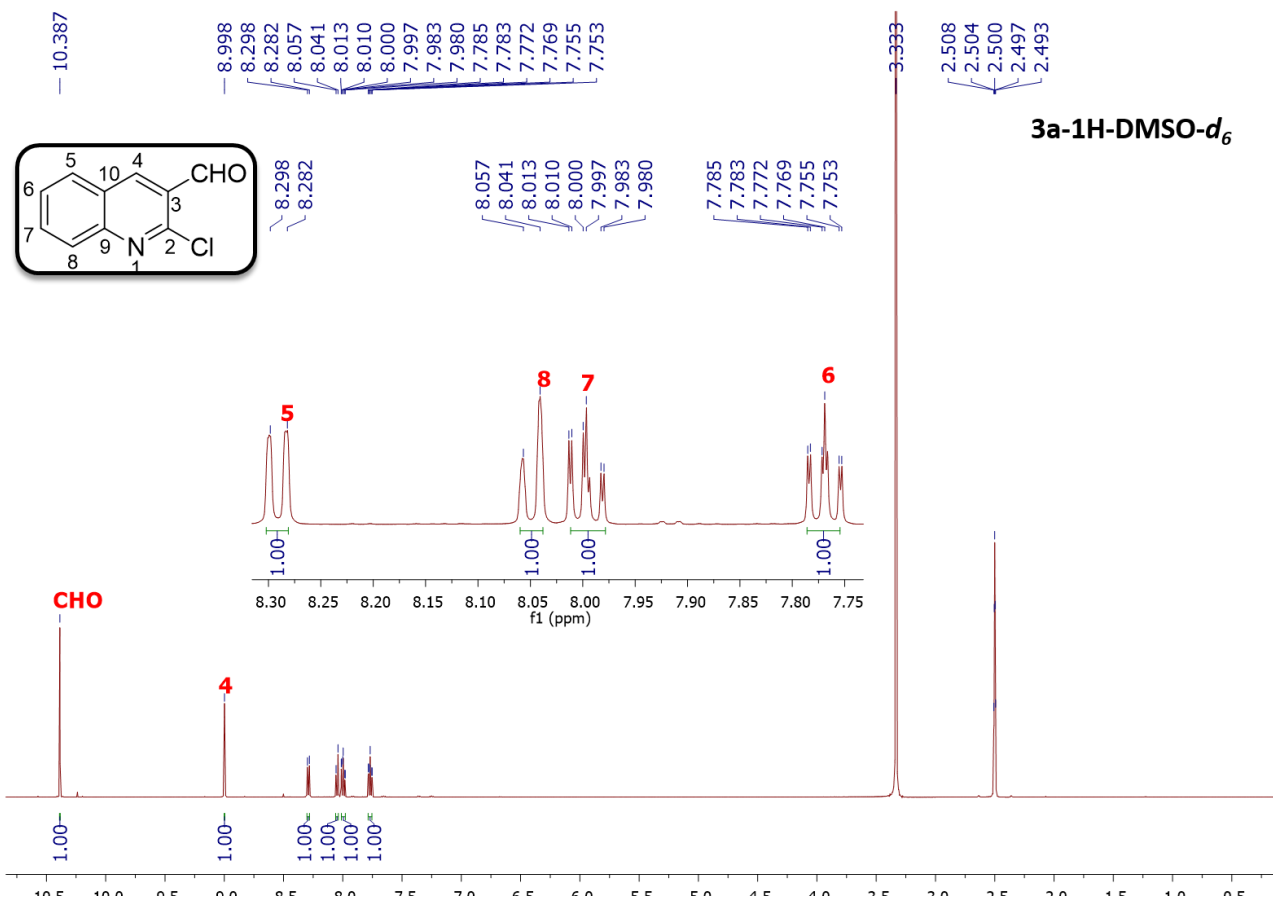
## S2. $^1\text{H}$ -NMR spectrum of compound (2)



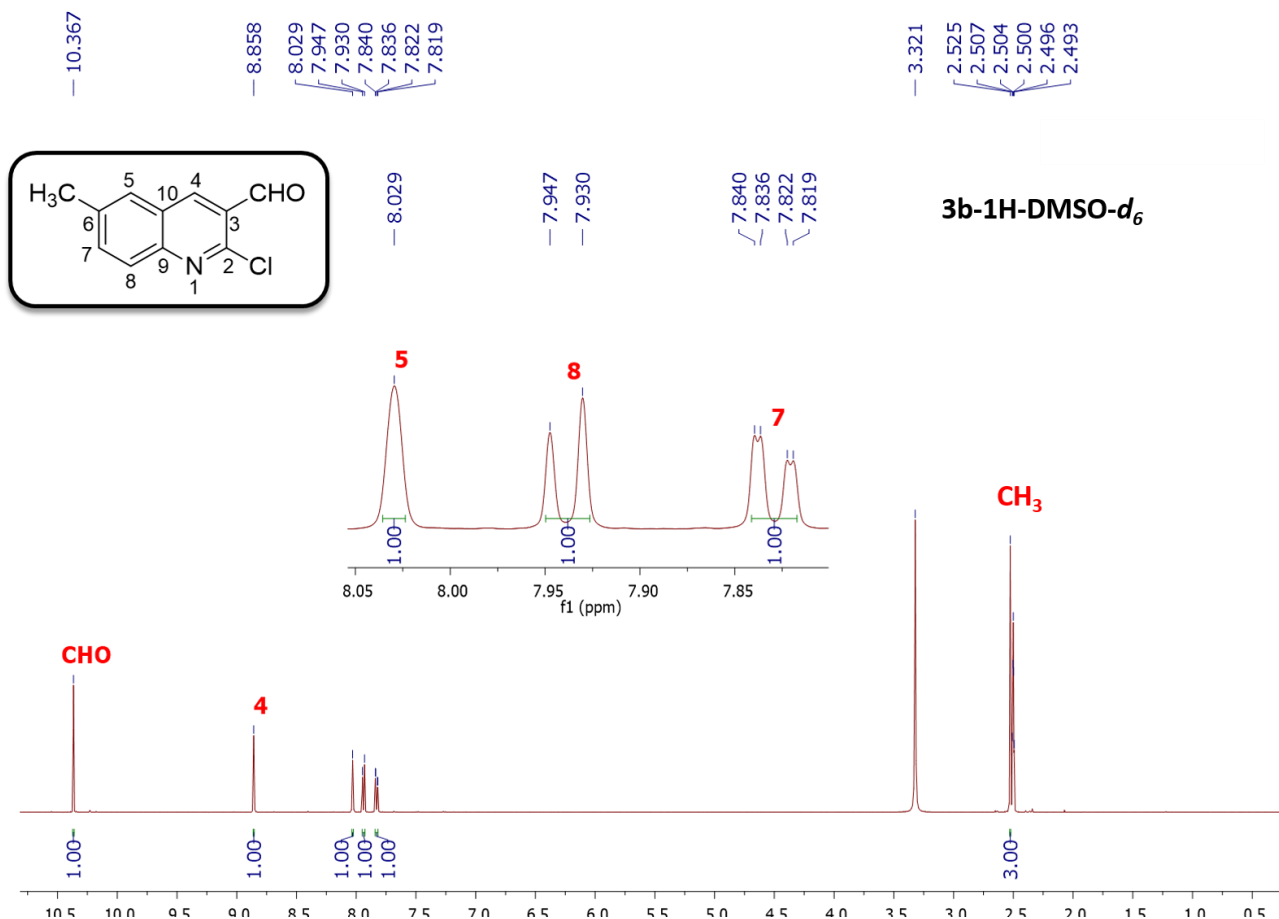
### S3. <sup>13</sup>C-NMR spectrum of compound (2)



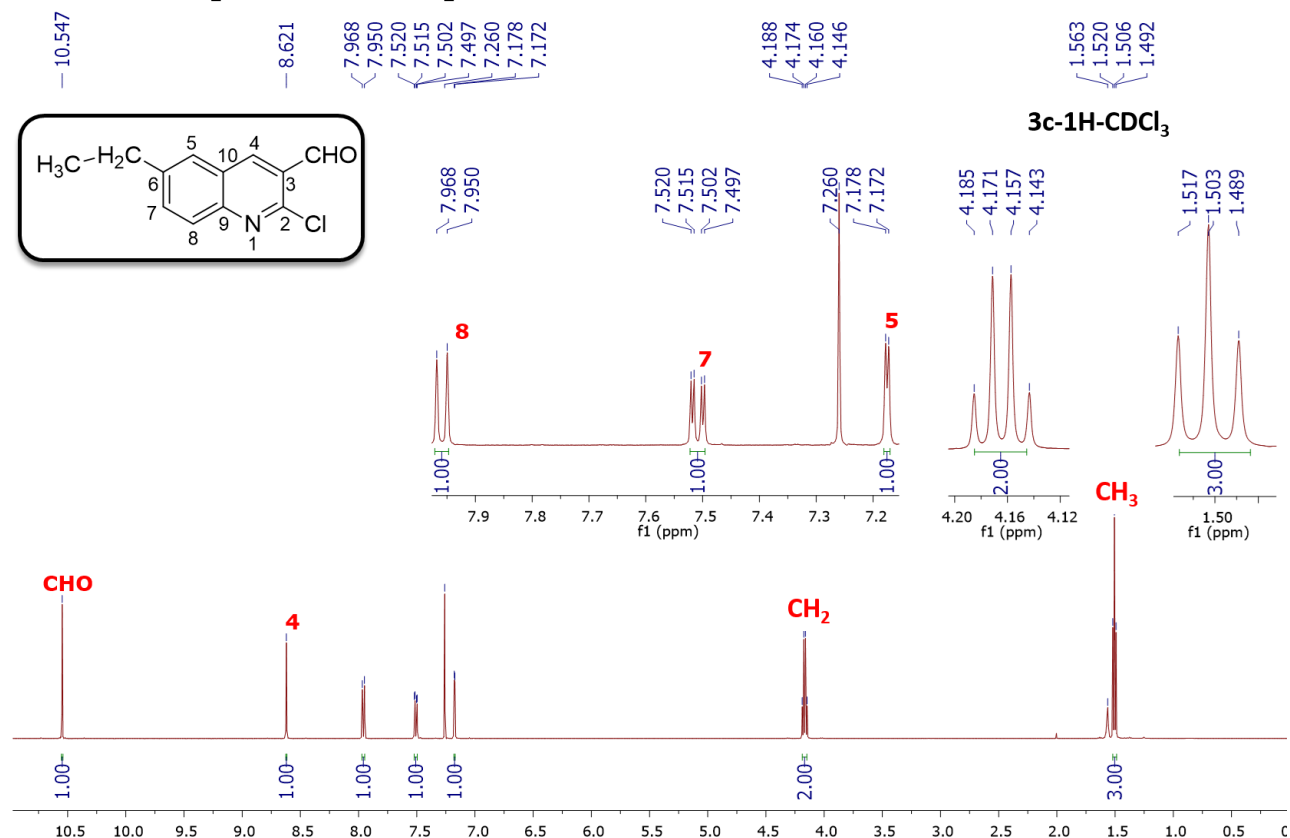
#### S4. <sup>1</sup>H-NMR spectrum of compound (3a)



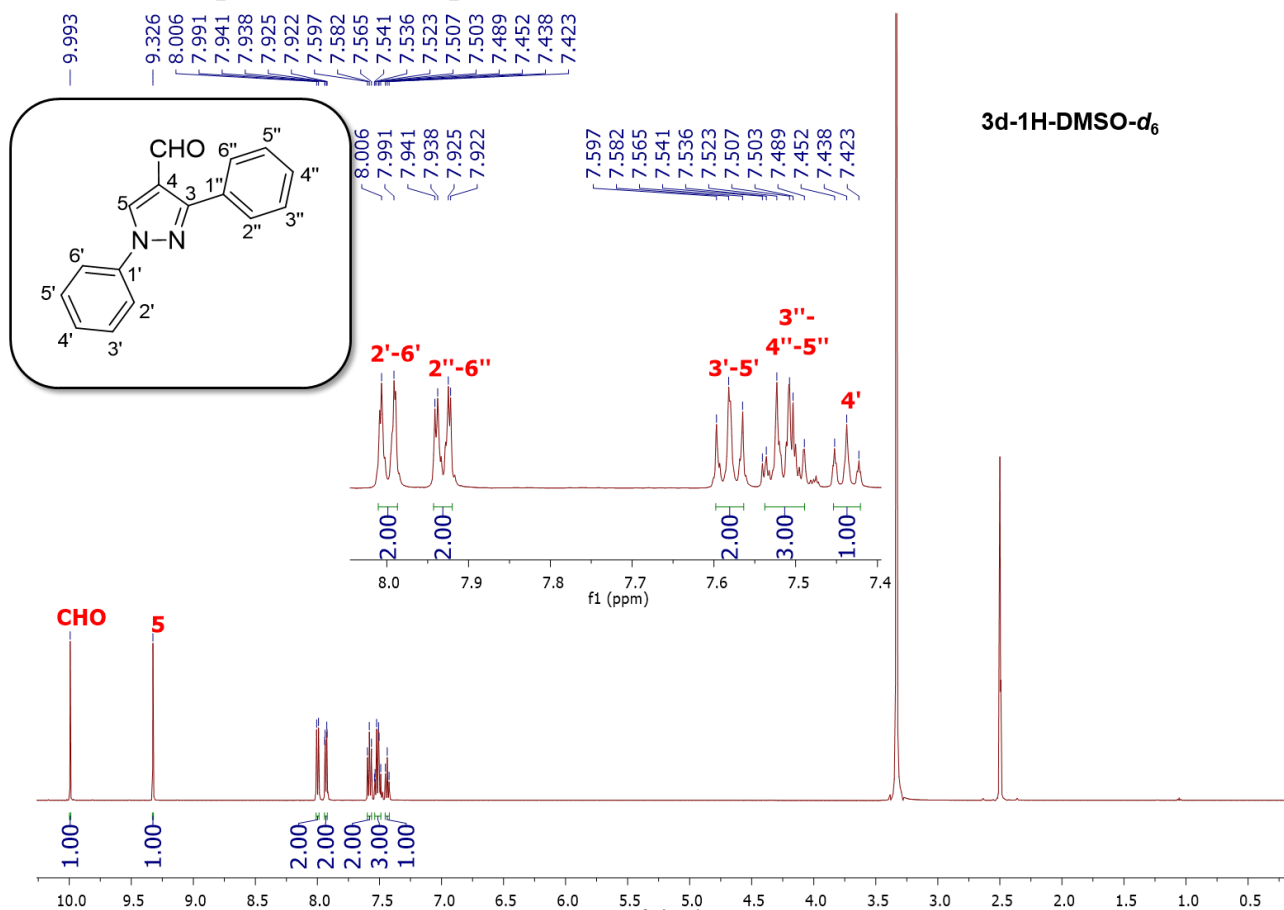
### S5. $^1\text{H}$ -NMR spectrum of compound (3b)



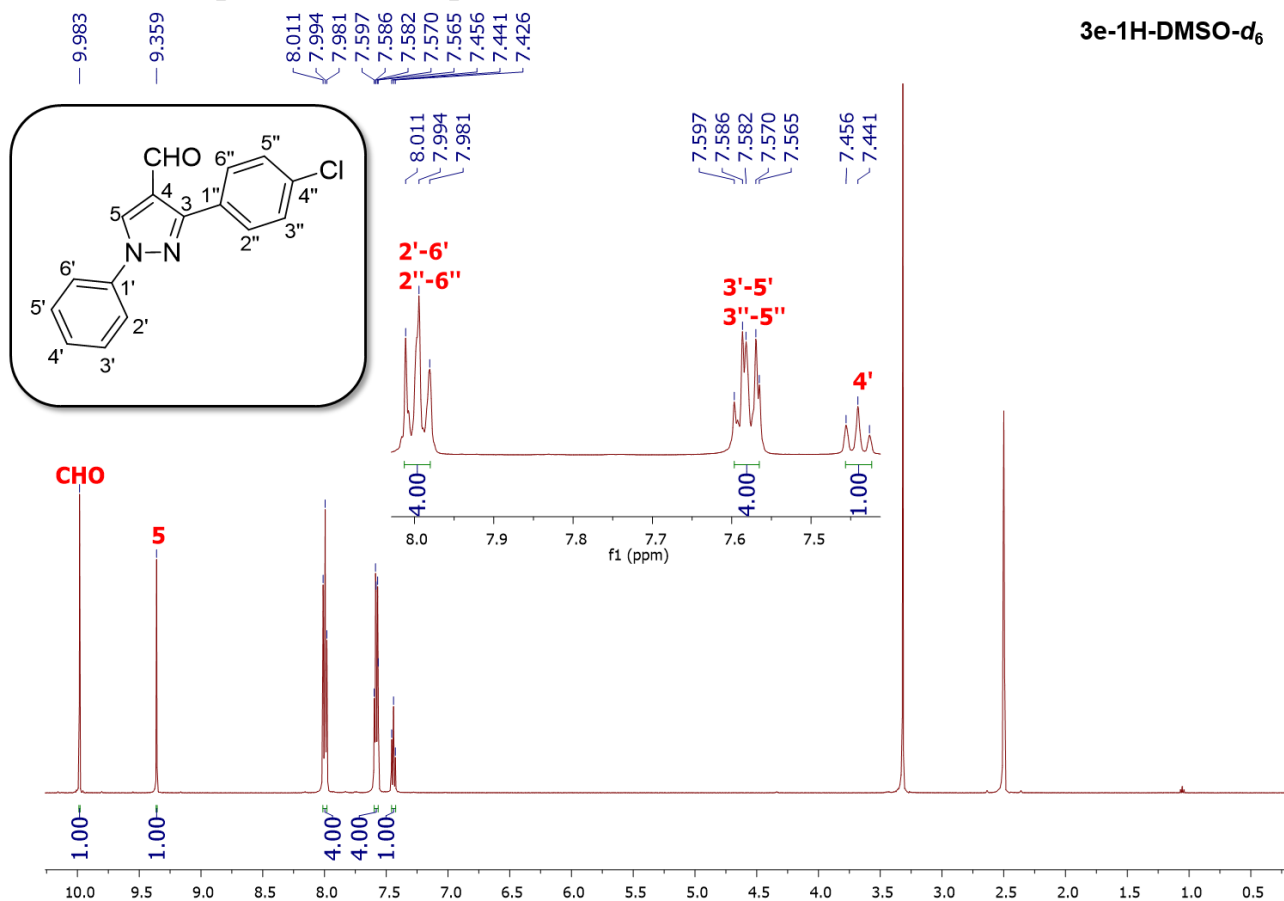
### S6. $^1\text{H}$ -NMR spectrum of compound (3c)



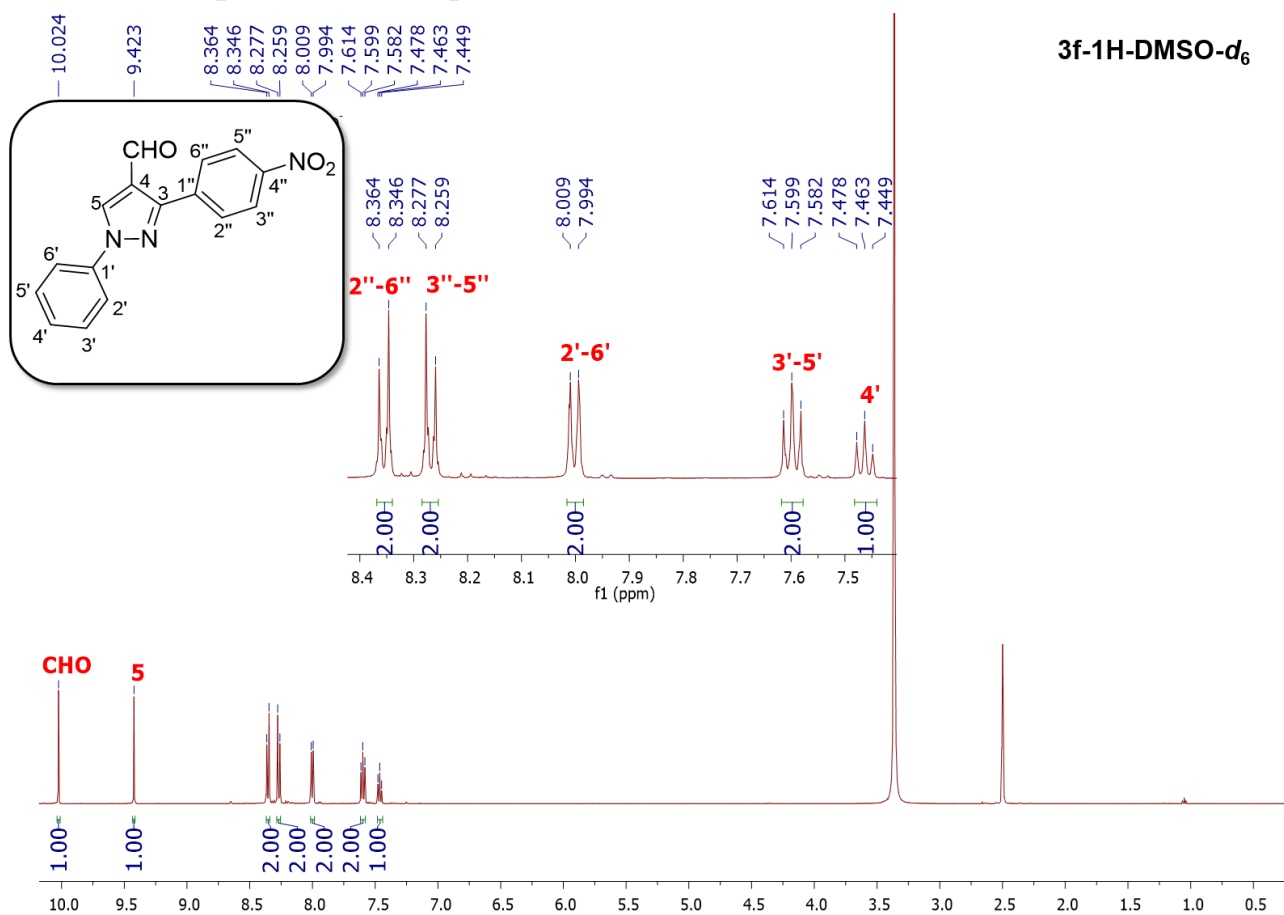
### S7. $^1\text{H}$ -NMR spectrum of compound (3d)



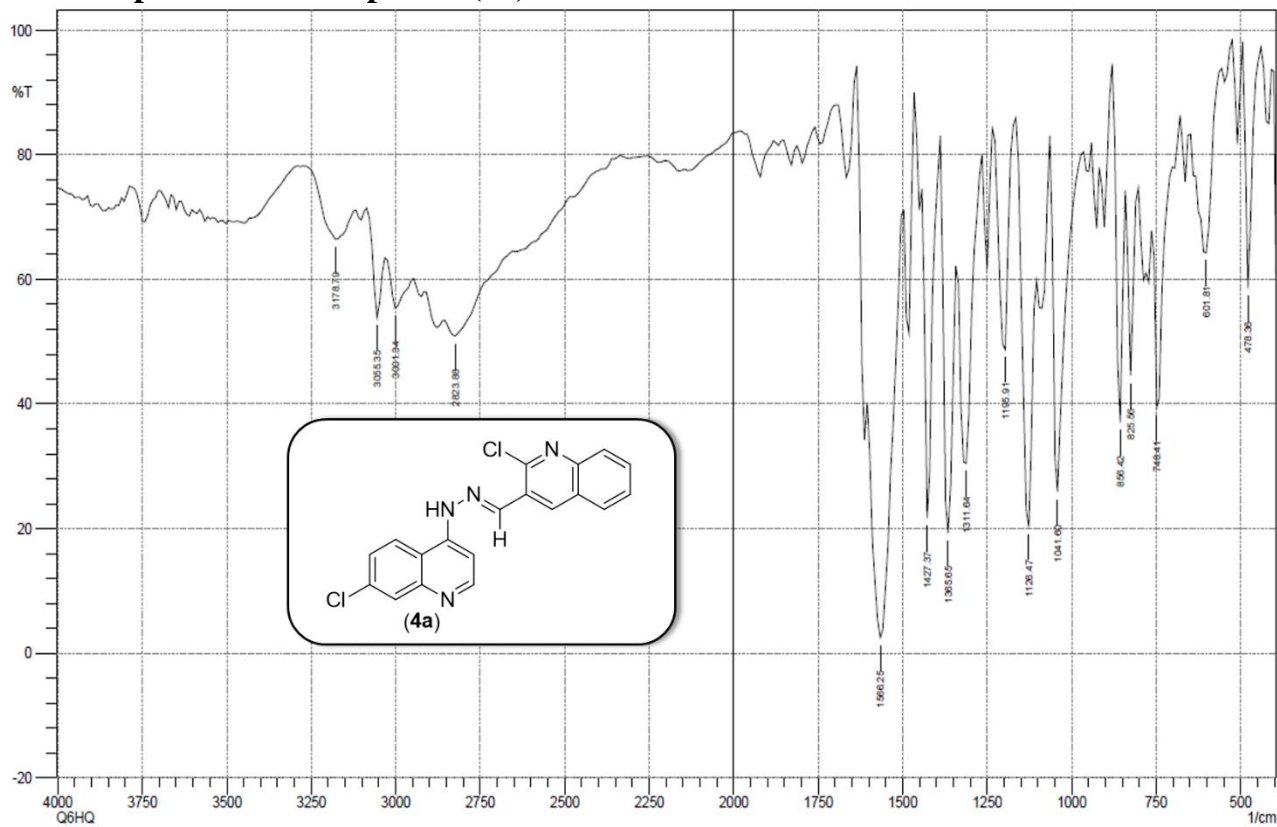
### S8. $^1\text{H}$ -NMR spectrum of compound (3e)



### S9. <sup>1</sup>H-NMR spectrum of compound (3f)



### S10. IR spectrum of compound (4a)





# S11. HR-MS spectrum of compound (4a)

## Display Report

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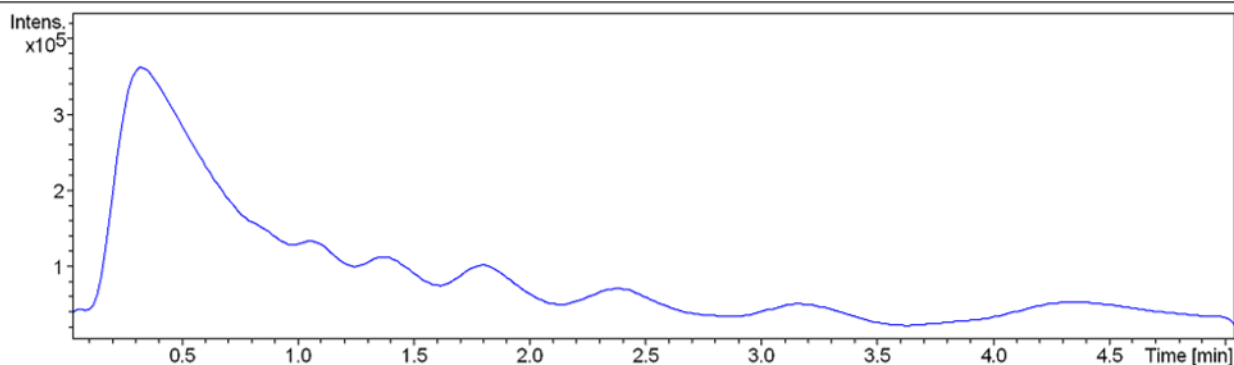
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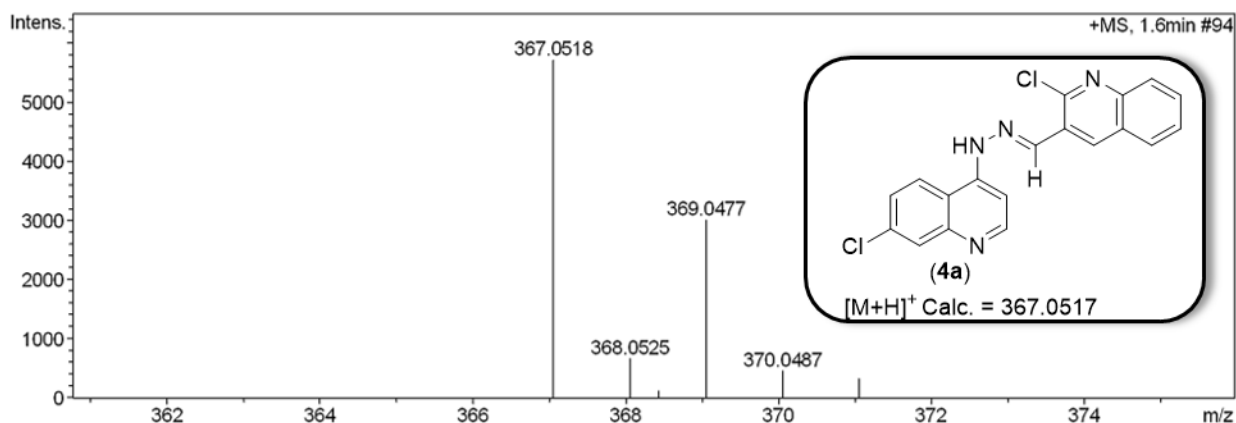
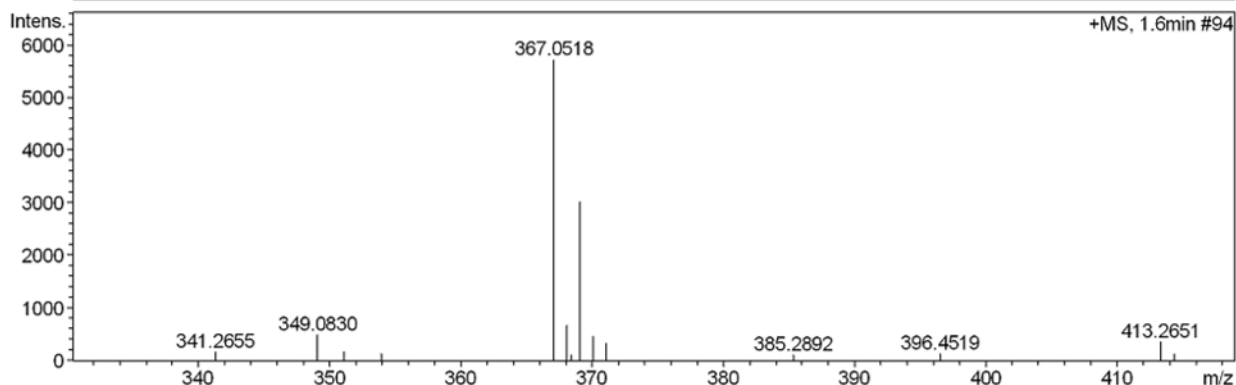
Operator Anh Mai  
 Instrument micrOTOF-Q 10187

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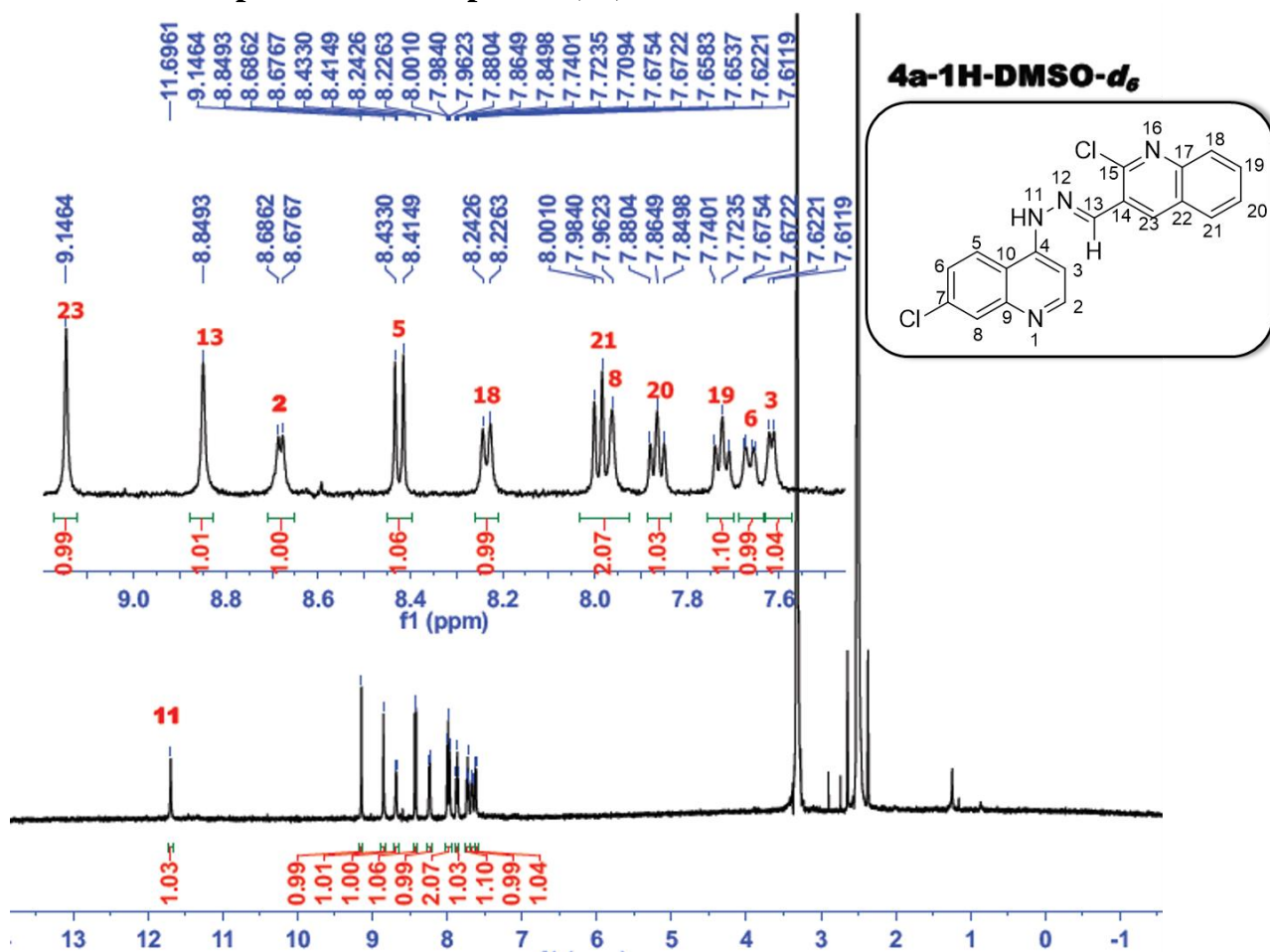
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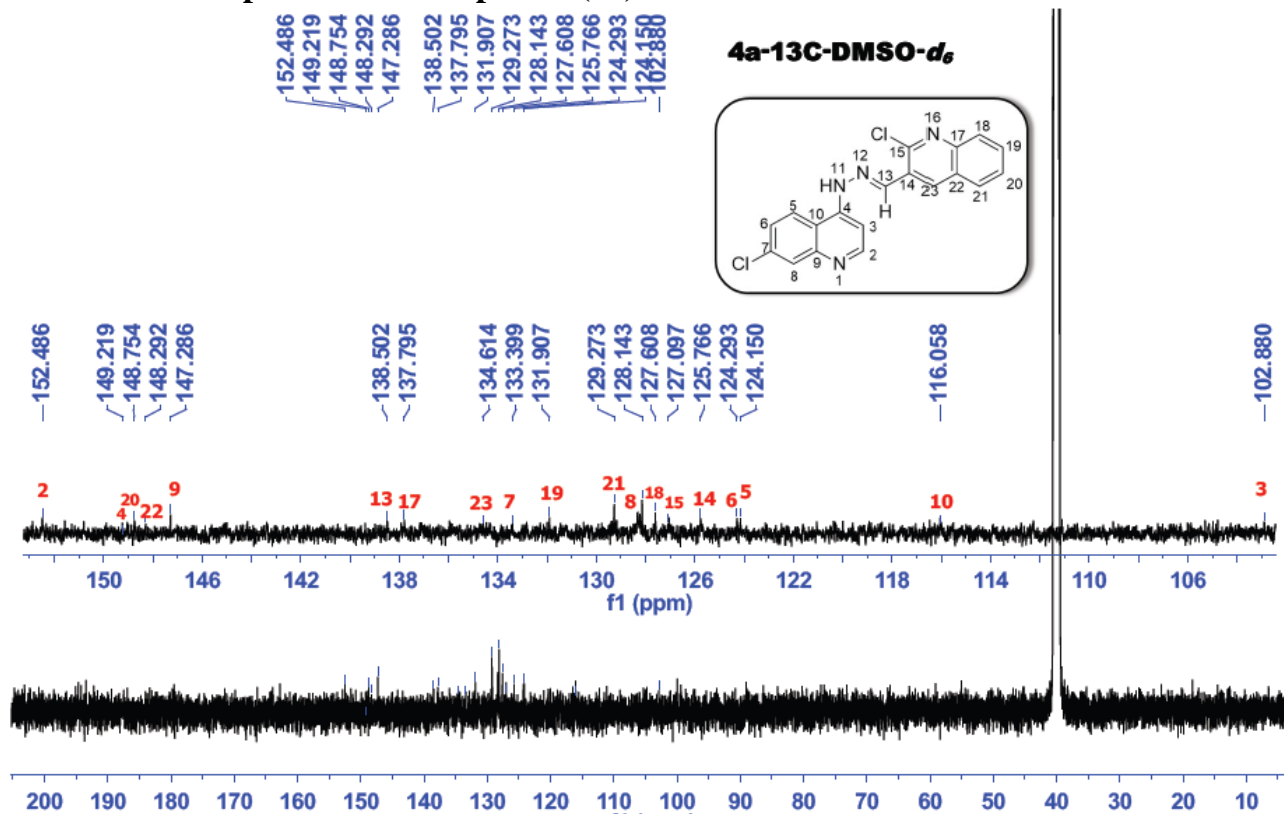
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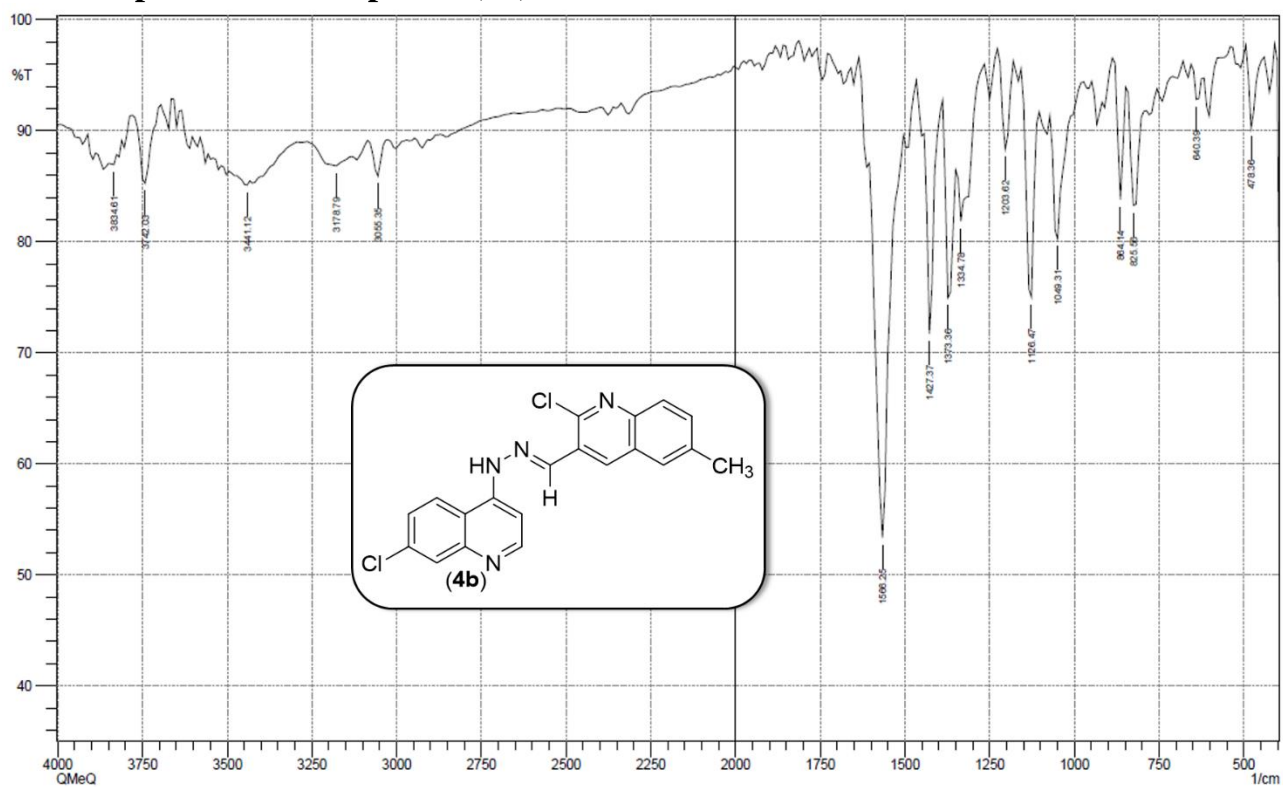
S12.  $^1\text{H}$ -NMR spectrum of compound (4a)



S13.  $^{13}\text{C}$ -NMR spectrum of compound (4a)



#### S14. IR spectrum of compound (4b)



# S15. HR-MS spectrum of compound (4b)

## Display Report

### Analysis Info

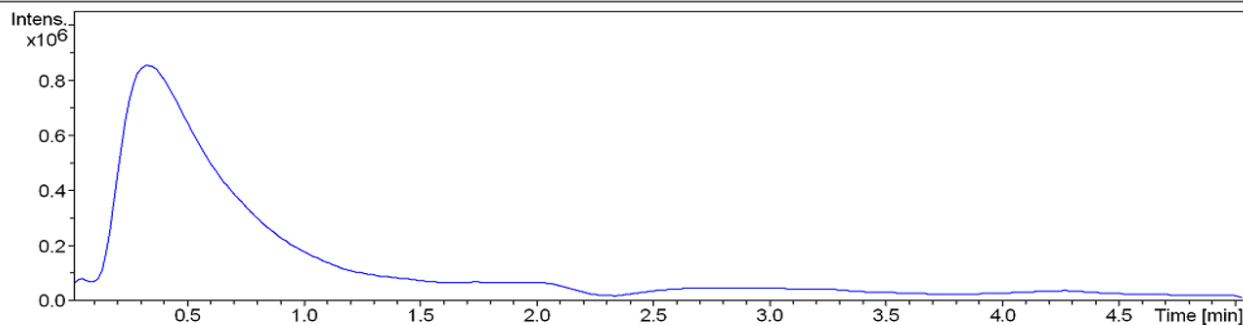
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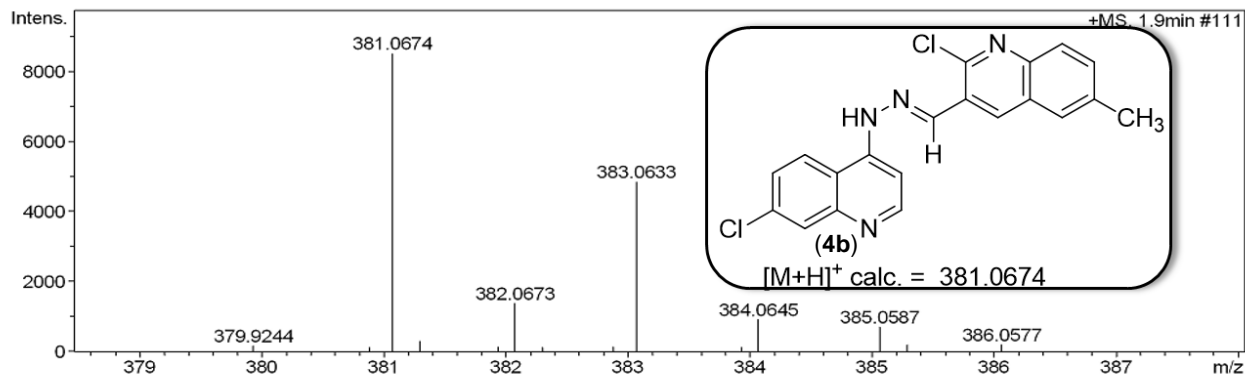
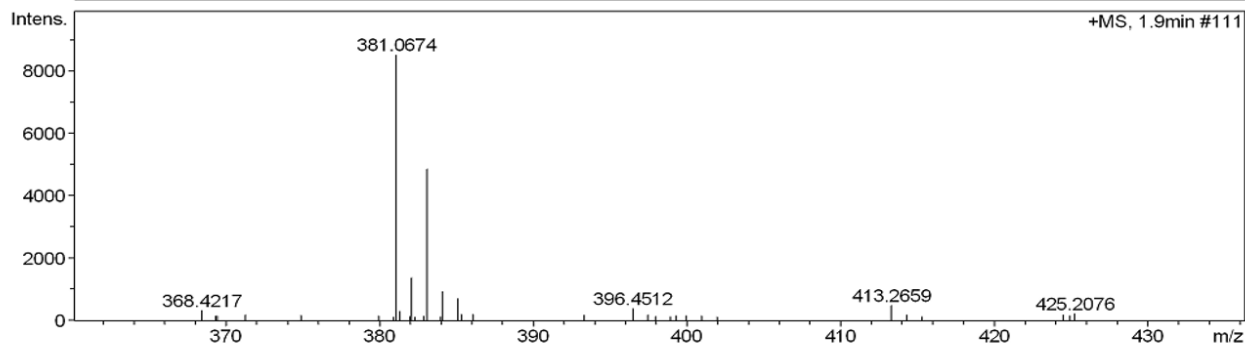
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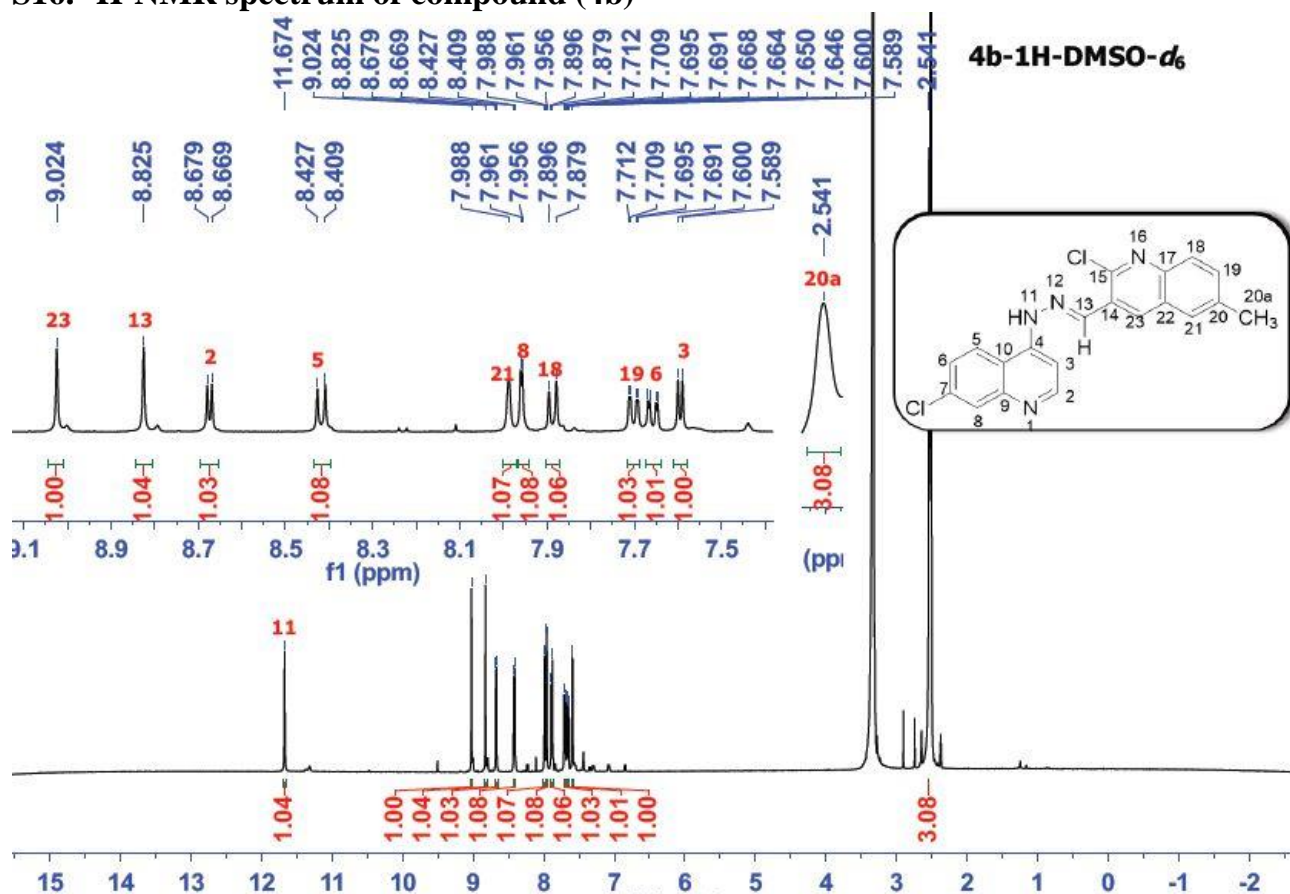
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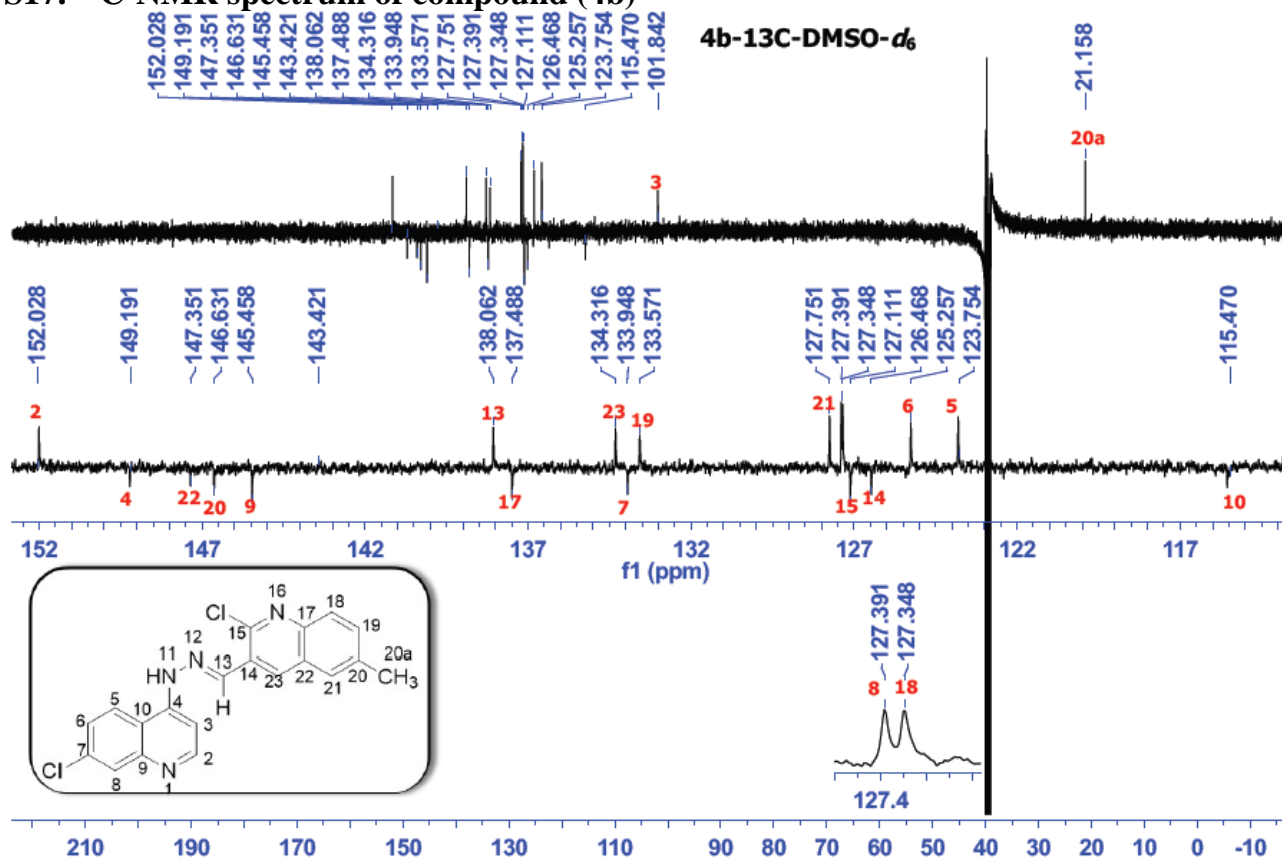
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S16.  $^1\text{H}$ -NMR spectrum of compound (4b)

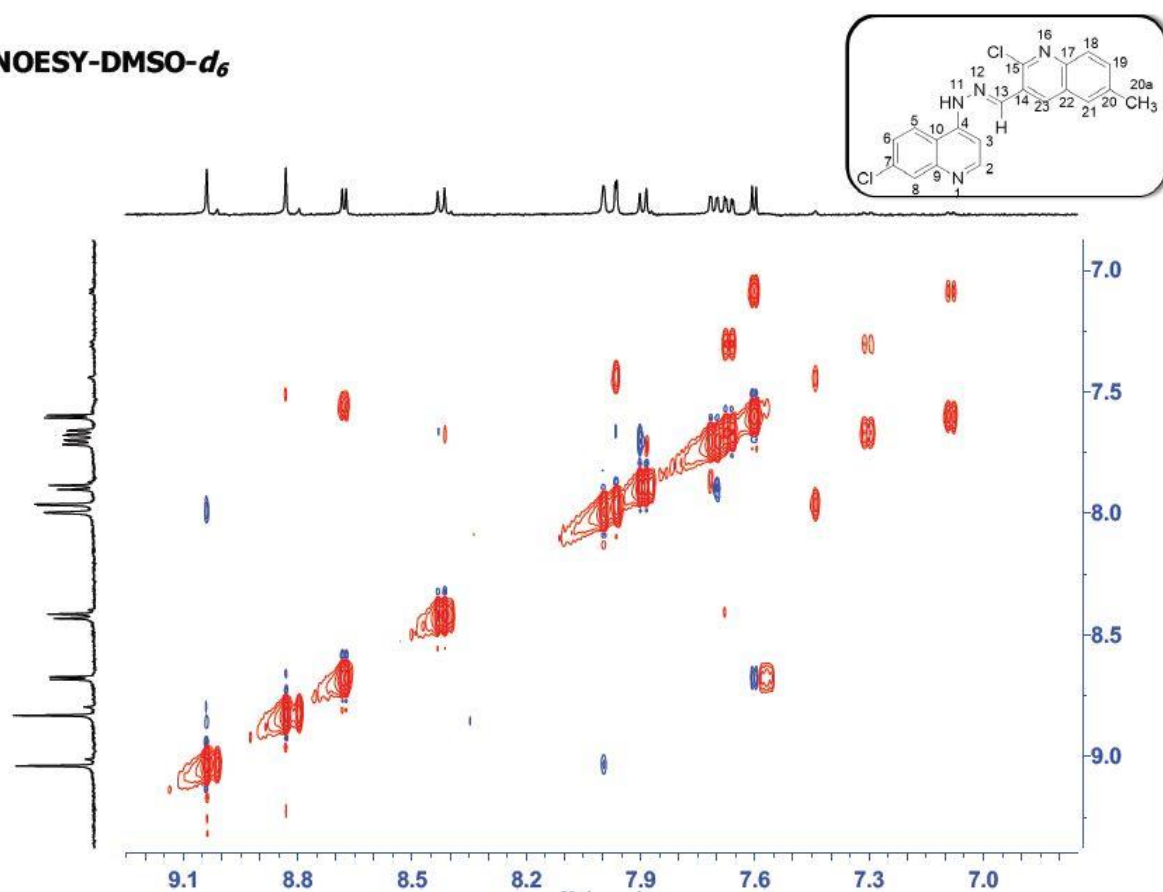


S17.  $^{13}\text{C}$ -NMR spectrum of compound (4b)



S18. NOESY spectrum of compound (4b) (expanded)

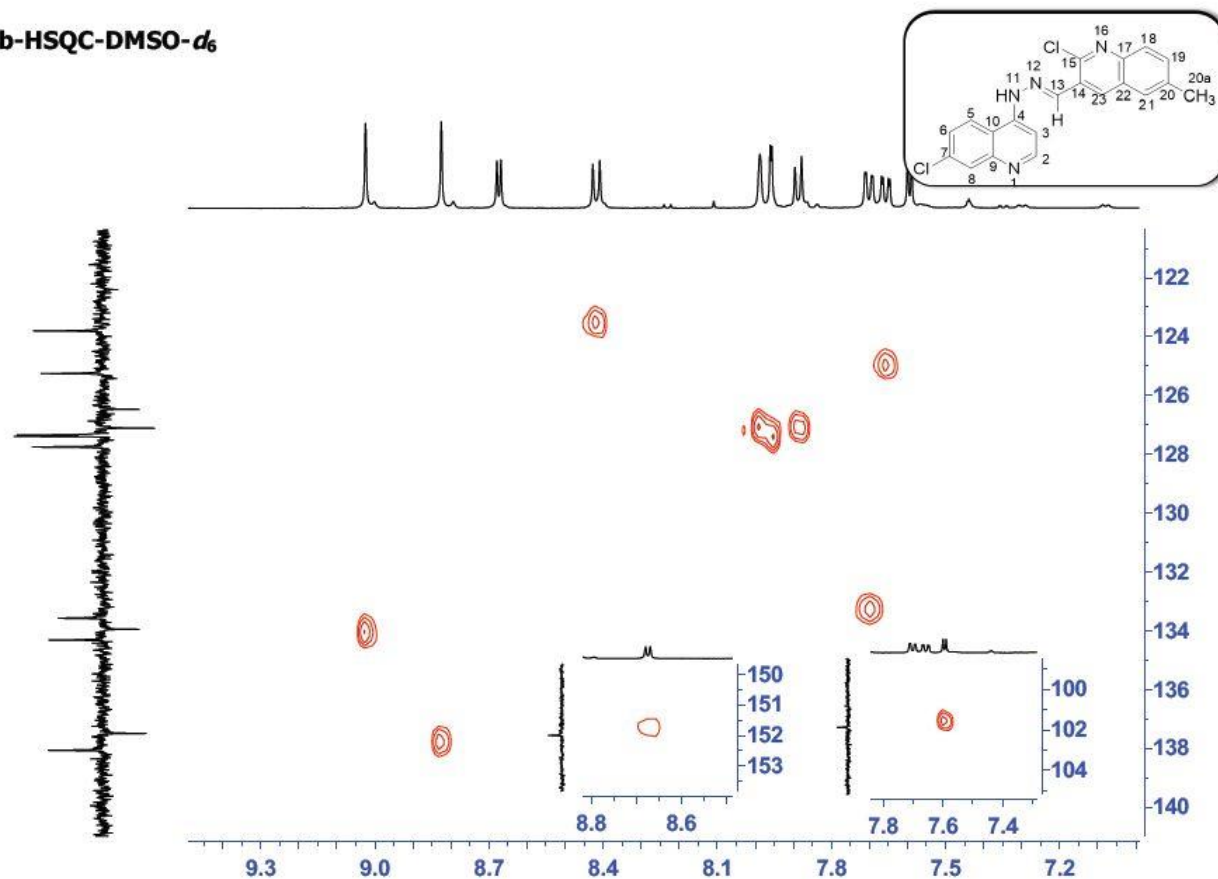
4b-NOESY-DMSO- $d_6$





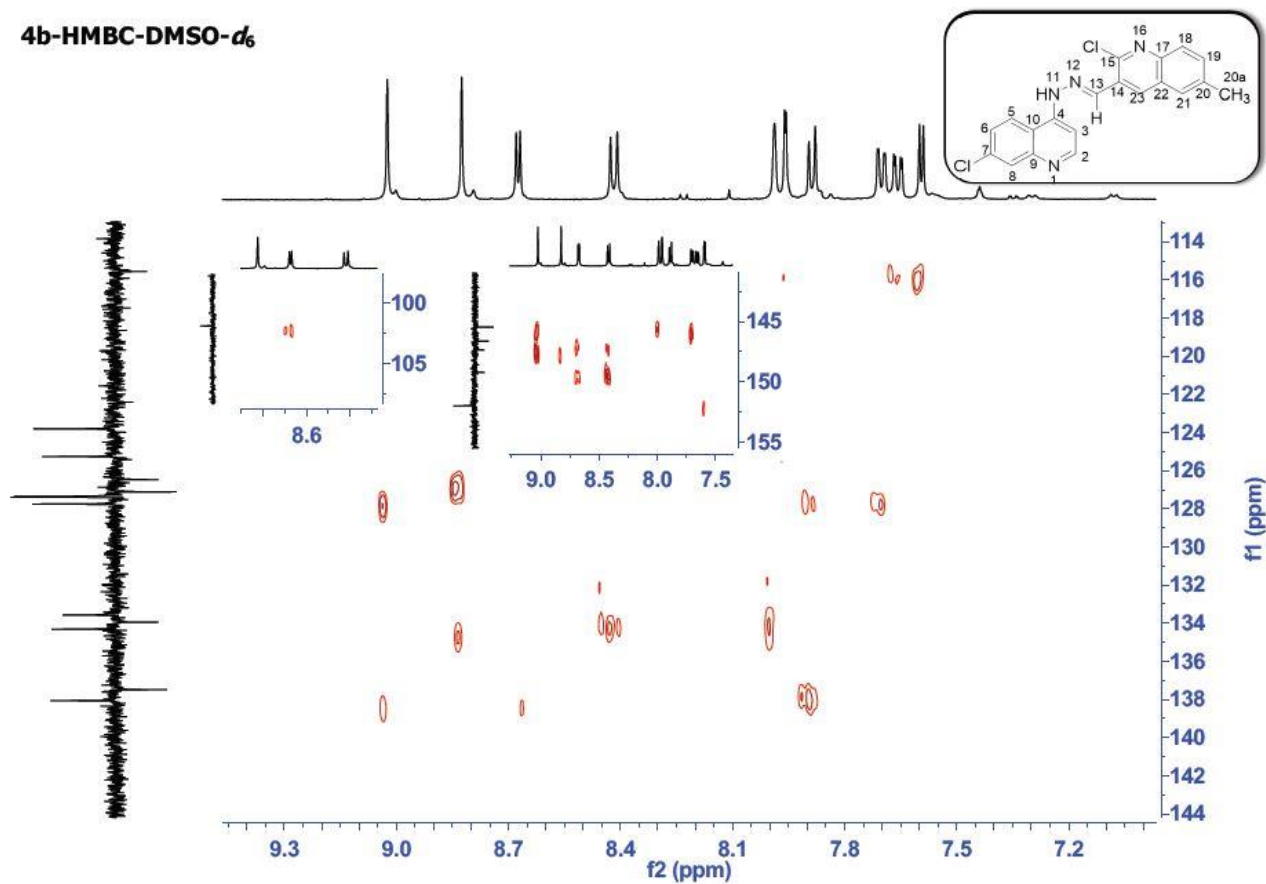
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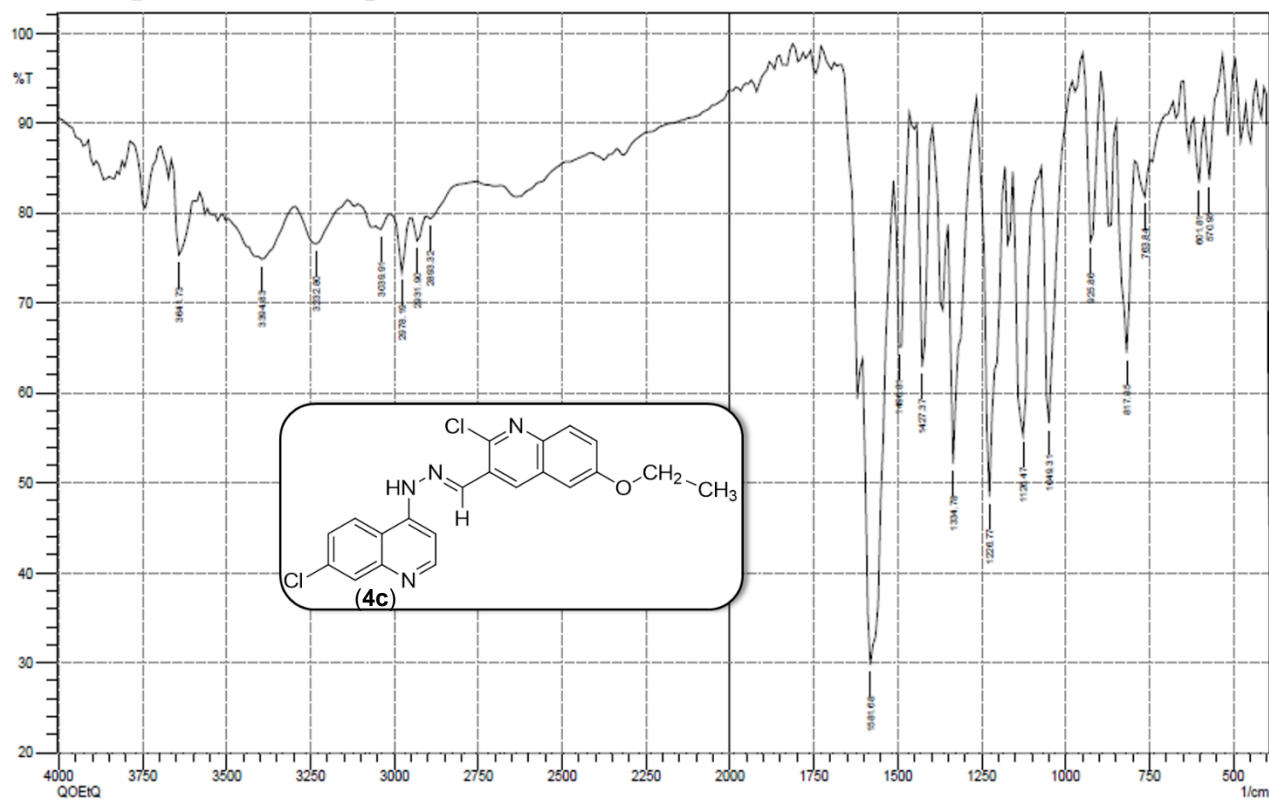


# S20. HMBC spectrum of compound (4b) (Expanded)

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## S21. IR spectrum of compound (4c)





## S22. HR-MS spectrum of compound (4c)

### Display Report

#### Analysis Info

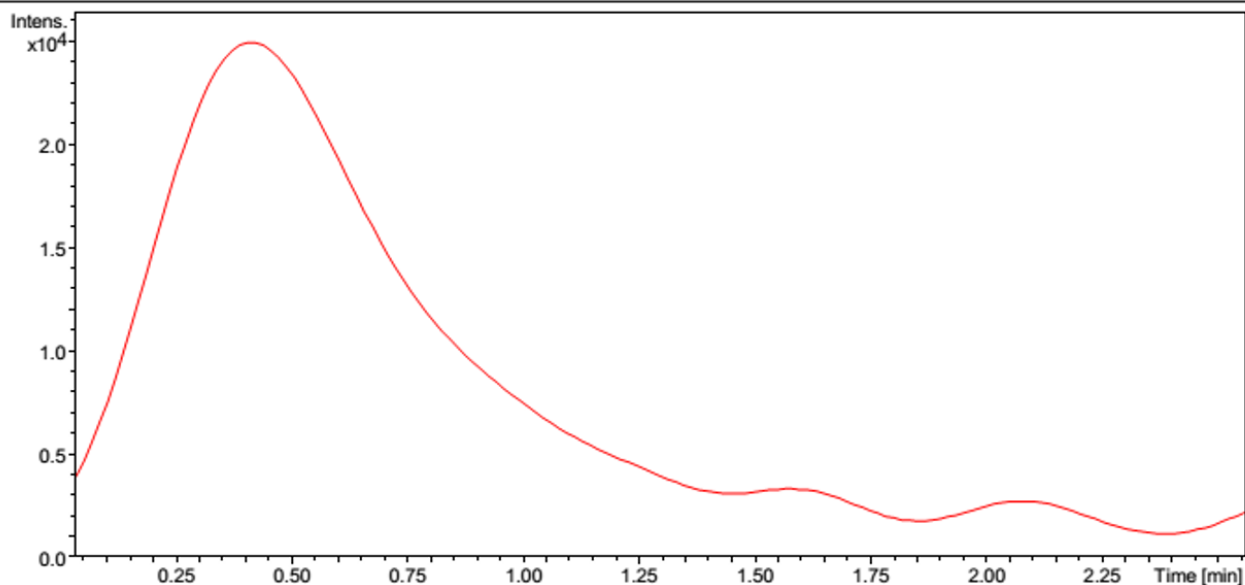
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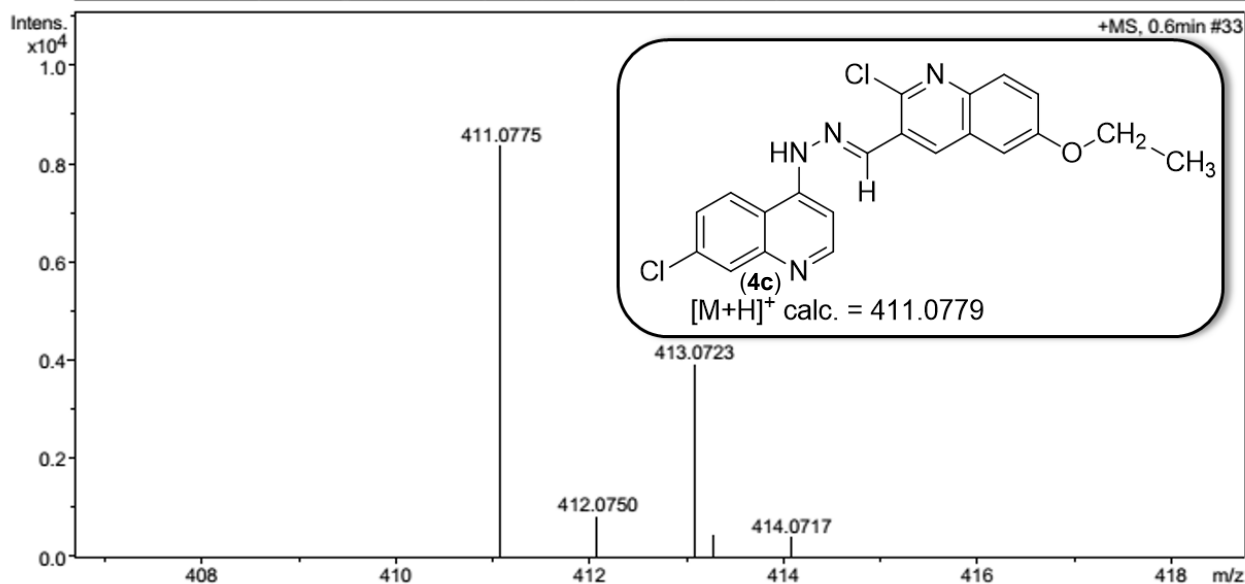
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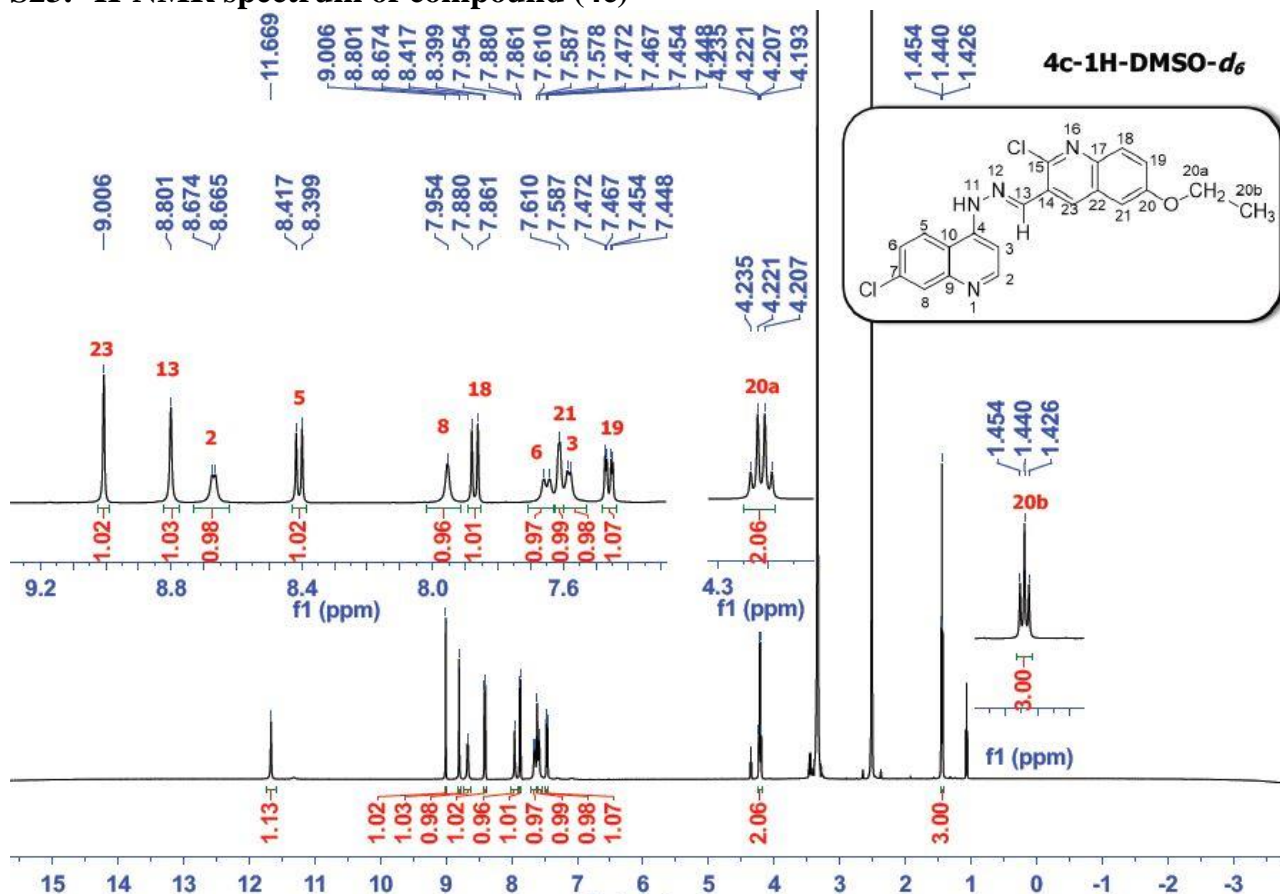
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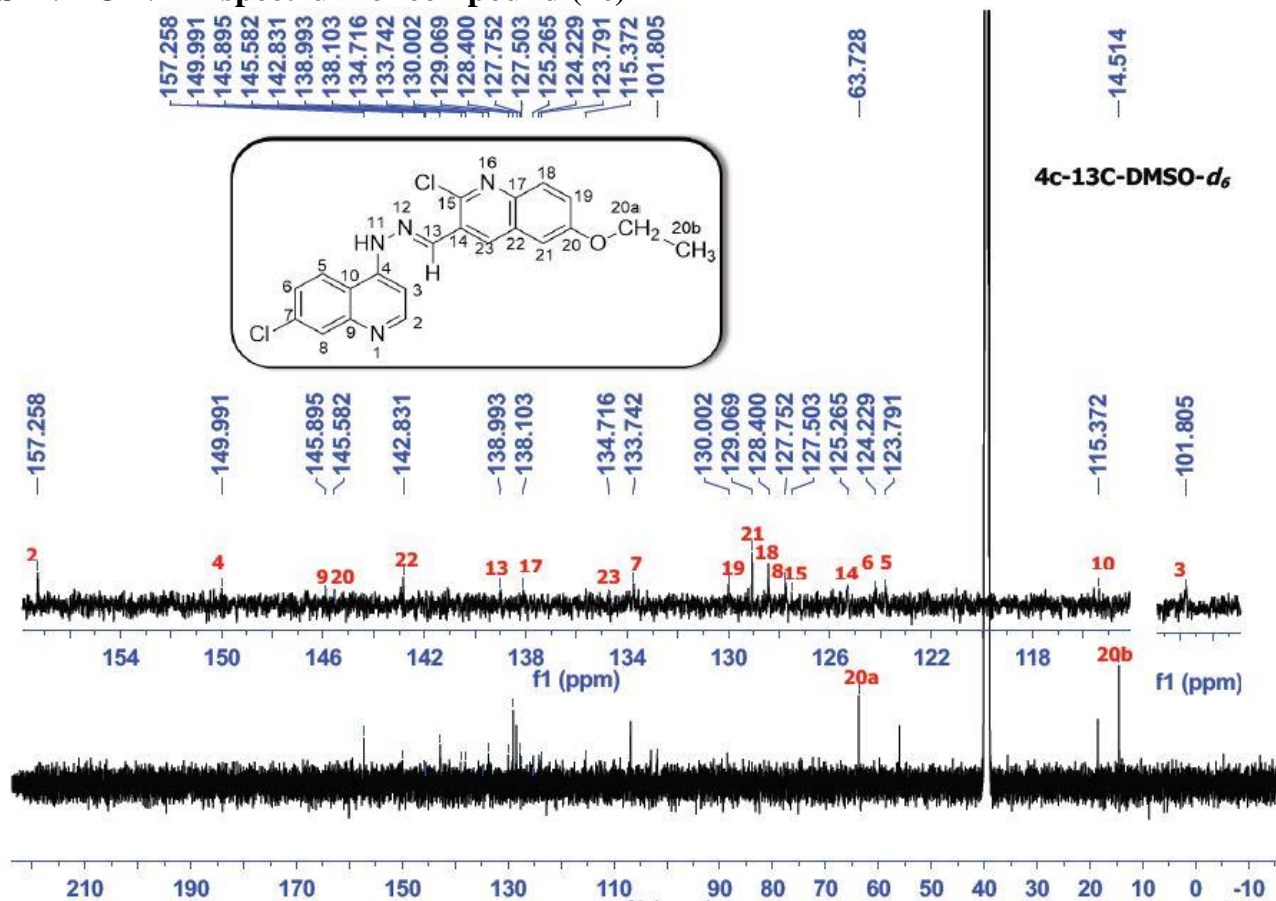
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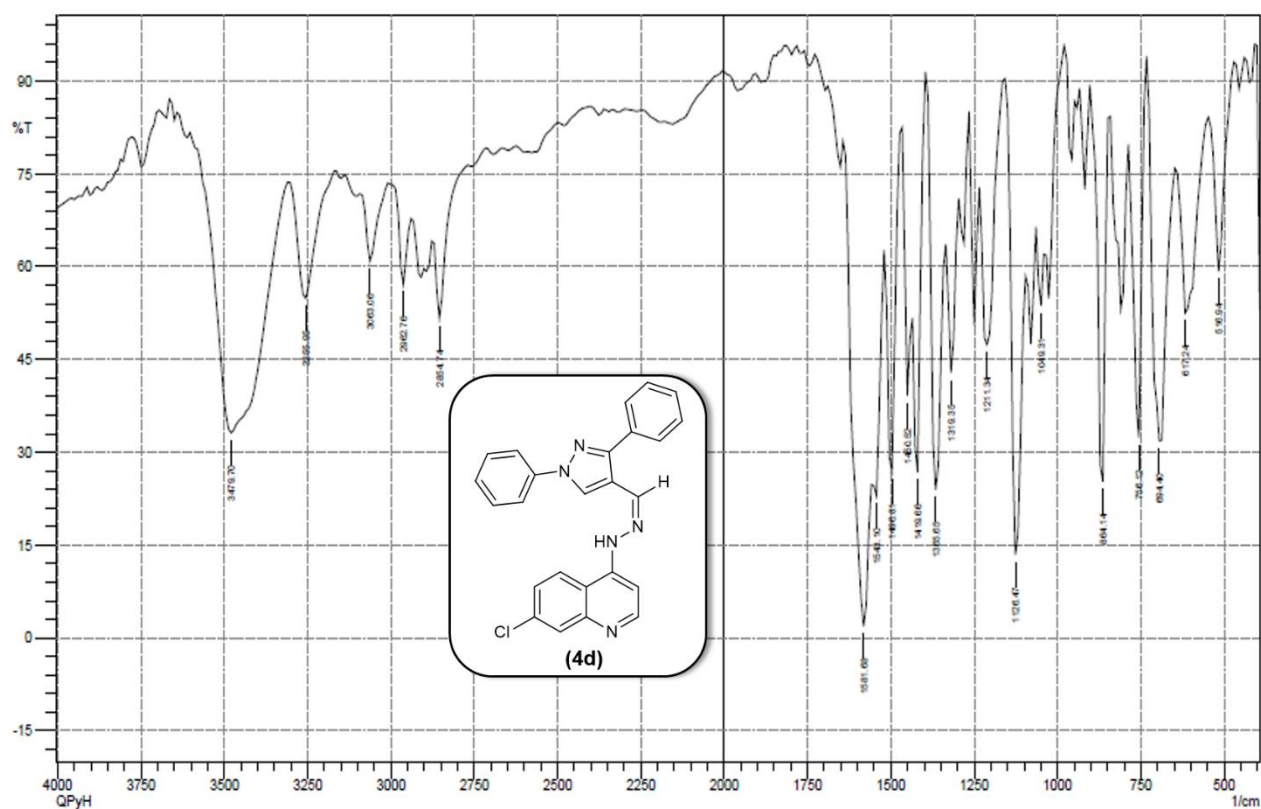
S23.  $^1\text{H}$ -NMR spectrum of compound (4c)



S24.  $^{13}\text{C}$ -NMR spectrum of compound (4c)



**S25. IR spectrum of compound (4d)**



# S26. HR-MS spectrum of compound (4d)

## Display Report

### Analysis Info

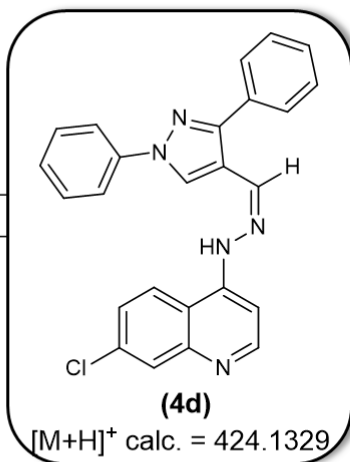
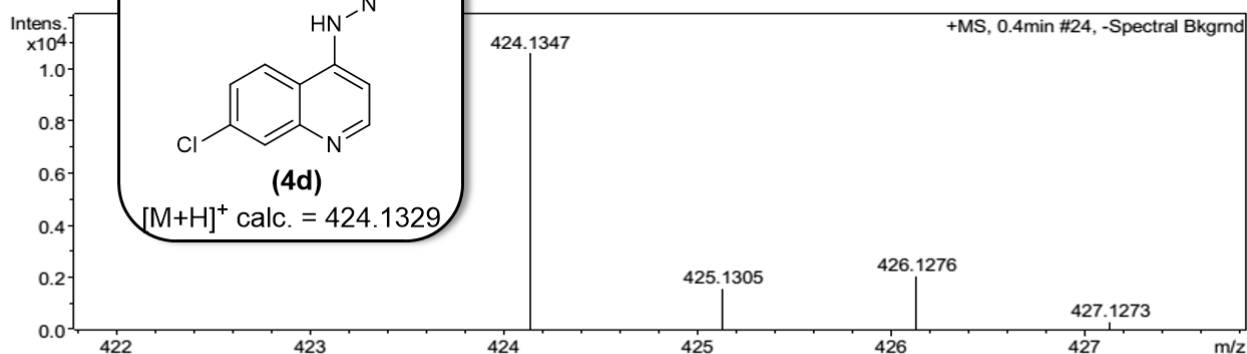
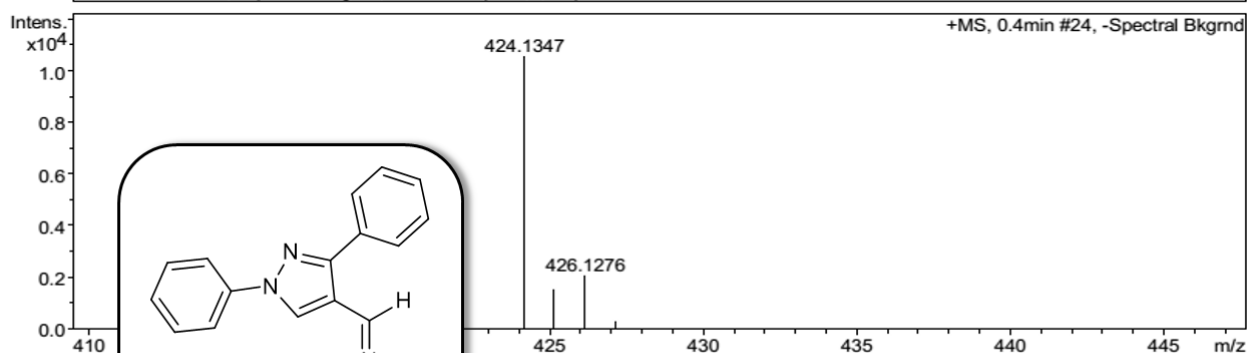
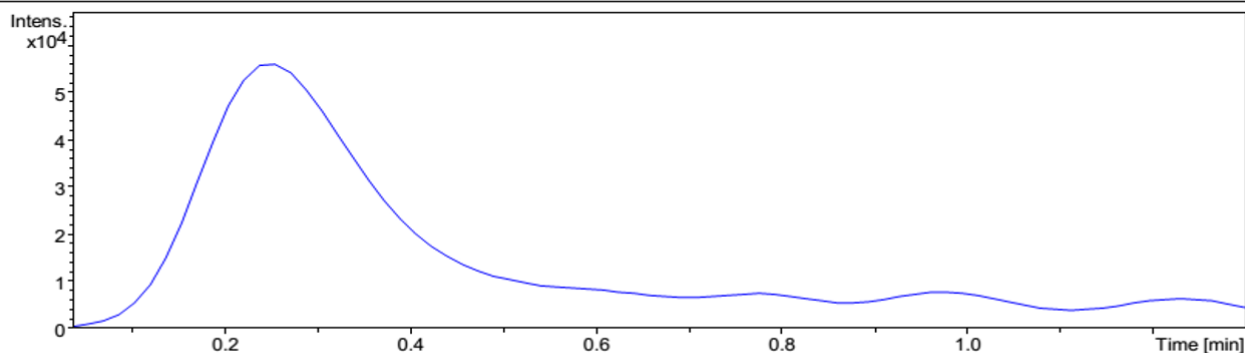
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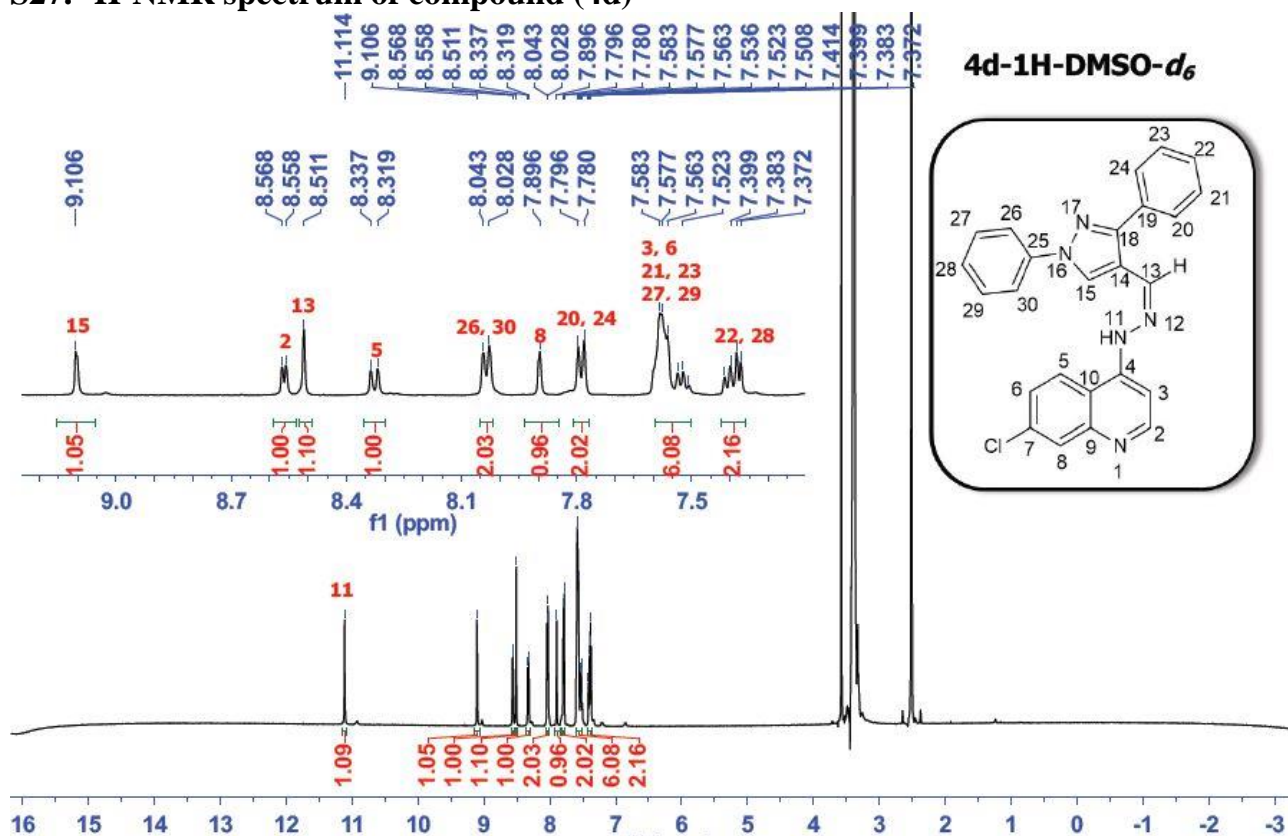
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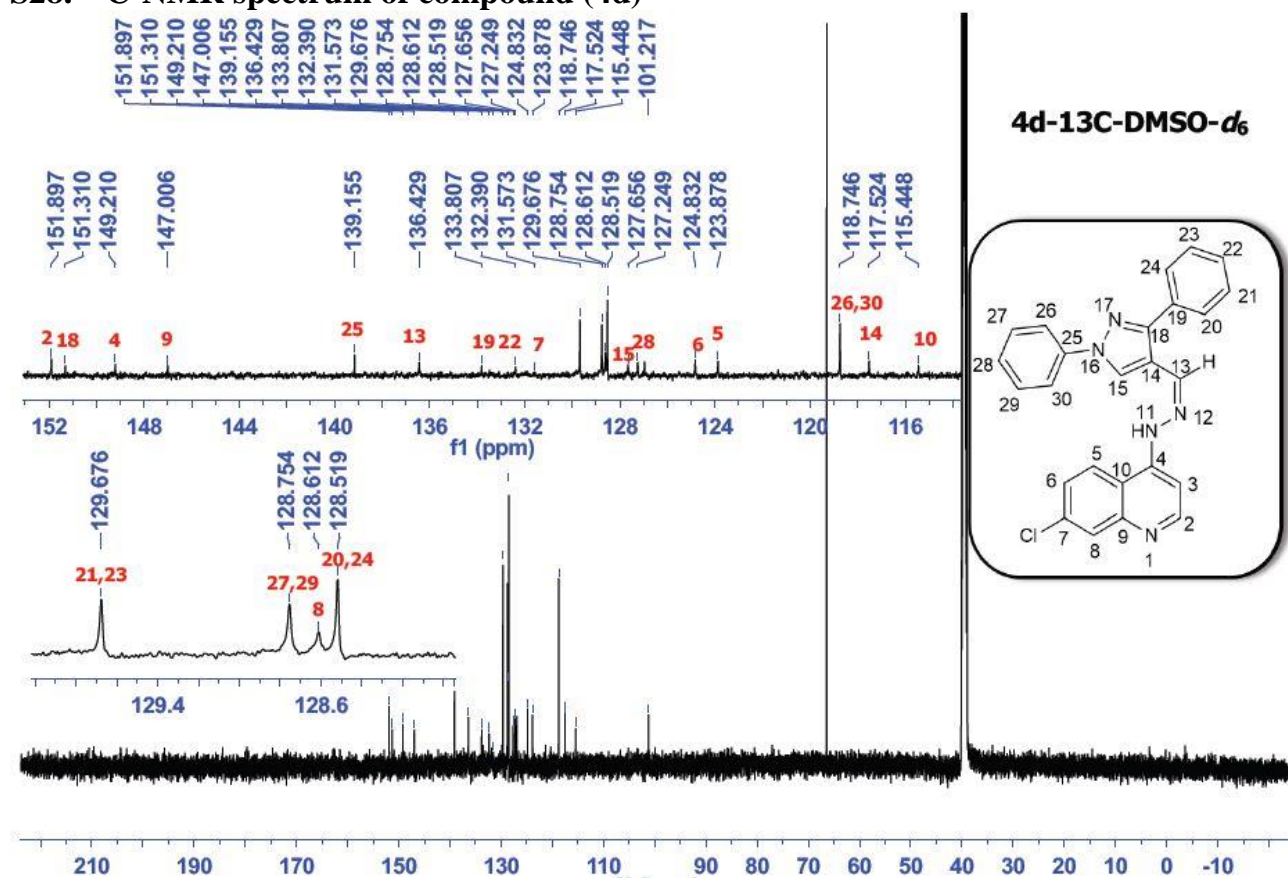
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S27.  $^1\text{H}$ -NMR spectrum of compound (4d)

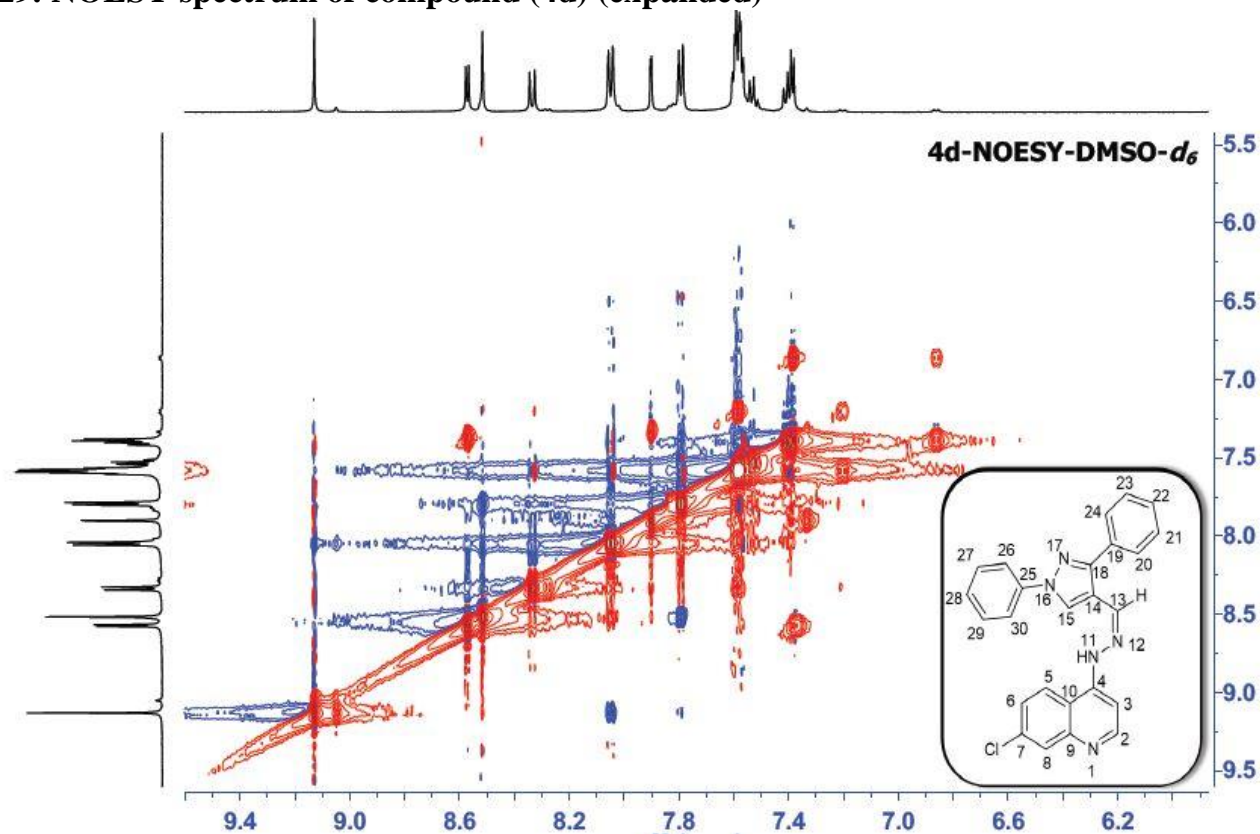


S28.  $^{13}\text{C}$ -NMR spectrum of compound (4d)

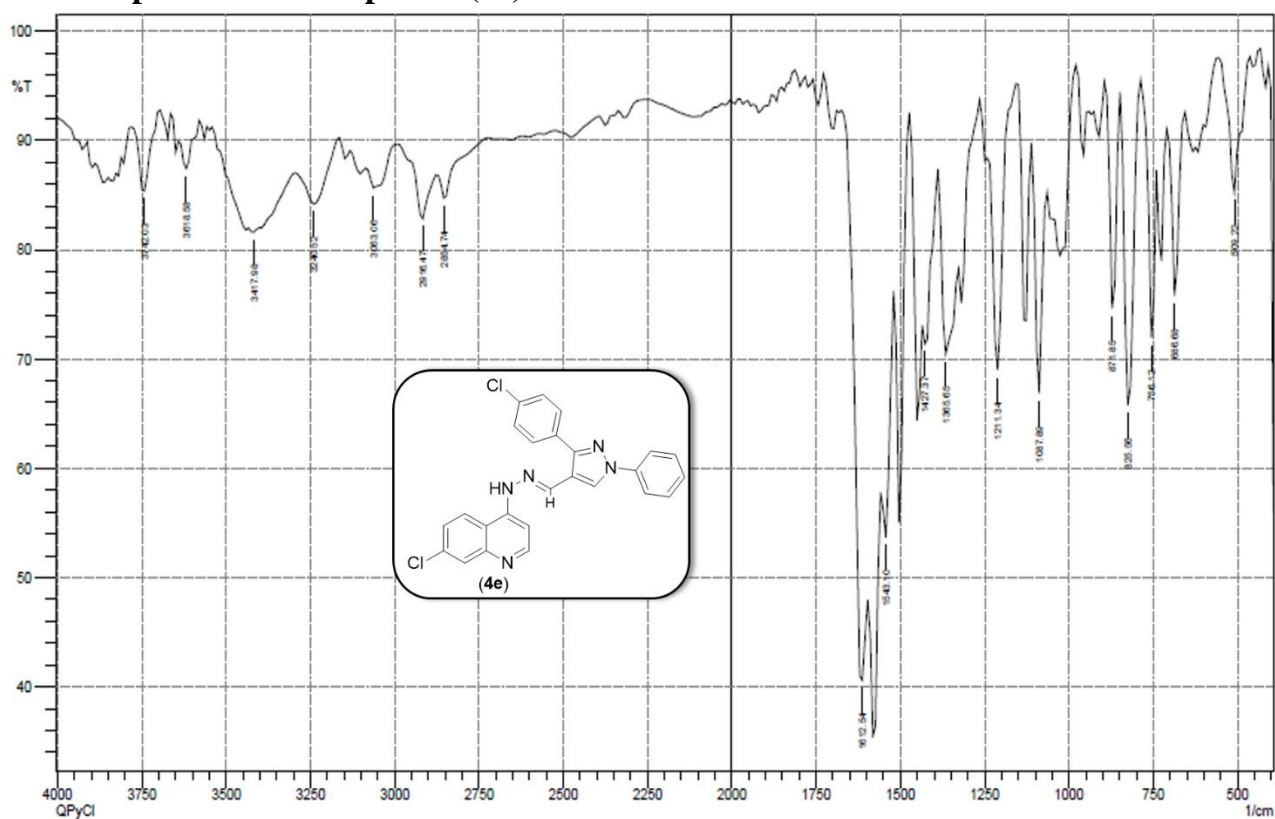




S29. NOESY spectrum of compound (4d) (expanded)



S30. IR spectrum of compound (4e)



# S31. HR-MS spectrum of compound (4e)

## Display Report

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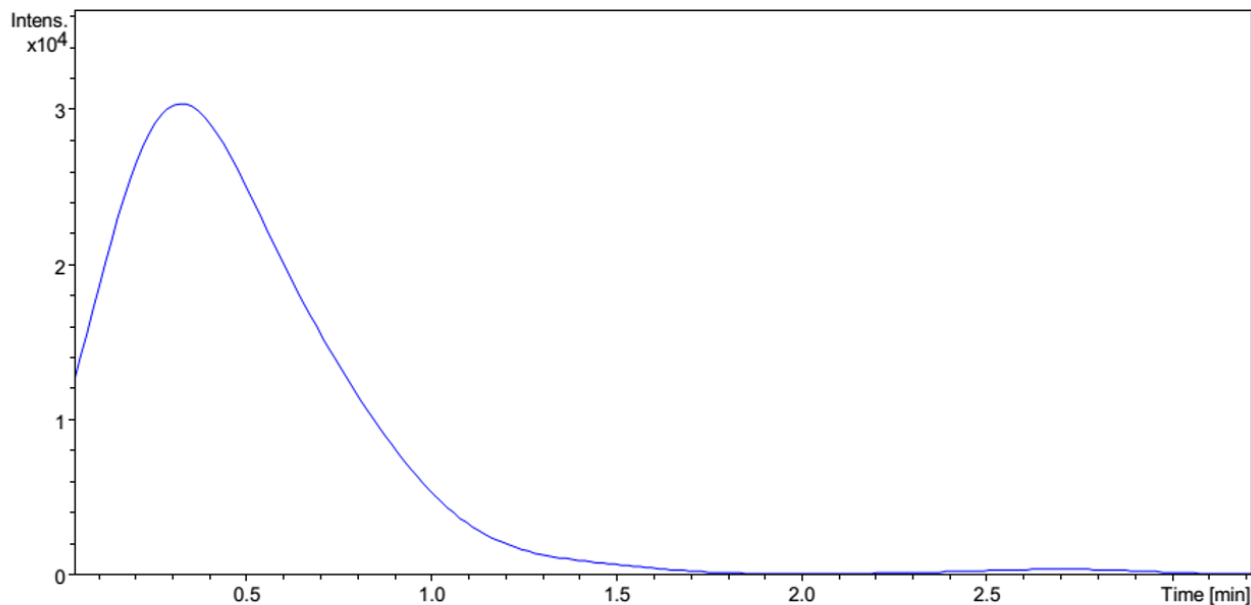
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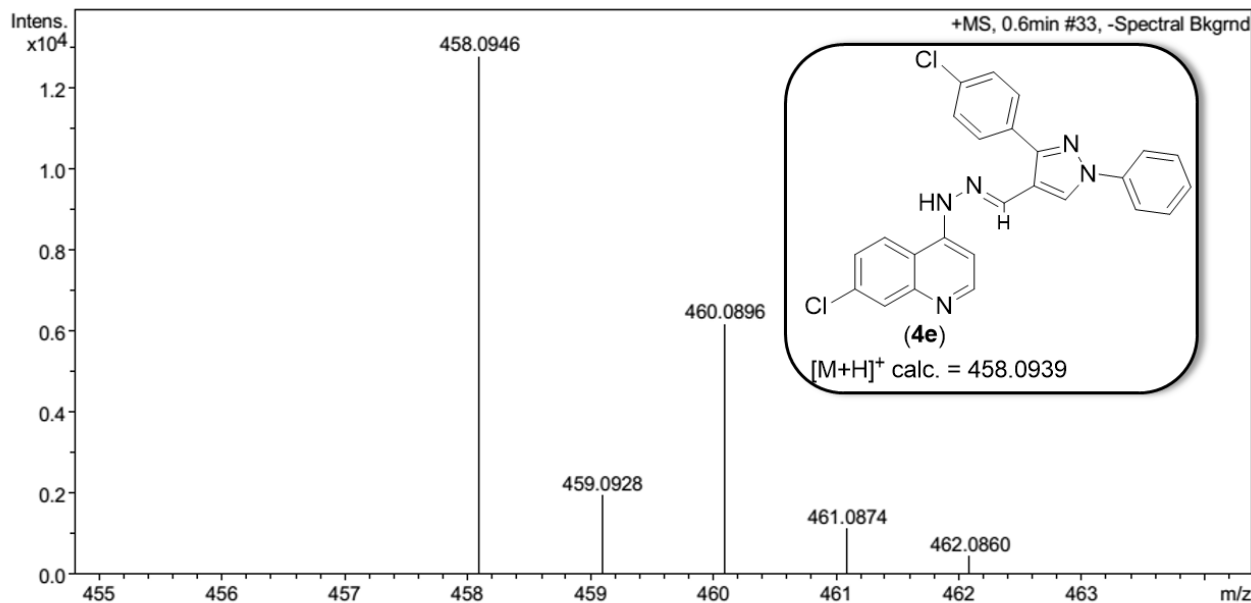
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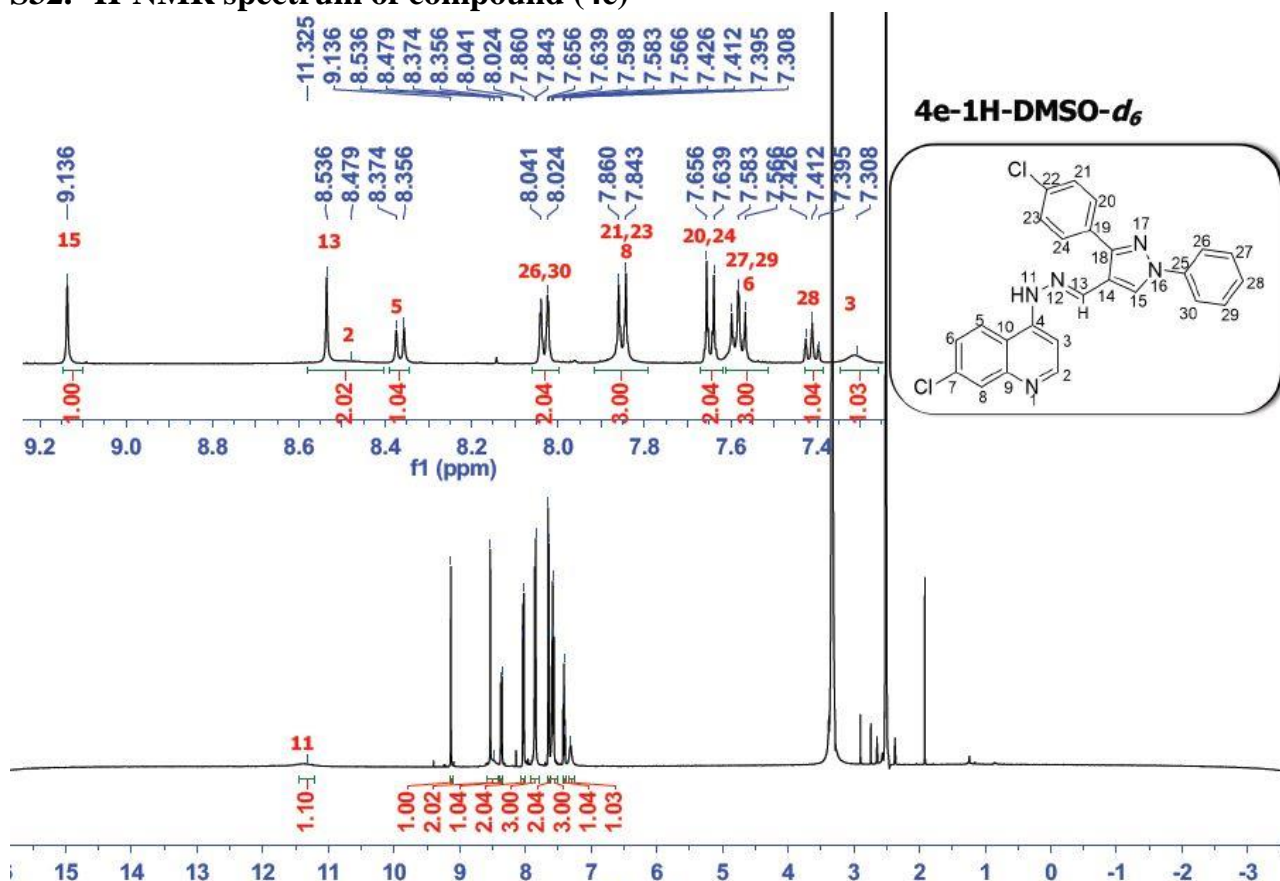
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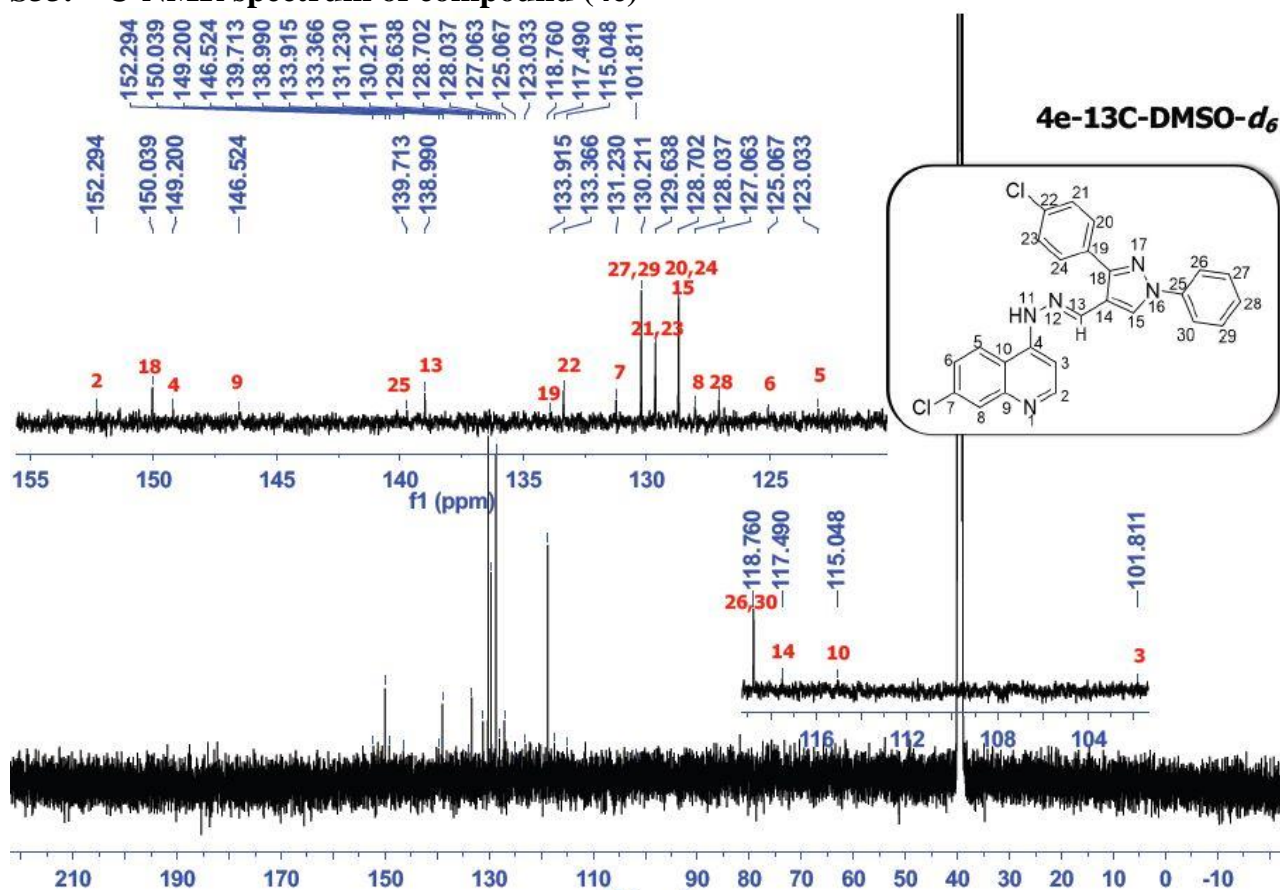
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S32.  $^1\text{H}$ -NMR spectrum of compound (4e)

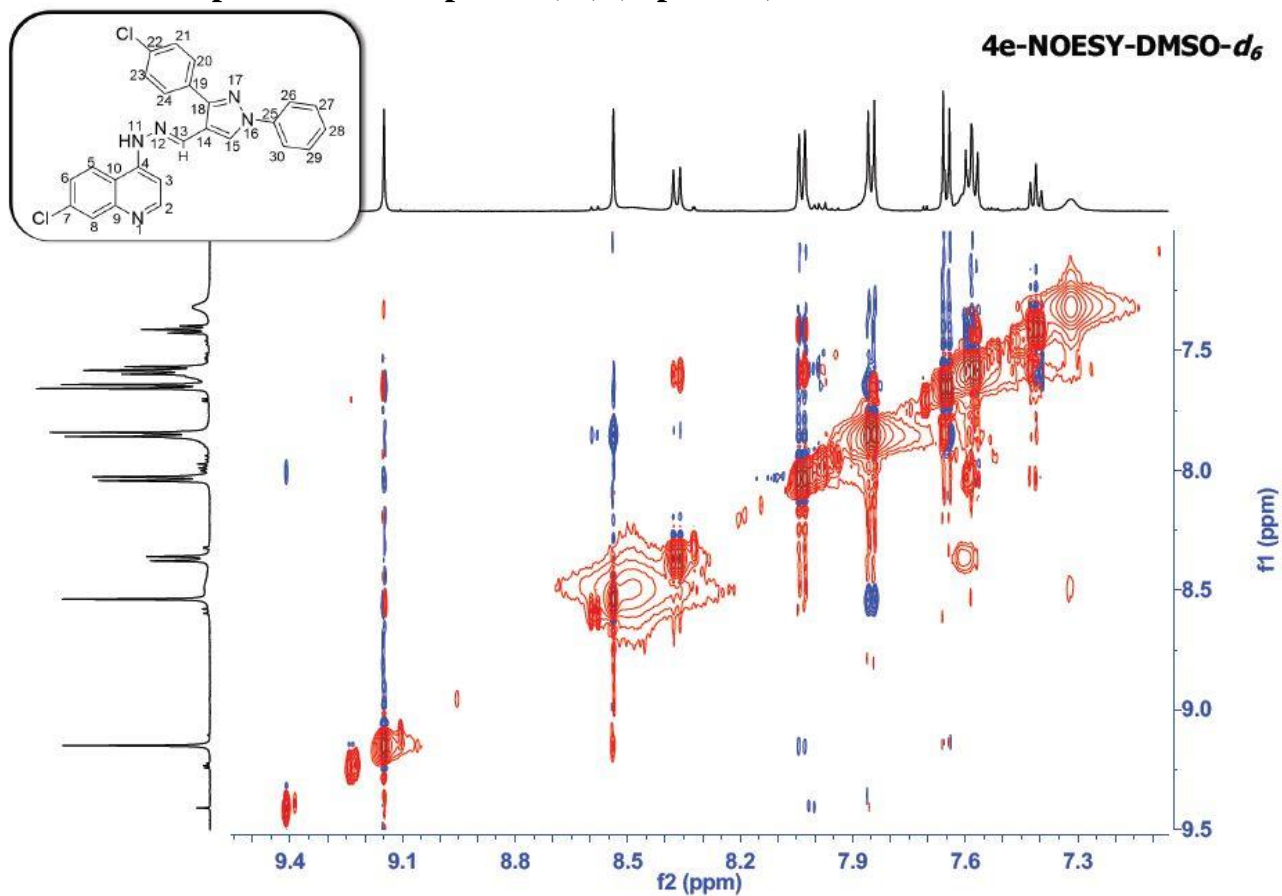


S33.  $^{13}\text{C}$ -NMR spectrum of compound (4e)

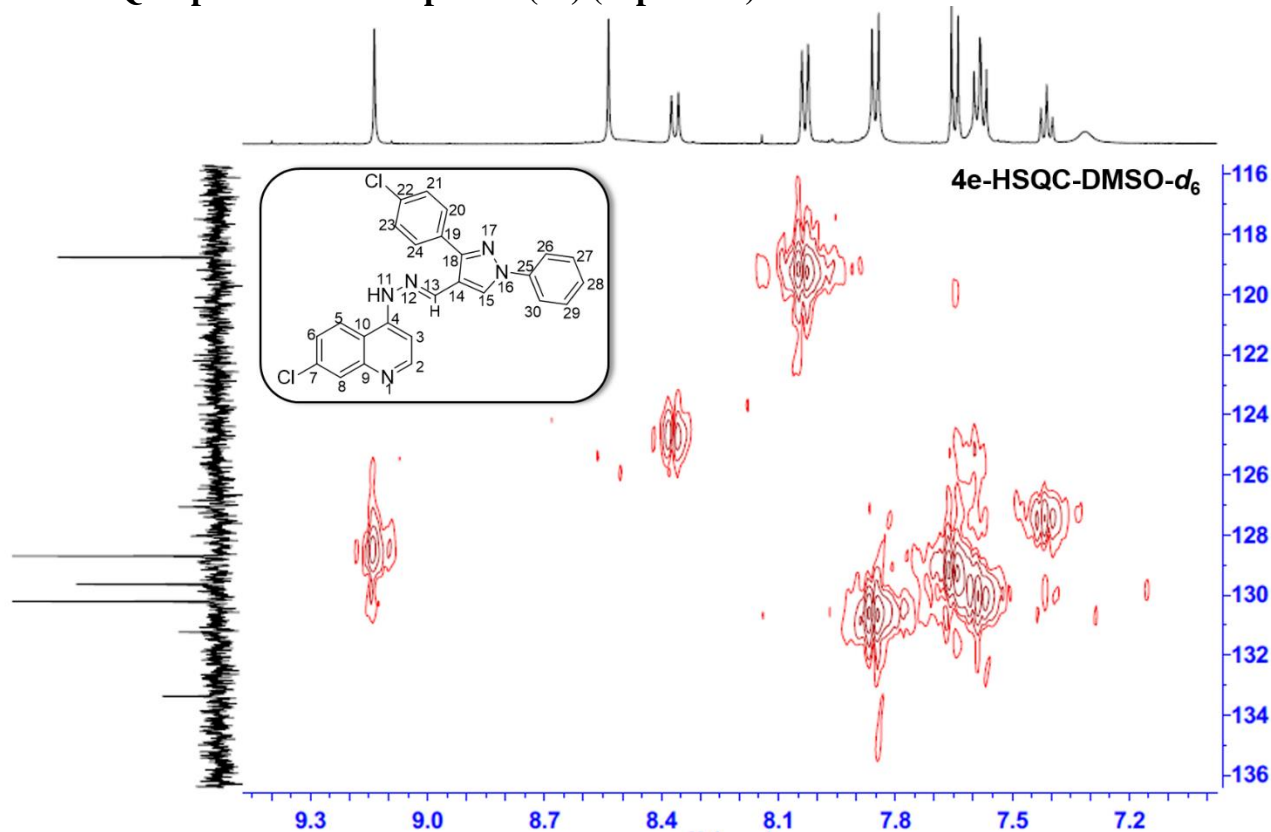




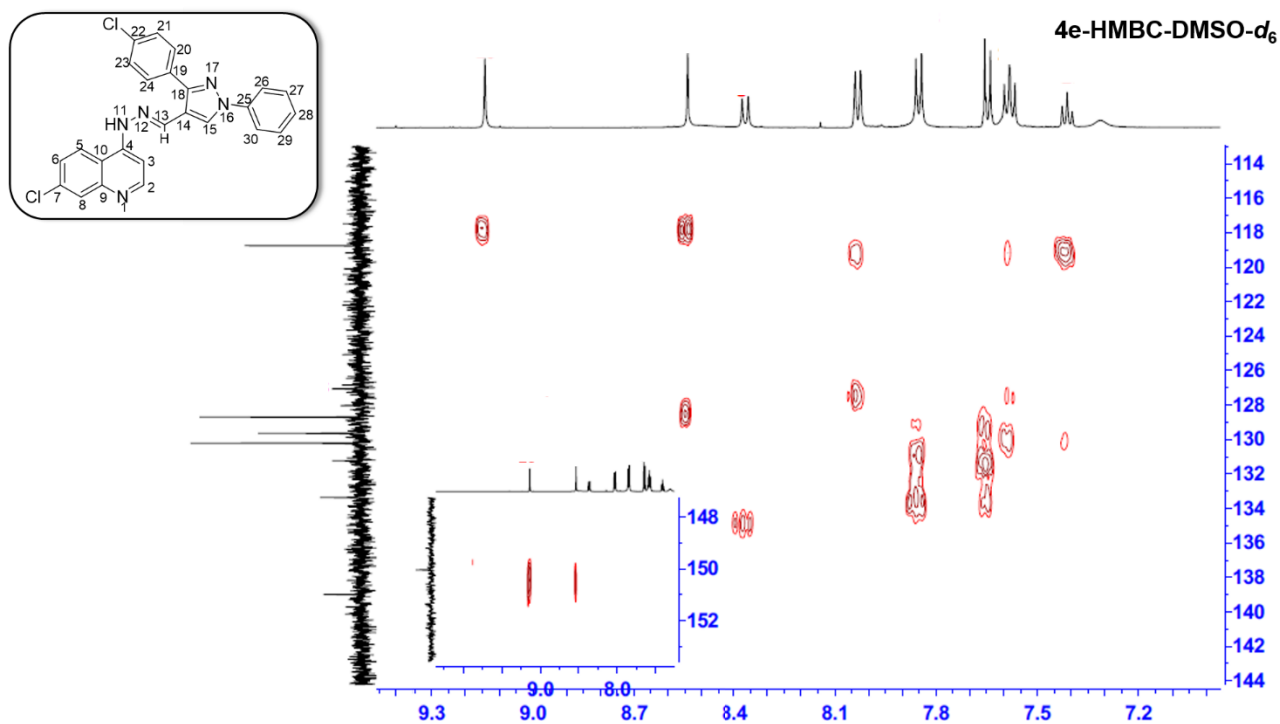
**S34. NOESY spectrum of compound (4e) (expanded)**



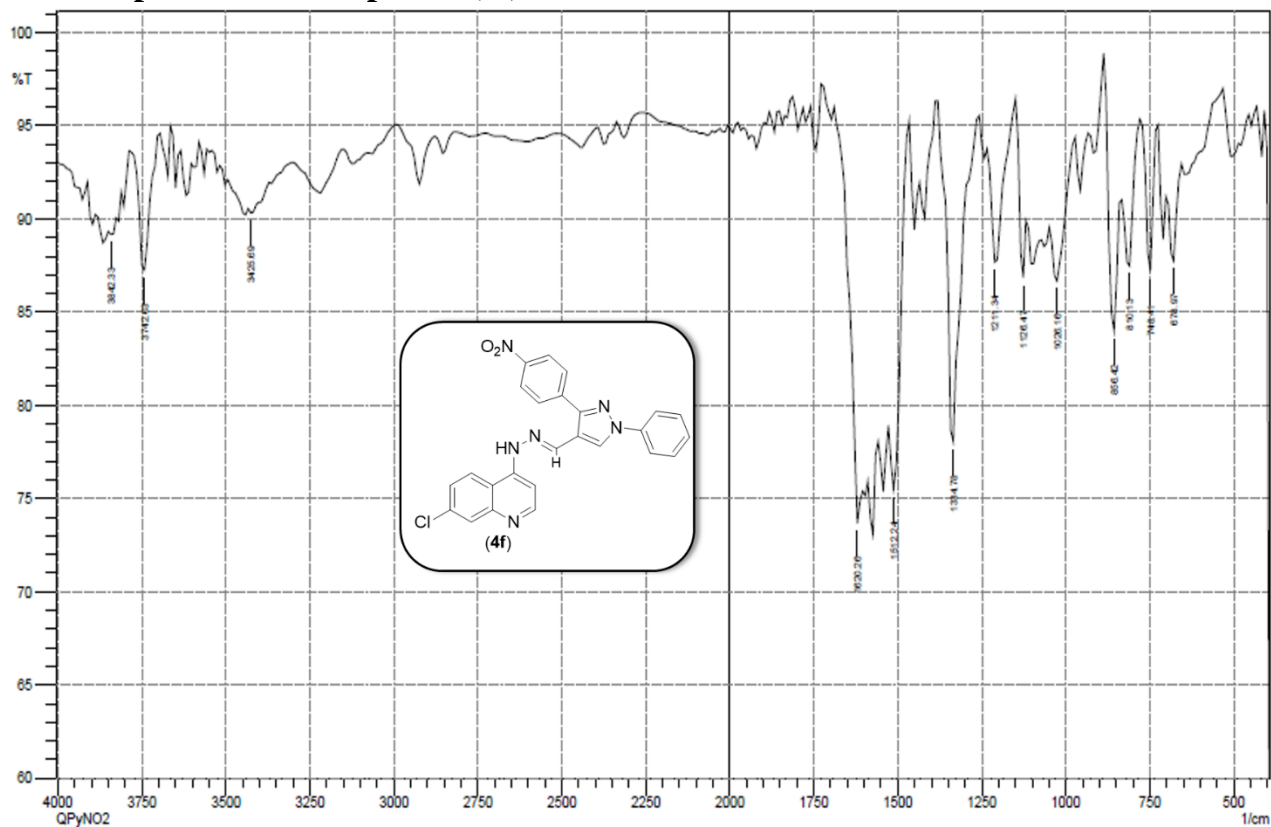
**S35. HSQC spectrum of compound (4e) (expanded)**



**S36. HMBC spectrum of compound (4e) (expanded)**



**S37. IR spectrum of compound (4f)**



# S38. HR-MS spectrum of compound (4f)

## Display Report

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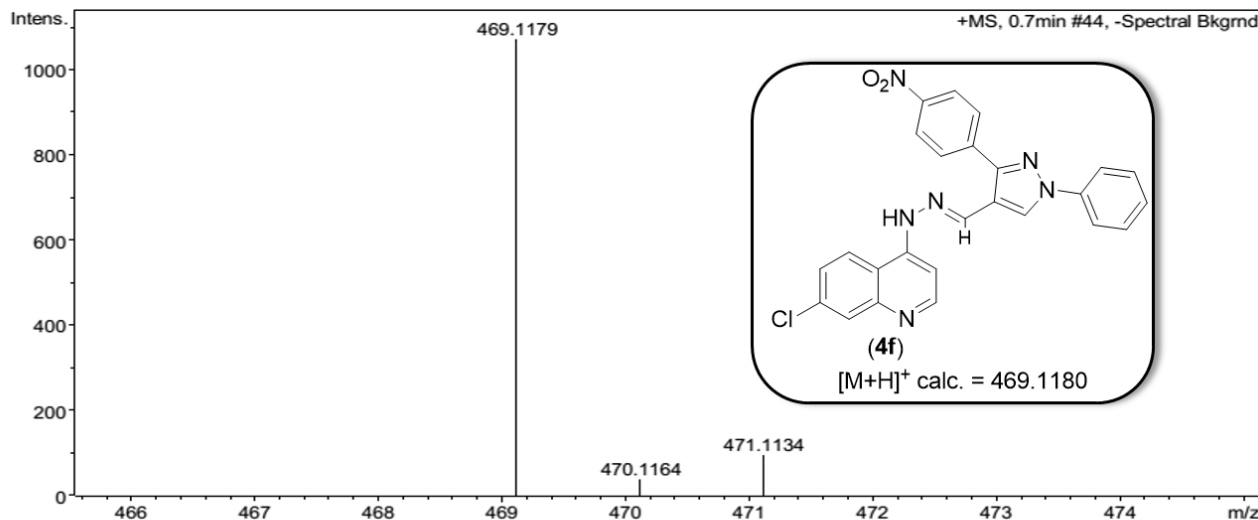
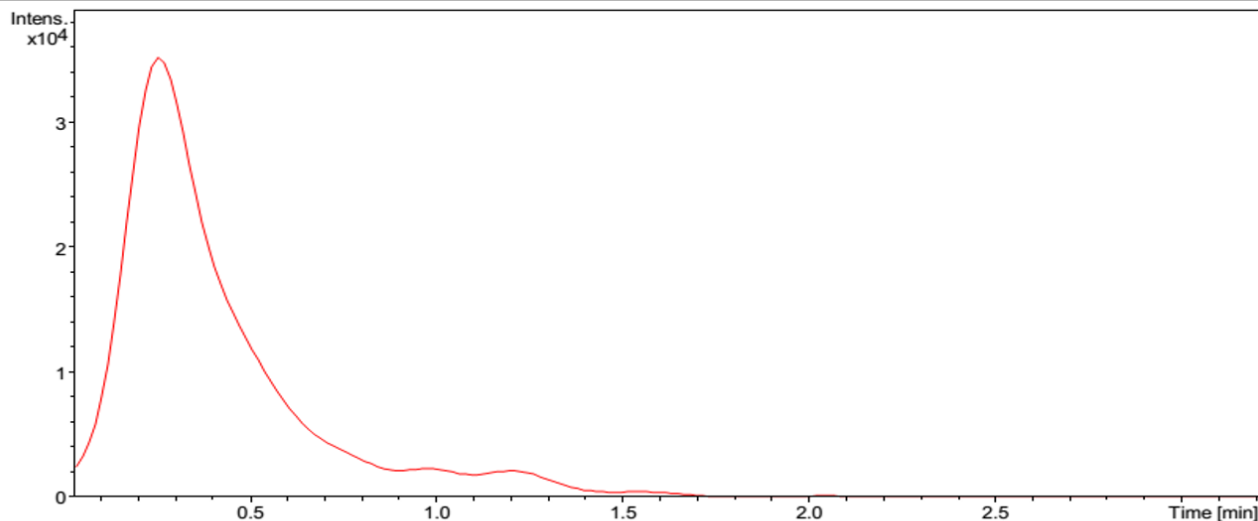
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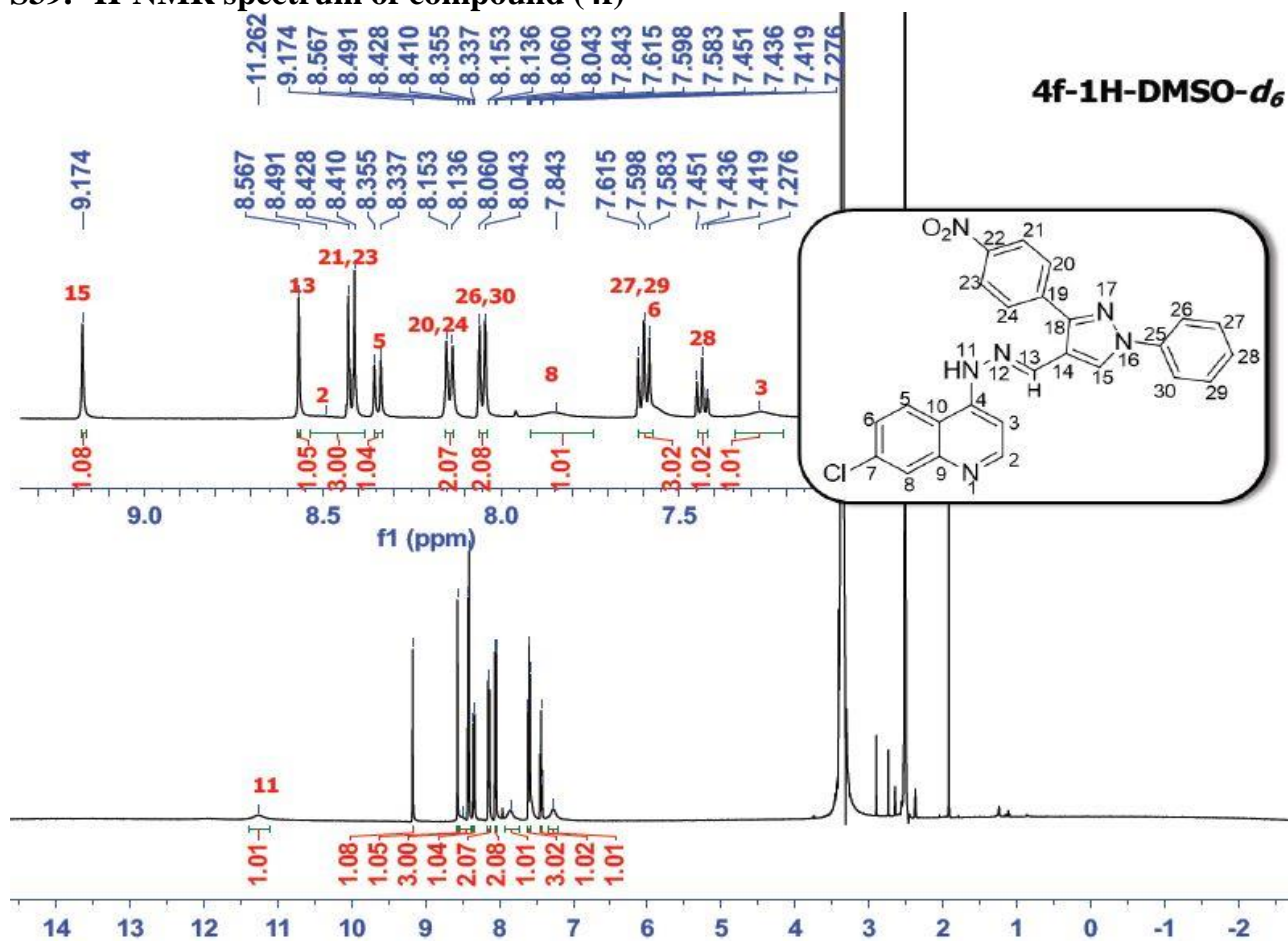
Operator Anh Mai  
 Instrument micrOTOF-Q 10187

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S39.  $^1\text{H}$ -NMR spectrum of compound (4f)



S40.  $^{13}\text{C}$ -NMR spectrum of compound (4f)

