

Synthesis and Biological Evaluation of Substituted Fused Dipyranoquinolinones

Evangelia-Eirini N. Vlachou ¹, Eleni Pontiki ², Dimitra J. Hadjipavlou-Litina ^{2,*} and Konstantinos E. Litinas ^{1,*}

¹ Laboratory of Organic Chemistry, Department of Chemistry, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece

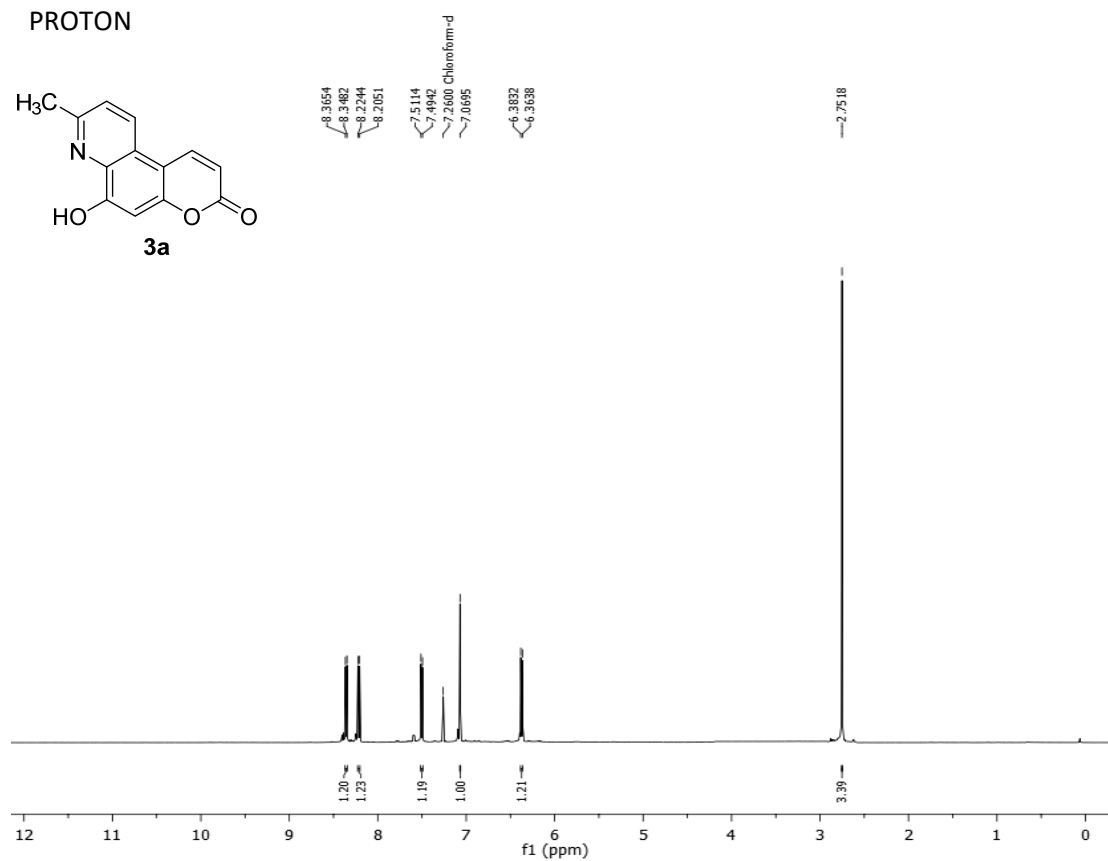
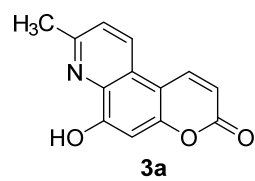
² Department of Pharmaceutical Chemistry, School of Pharmacy, Faculty of Health Sciences, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece

* Correspondence: hadjipav@pharm.auth.gr (D.J.H.-L.); klitinas@chem.auth.gr (K.E.L.)

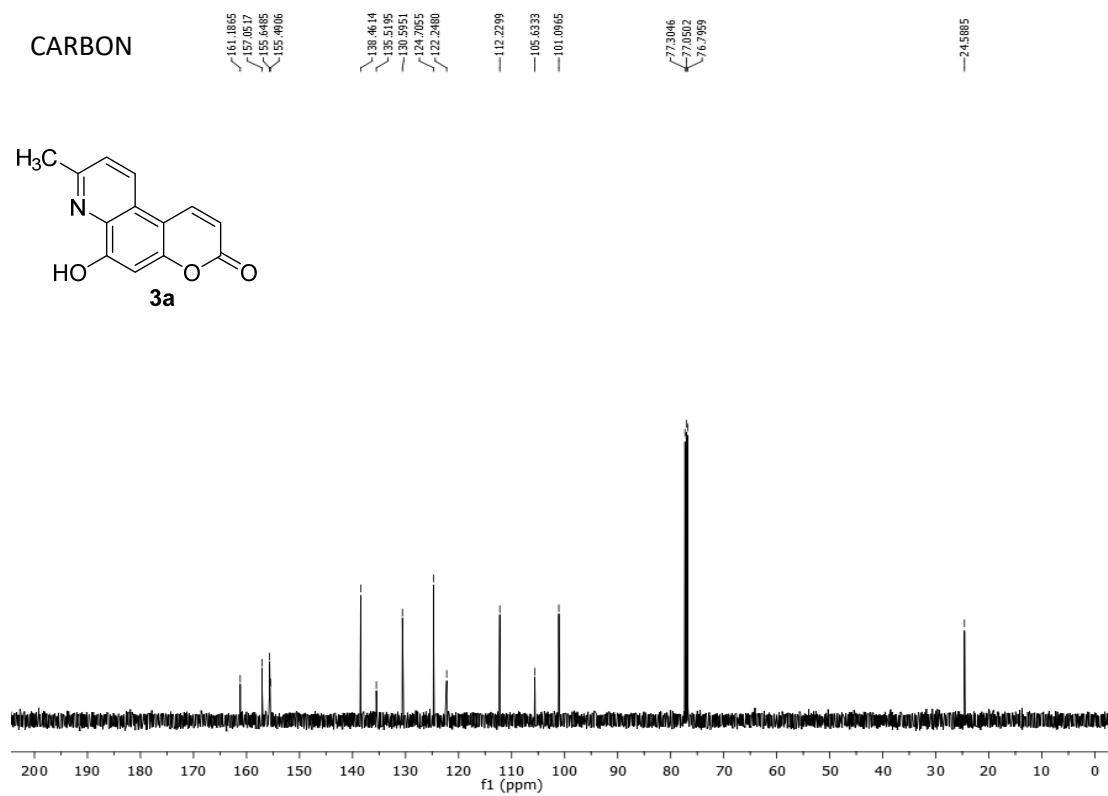
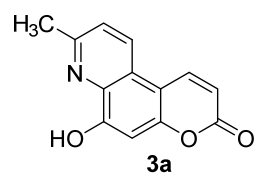
¹H-NMR and ¹³C-NMR Spectra for the compounds:

6-Hydroxy-8-methyl-3H-pyrano[3,2-f]quinolin-3-one (3a).....	3
6-Hydroxy-1,8-dimethyl-3H-pyrano[3,2-f]quinolin-3-one (3b).....	5
6-Hydroxy-8-methyl-2H-pyrano[2,3-f]quinolin-2-one (4a).....	7
6-Hydroxy-4,8-dimethyl-2H-pyrano[2,3-f]quinolin-2-one (4b).....	8
1-Hydroxy-10-methyl-3H-pyrano[3,2-f]quinolin-3-one (5).....	11
8-Methyl-6-(prop-2-yn-1-yloxy)-3H-pyrano[3,2-f]quinolin-3-one (7a).....	13
1,8-Dimethyl-6-(prop-2-yn-1-yloxy)-3H-pyrano[3,2-f]quinolin-3-one (7b).....	14
8-Methyl-6-(prop-2-yn-yloxy)-2H-pyrano[2,3-f]quinolin-2-one (8a).....	15
4,8-Dimethyl-6-(prop-2-yn-1-yloxy)-2H-pyrano[2,3-f]quinolin-2-one (8b).....	17
10-Methyl-1-(prop-2-yn-1-yloxy)-3H-pyrano[3,2-f]quinolin-3-one (9).....	19
11-methyl-2H,6H-dipyrano[3,2-f:3',2'-h]quinolin-6-one (10a).....	20
8,11-Dimethyl-2H,6H-dipyrano[3,2-f:3',2'-h]quinolin-6-one (10b).....	21
2-Methyldipyrano[2,3-f:3',2'-h]quinolin-6(11H)-one (12a).....	23
2,8-Dimethyldipyrano[2,3-f:3',2'-h]quinolin-6(11H)-one (12b).....	24
12-Methyl-4H,5H-pyrano[2',3':4,5]pyrano[3,2-f]quinolin-5-one (14).....	25
2,10-dimethyl-5H-furo[3,2-h]pyrano[3,2-f]quinolin-5-one (11a).....	26
2,7,10-Trimethyl-5H-furo[3,2-h]pyrano[3,2-f]quinolin-5-one (11b).....	27
2,10-Dimethyl-6H-furo[3,2-h]pyrano[2,3-f]quinolin-6-one (13a).....	28
2,8,10-Trimethyl-6H-furo[3,2-h]pyrano[2,3-f]quinolin-6-one (13b).....	29
2,11-Dimethyl-4H-furo[2',3':4,5]pyrano[3,2-f]quinolin-4-one (15).....	30
6-hydroxy-8,10-diphenyl-3H-pyrano[3,2-f]quinolin-3-one (18a).....	31
6-Hydroxy-1-methyl-8,10-diphenyl-3H-pyrano[3,2-f]quinolin-3-one (18b).....	32
6-Hydroxy-8,10-diphenyl-2H-pyrano[2,3-f]quinolin-2-one (20a).....	33
2-Phenyl-6H-chromeno[7,6-d]oxazol-6-one (21a).....	34
6-Hydroxy-4-methyl-8,10-diphenyl-2H-pyrano[2,3-f]quinolin-2-one (20b).....	35
8-Methyl-2-phenyl-6H-chromeno[7,6-d]oxazol-6-one (21b).....	36
1-Hydroxy-8,10-diphenyl-3H-pyrano[3,2-f]quinolin-3-one (22).....	37
2,4,10,12-Tetraphenyl-4H,5H-pyrano[2',3':4,5]pyrano[3,2-f]quinolin-5-one (23).....	38
8,10-Diphenyl-6-(prop-2-yn-1-yloxy)-3H-pyrano[3,2-f]quinolin-3-one (24a).....	39
1-Methyl-8,10-diphenyl-6-(prop-2-yn-1-yloxy)-3H-pyrano[3,2-f]quinolin-3-one (24b).....	40
8,10-Diphenyl-6-(prop-2-yn-1-yloxy)-2H-pyrano[2,3-f]quinolin-2-one (25a).....	41
4-Methyl-8,10-diphenyl-6-(prop-2-yn-1-yloxy)-2H-pyrano[2,3-f]quinolin-2-one (25b).....	42
8,10-Diphenyl-1-(prop-2-yn-1-yloxy)-3H-pyrano[3,2-f]quinolin-3-one (26).....	43
9,11-Diphenyl-2H,6H-dipyrano[3,2-f:3',2'-h]quinolin-6-one (27a).....	44
8-Methyl-9,11-diphenyl-2H,6H-dipyrano[3,2-f:3',2'-h]quinolin-6-one (27b).....	45
2,4-Diphenyldipyrano[2,3-f:3',2'-h]quinolin-6(11H)-one (28a).....	46
8-Methyl-2,4-diphenyldipyrano[2,3-f:3',2'-h]quinolin-6(11H)-one (28b).....	47
10,12-Diphenyl-2H,5H-pyrano[2',3':4,5]pyrano[3,2-f]quinolin-5-one (29).....	48

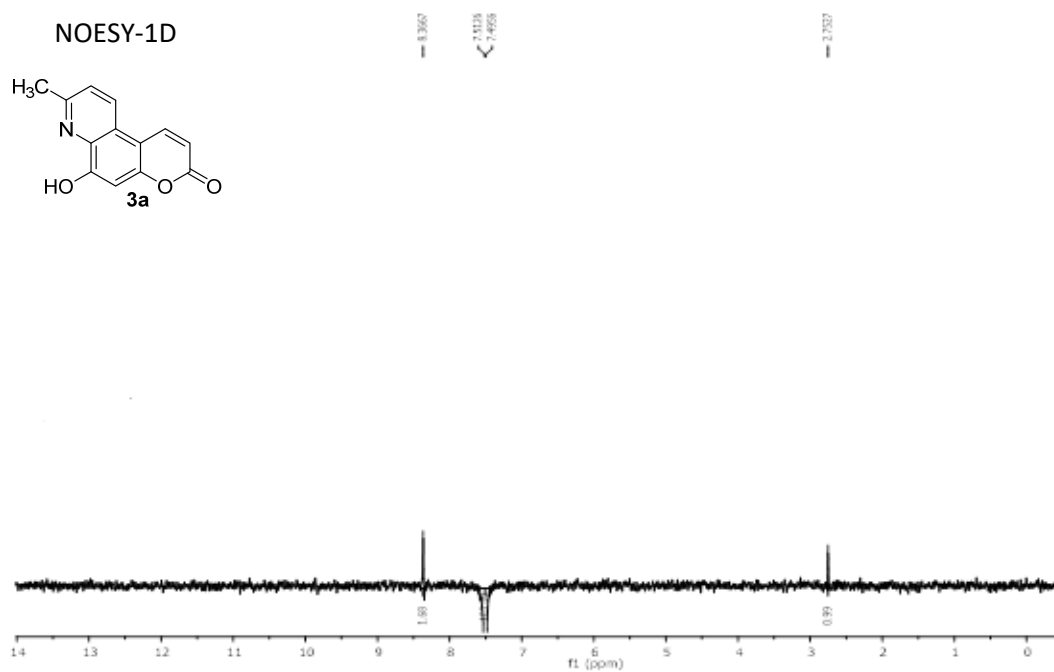
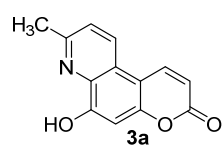
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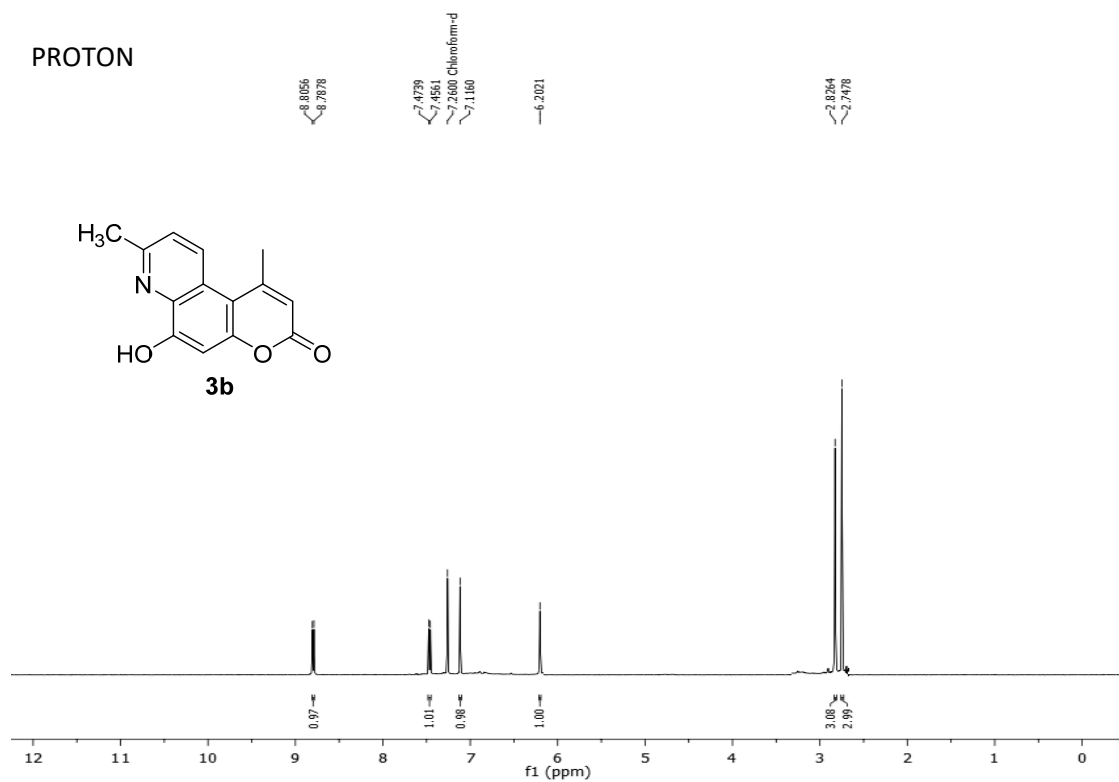
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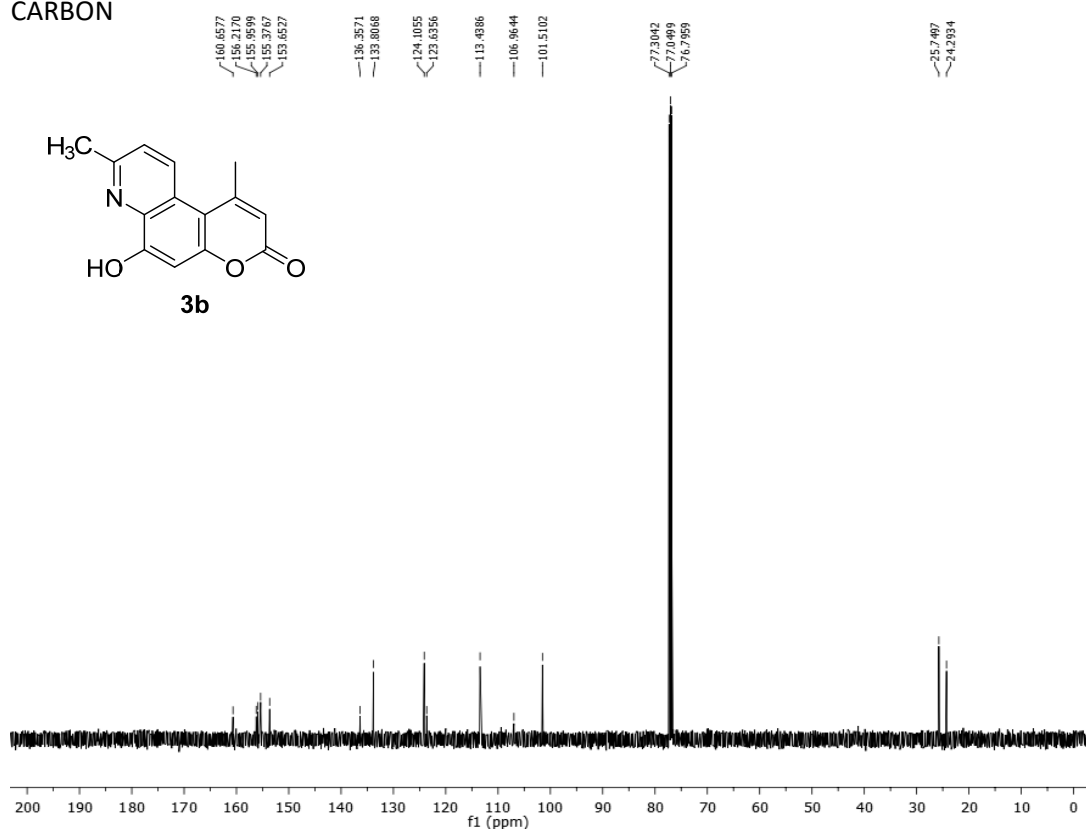
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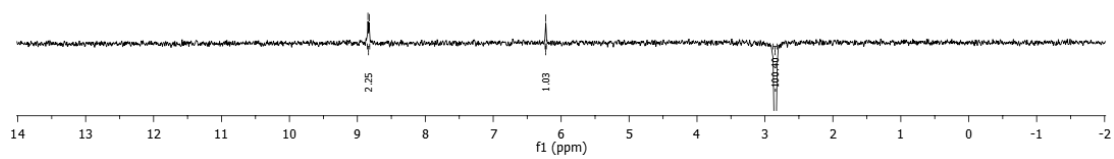
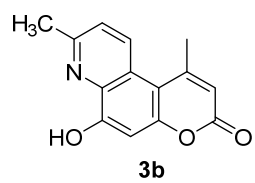
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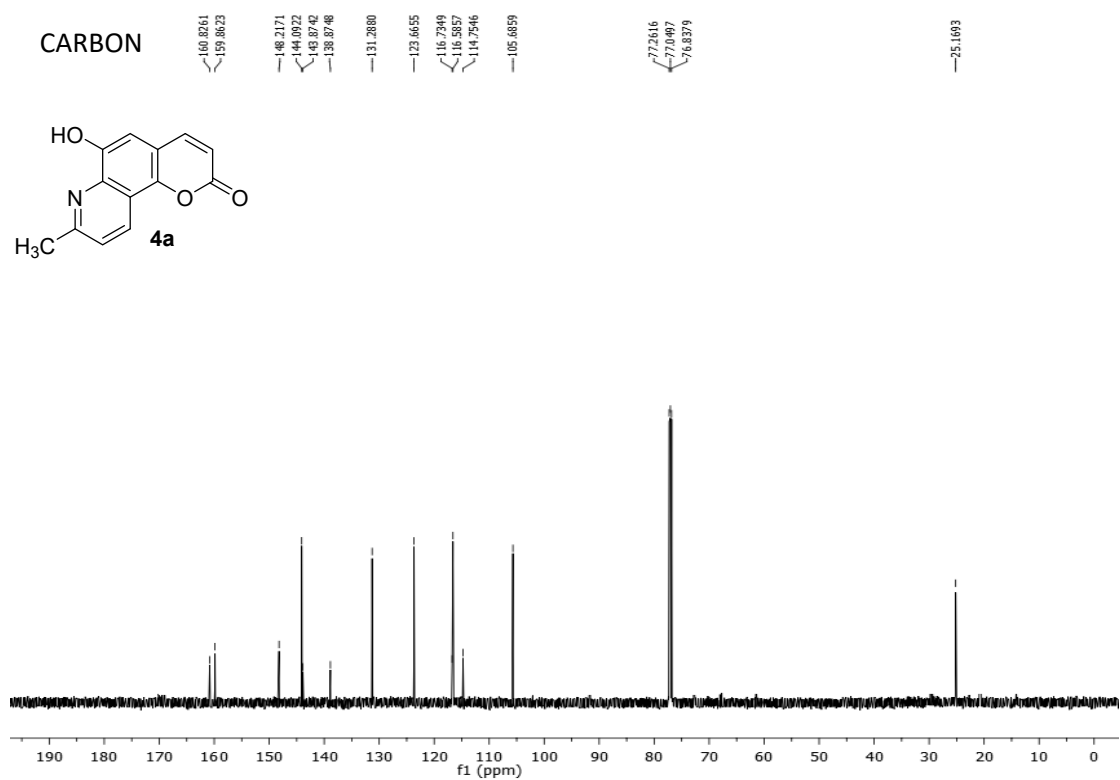
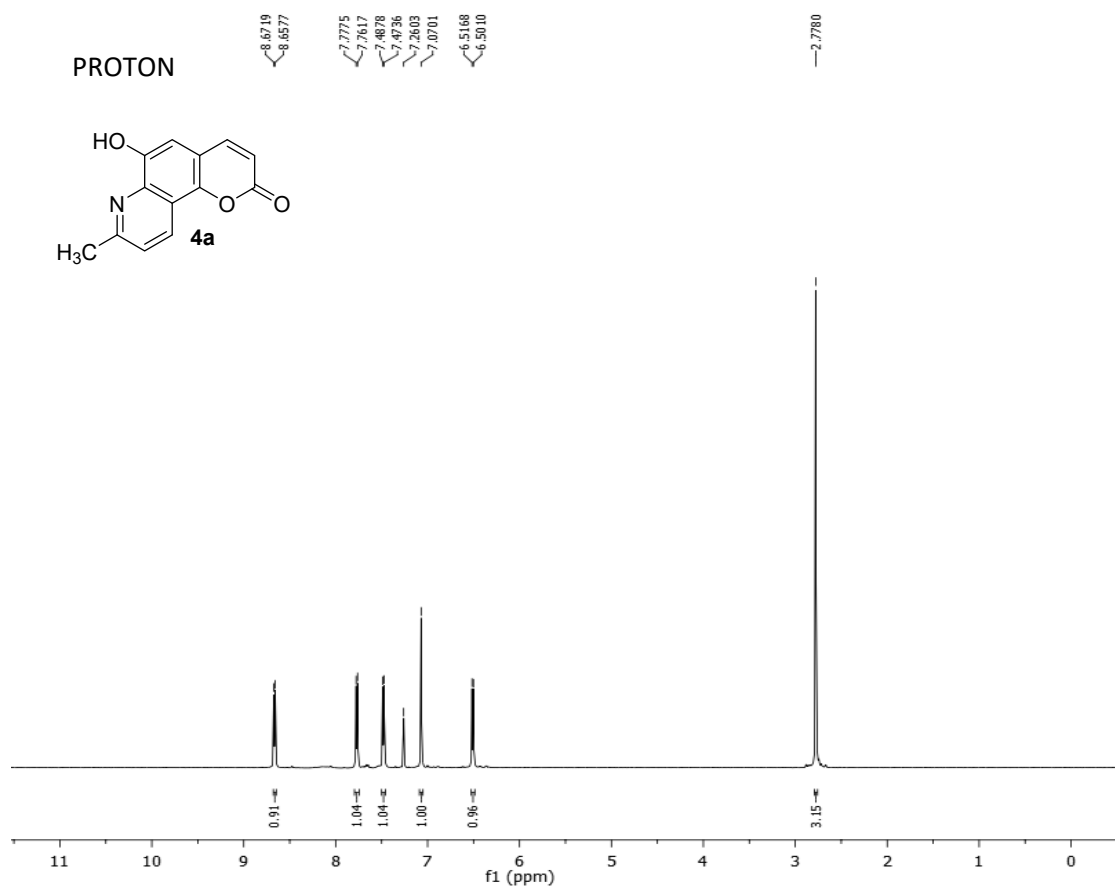


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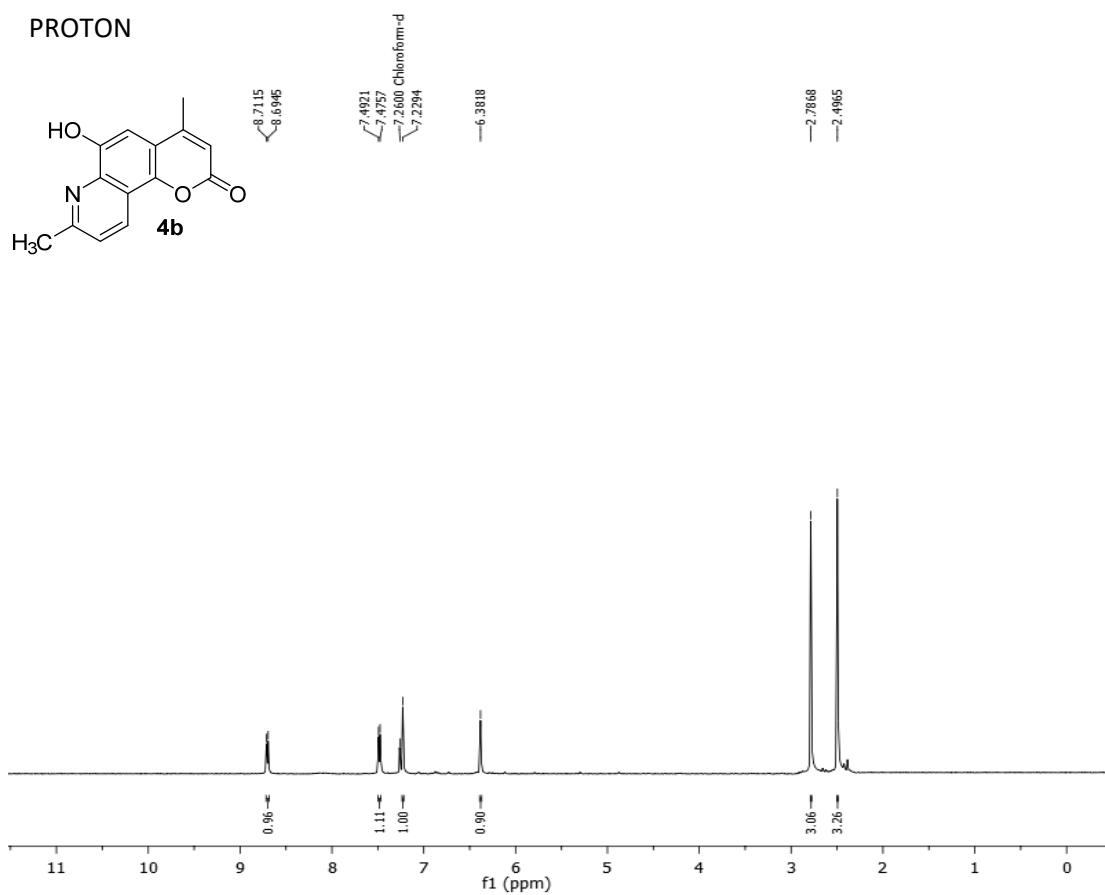


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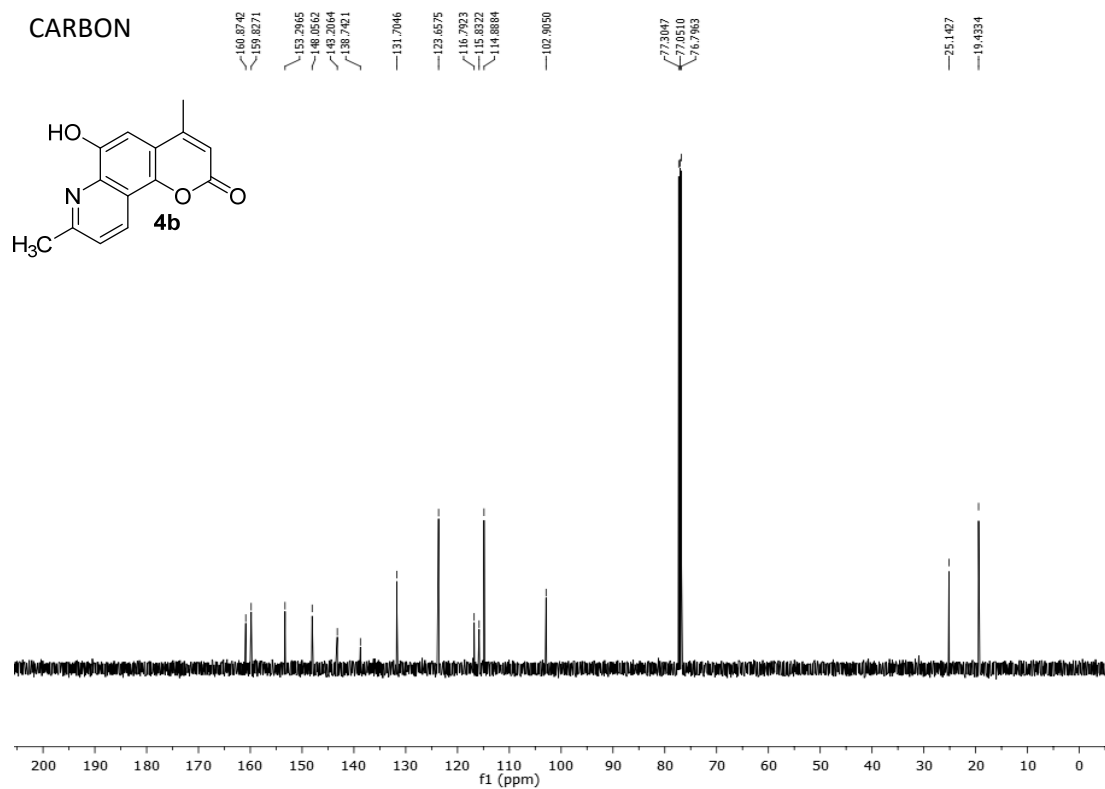


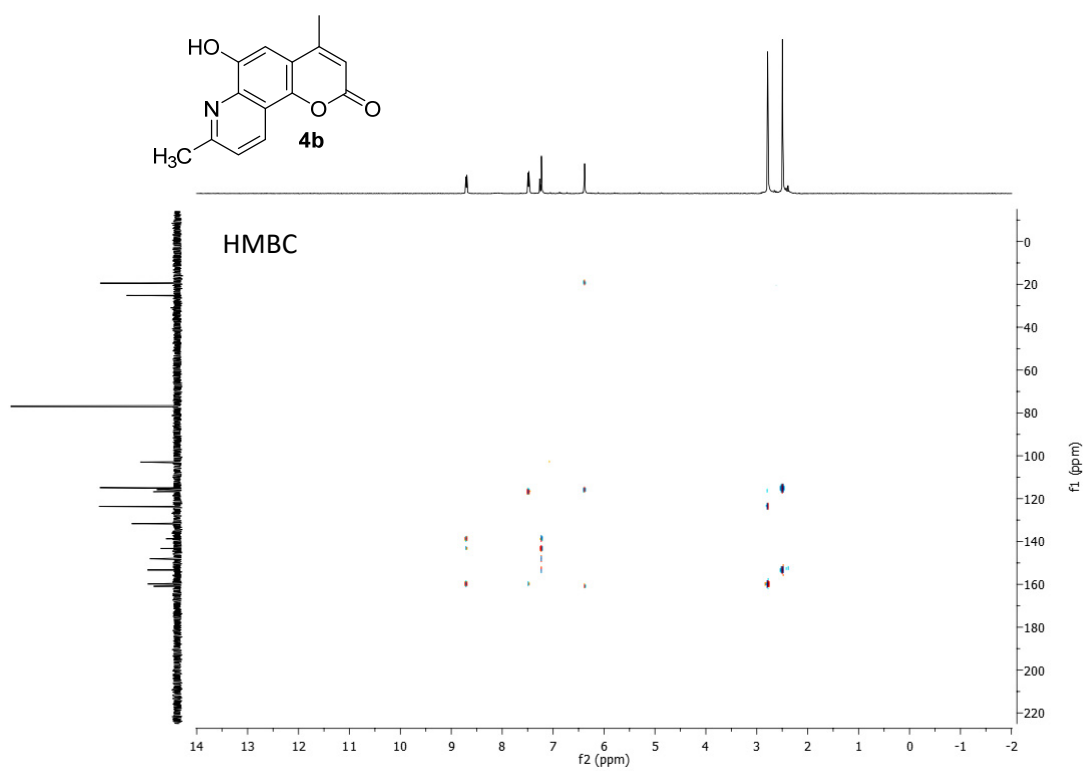
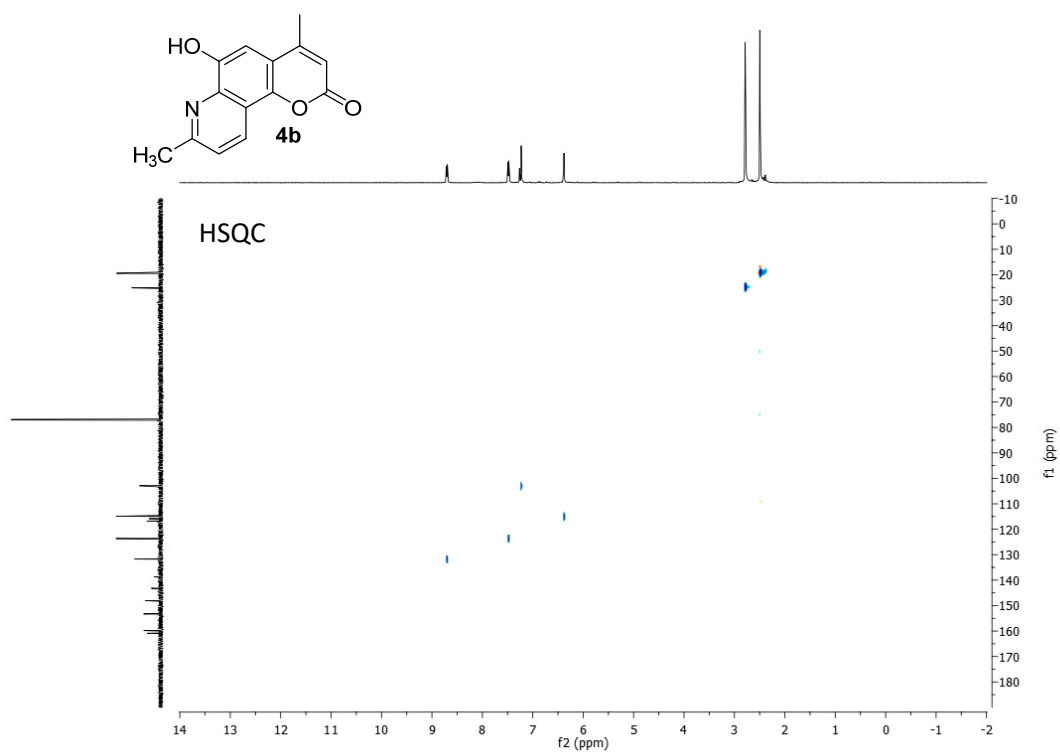


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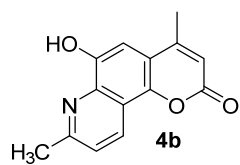


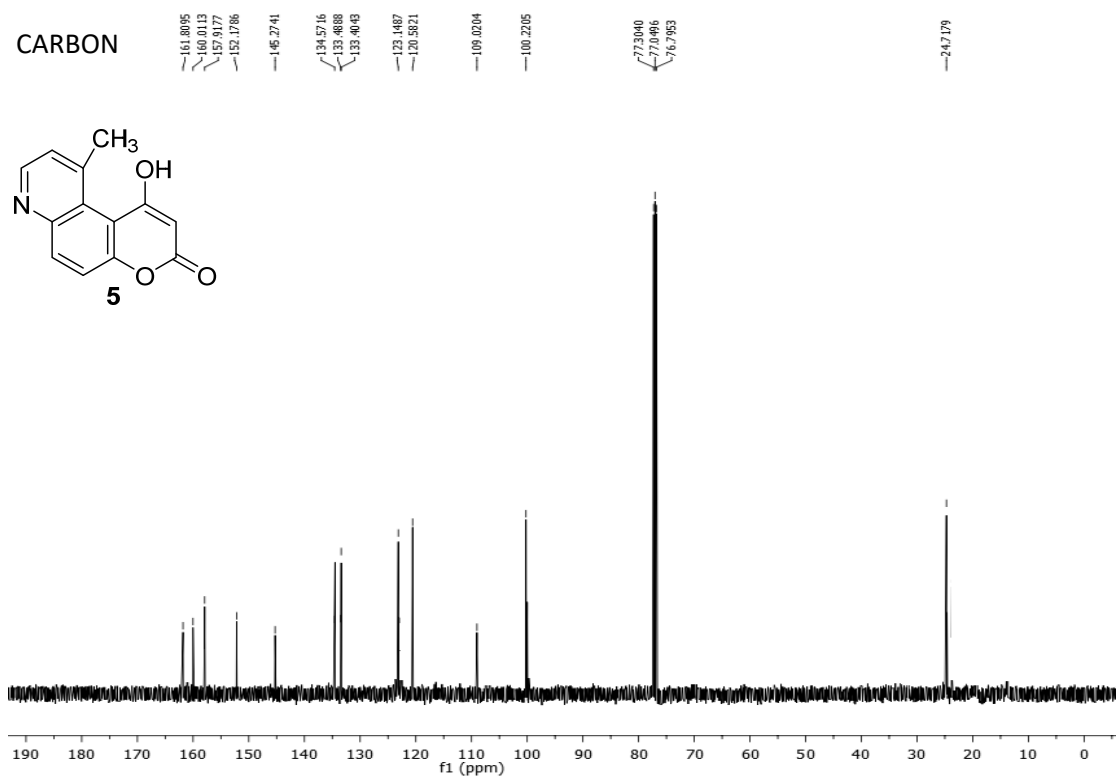
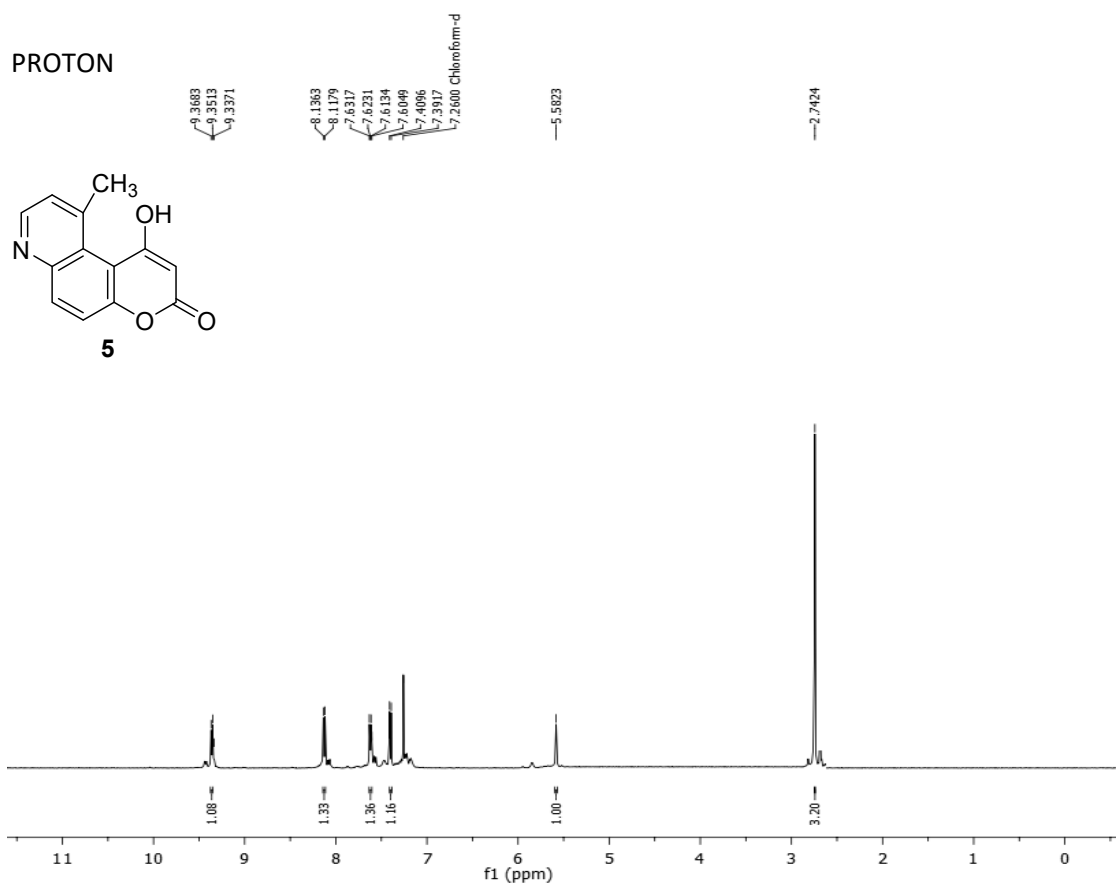
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—8.6991

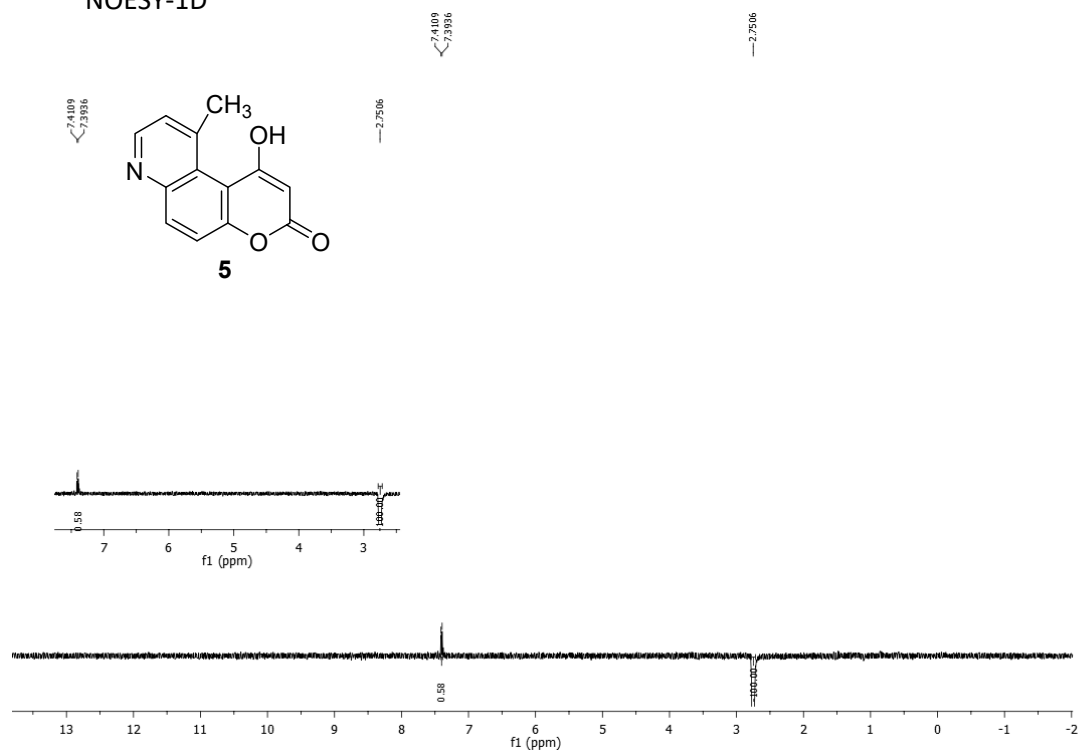
↙7.4854
↘7.4684

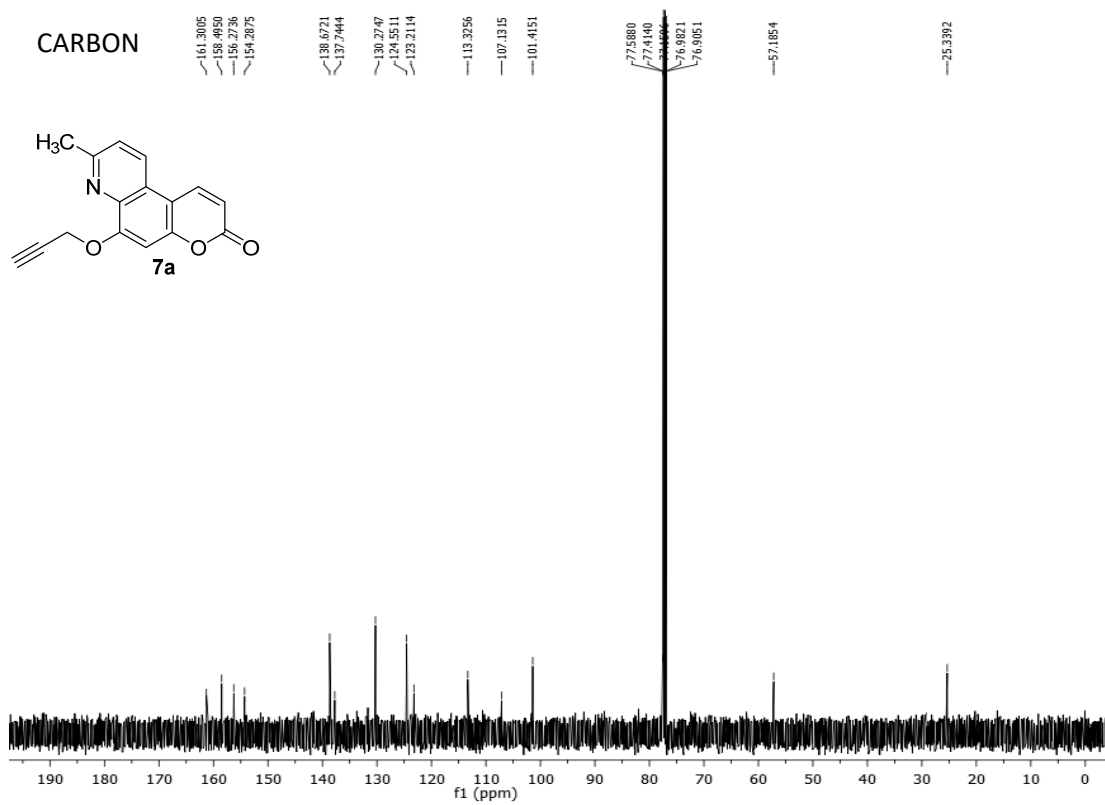
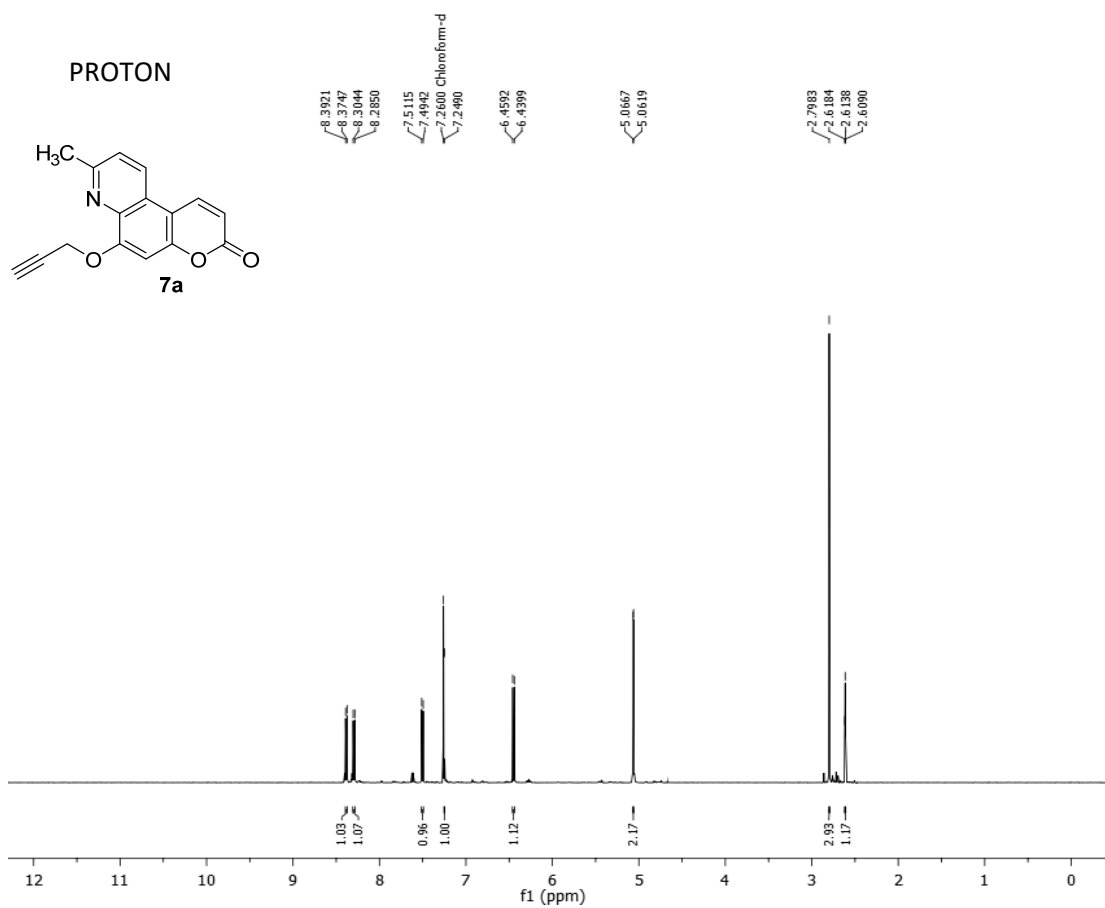
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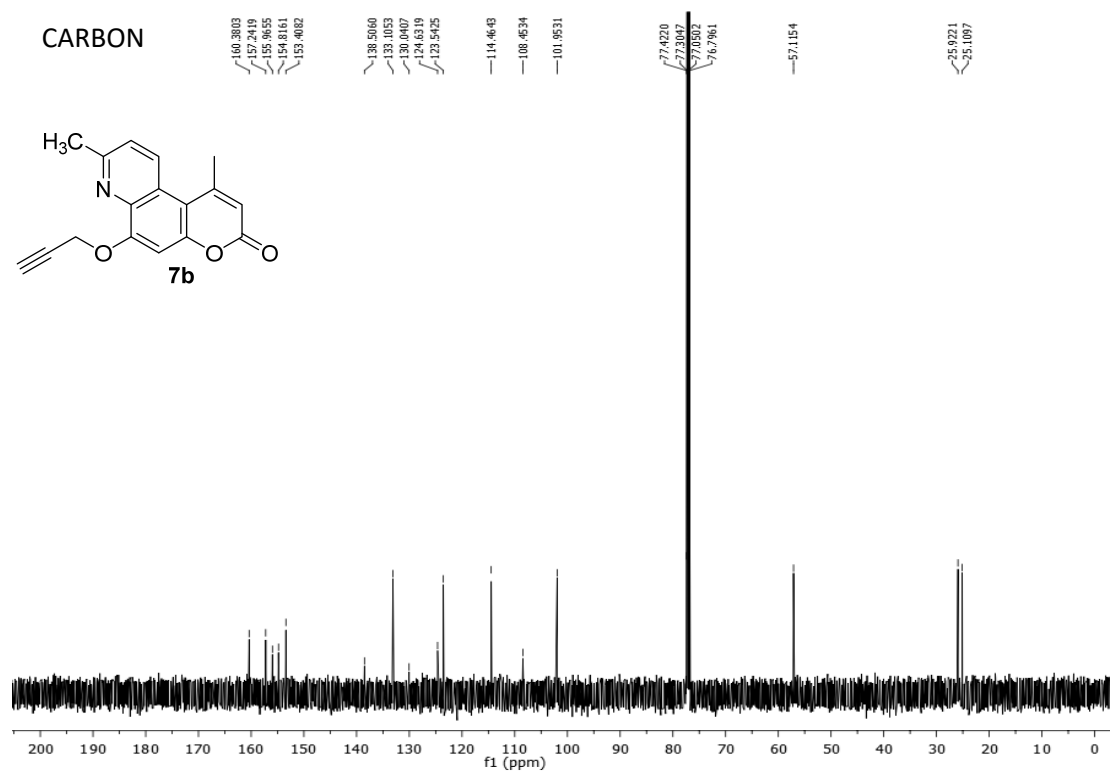
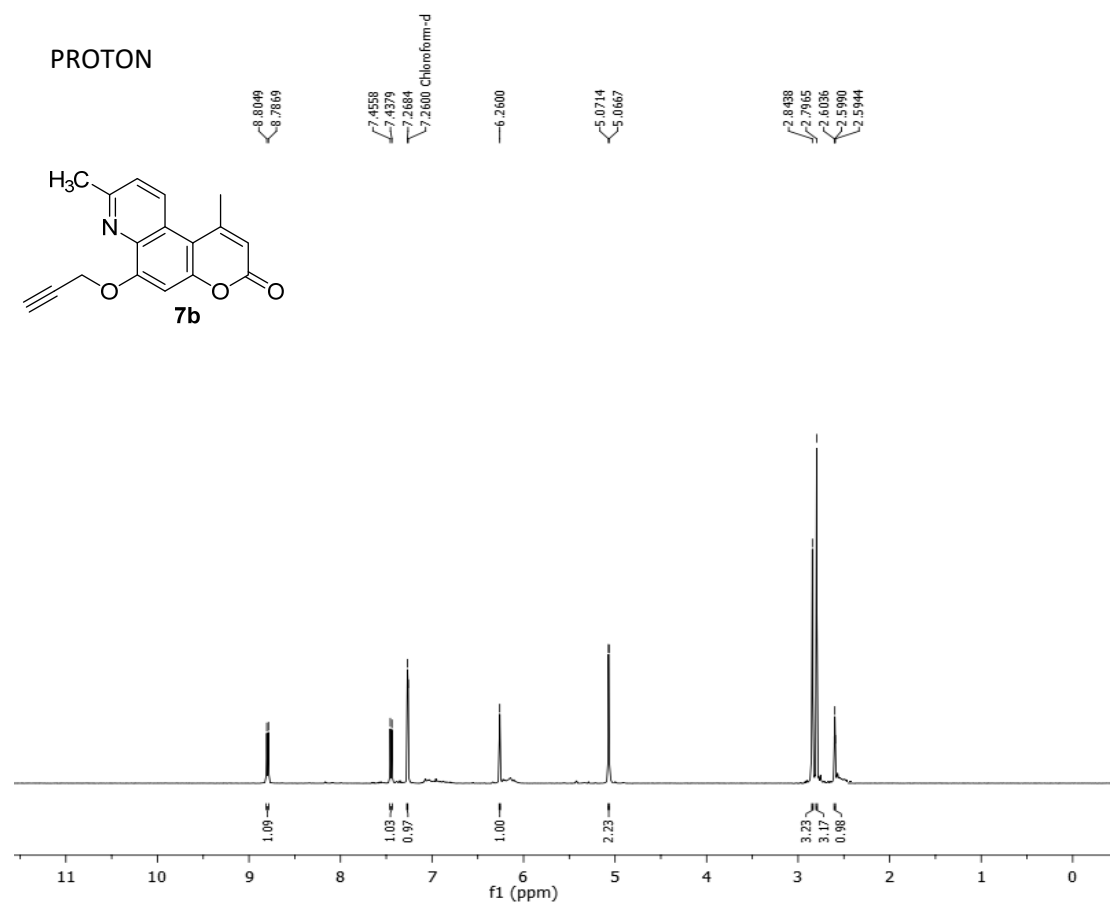


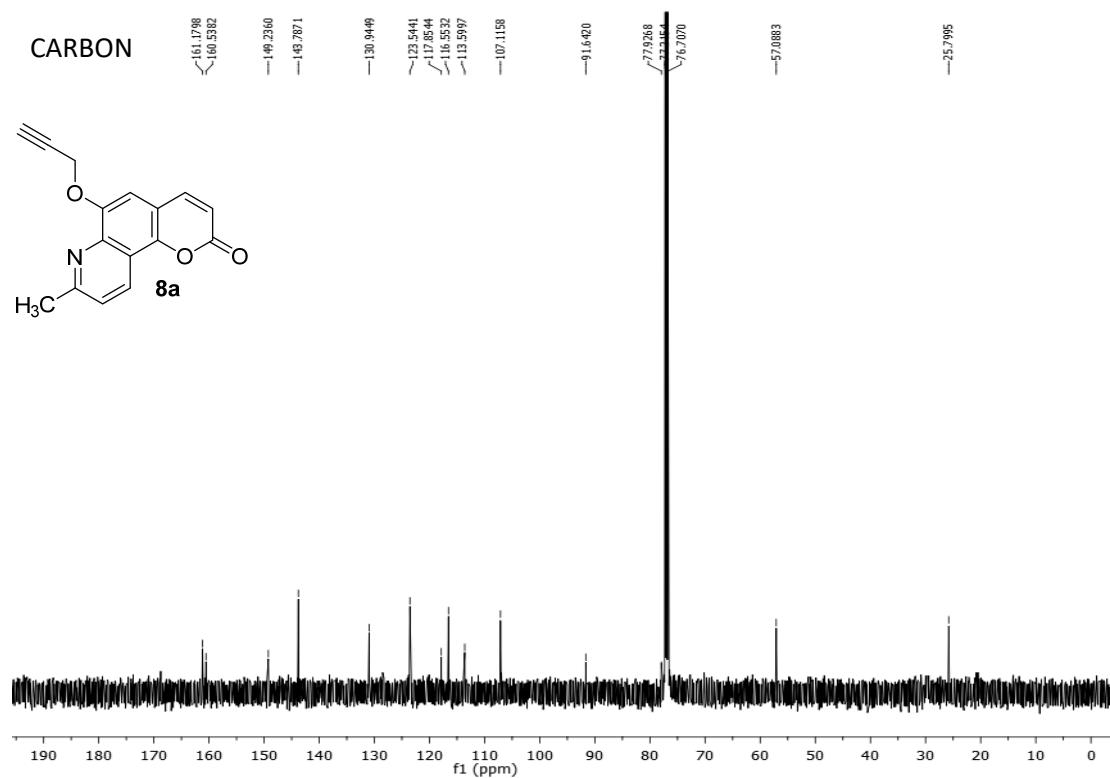
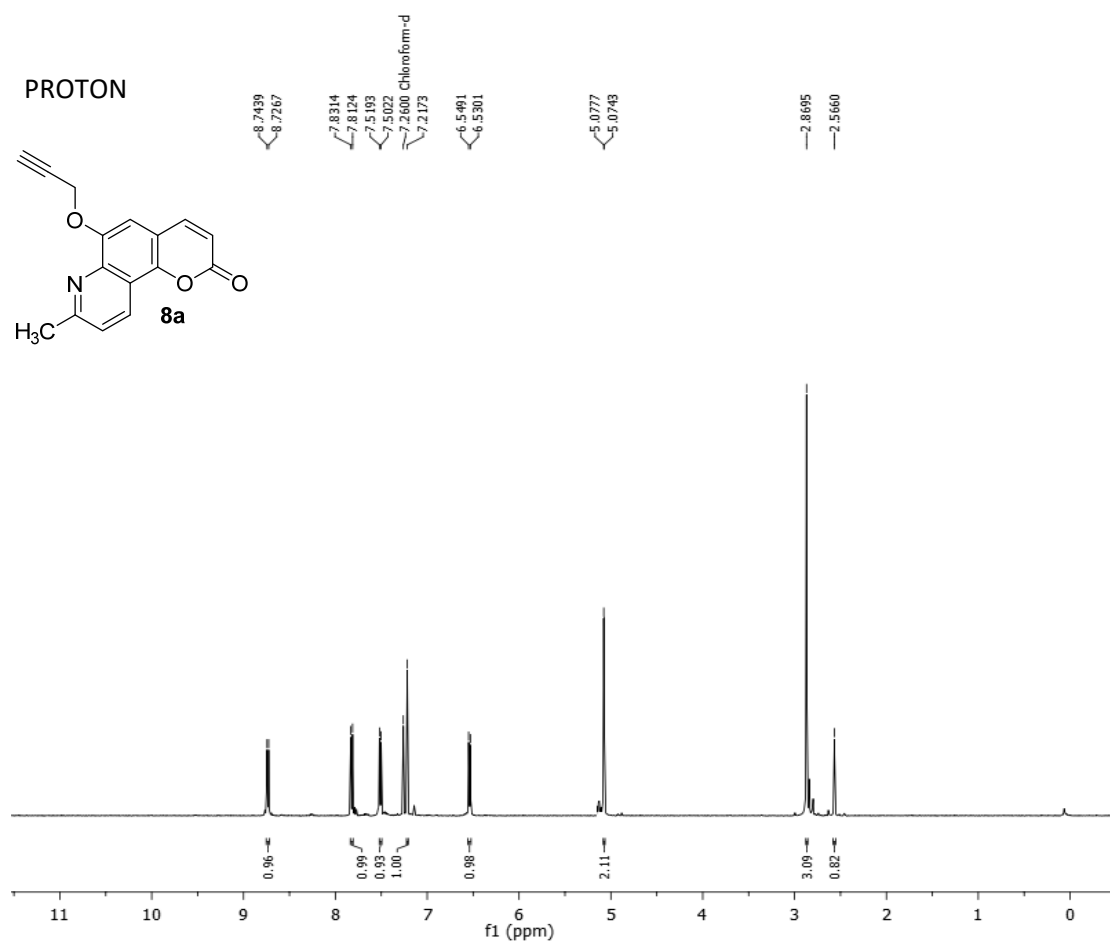


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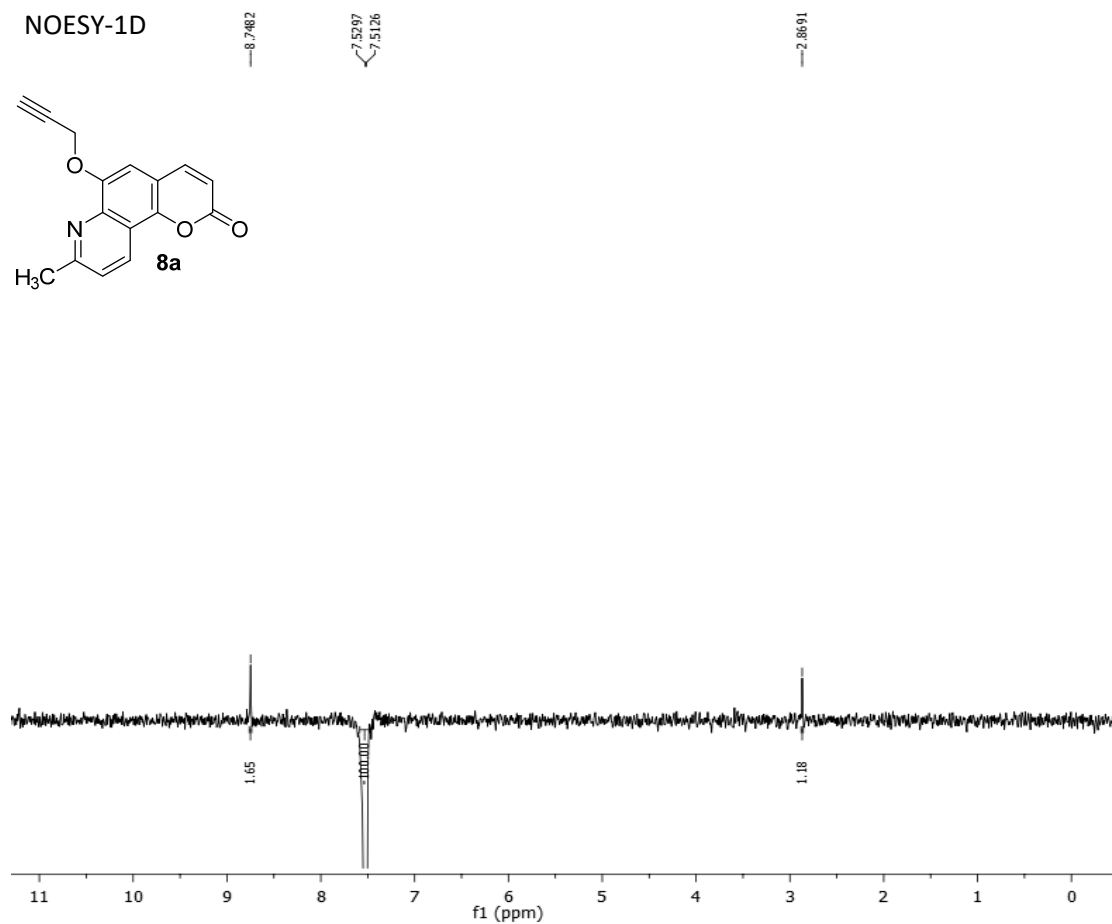
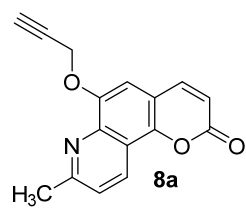


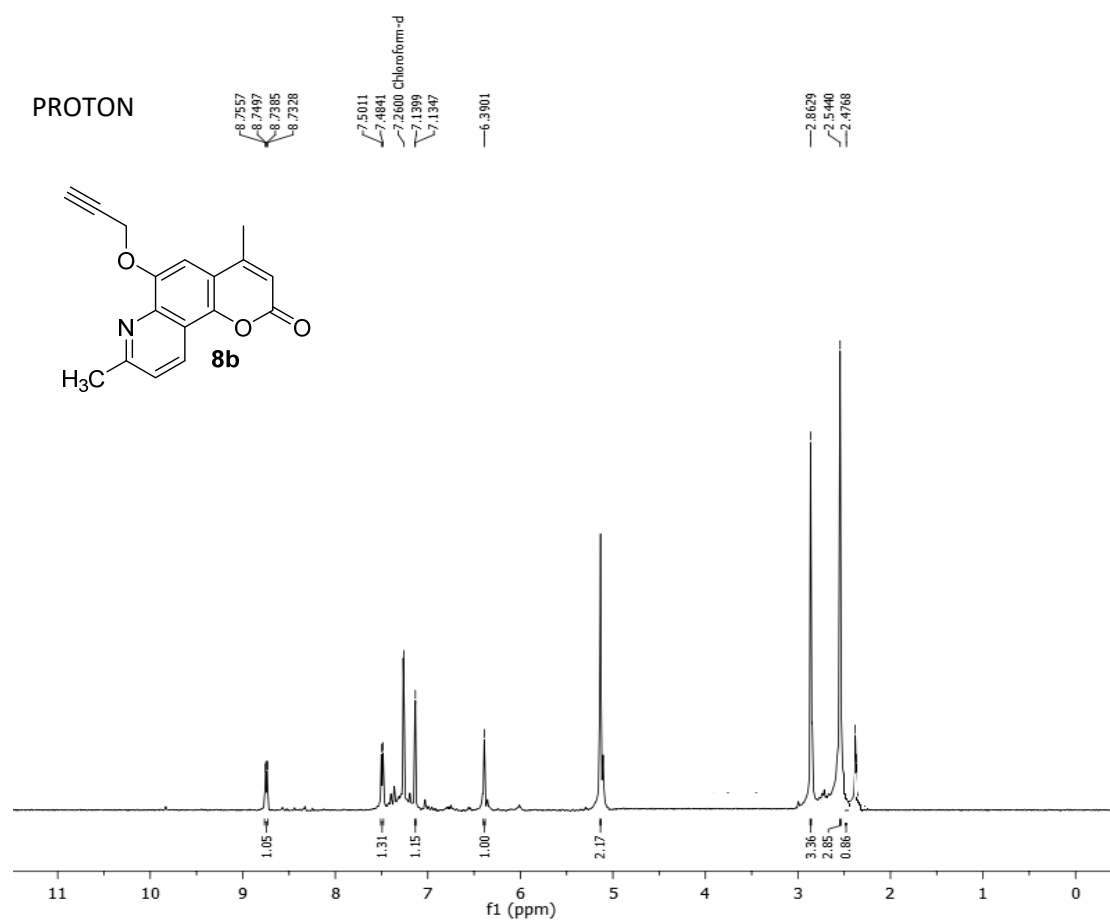




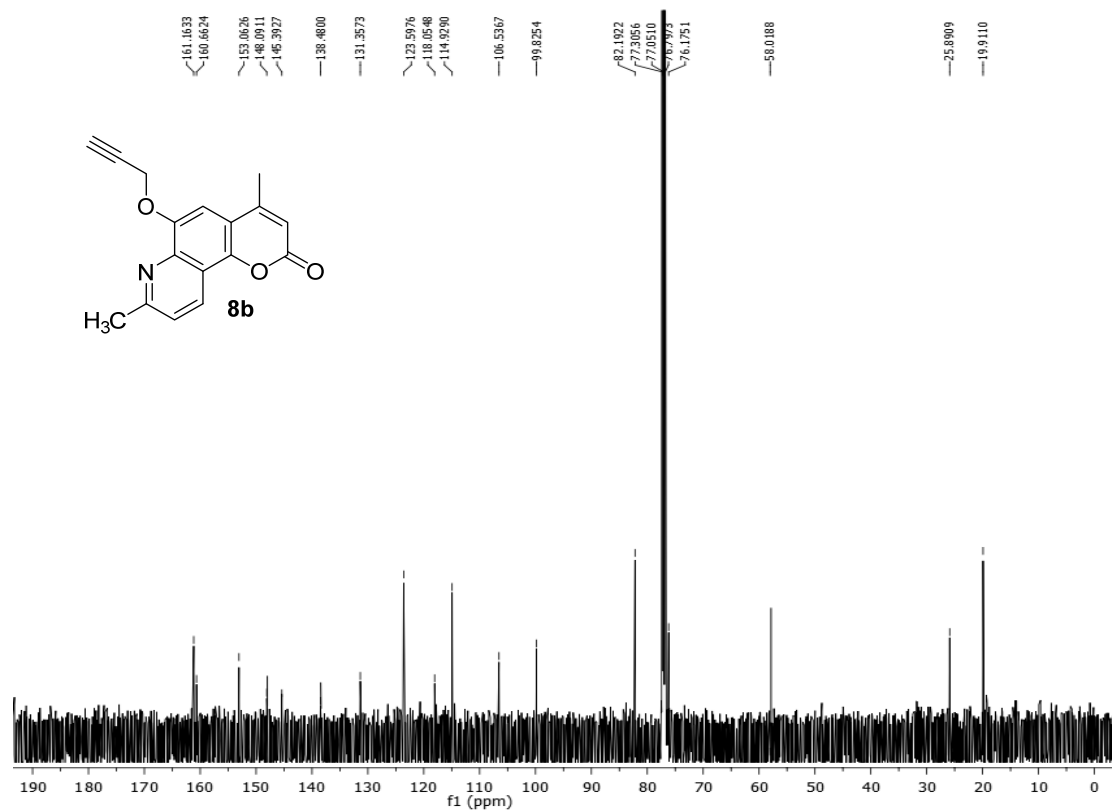


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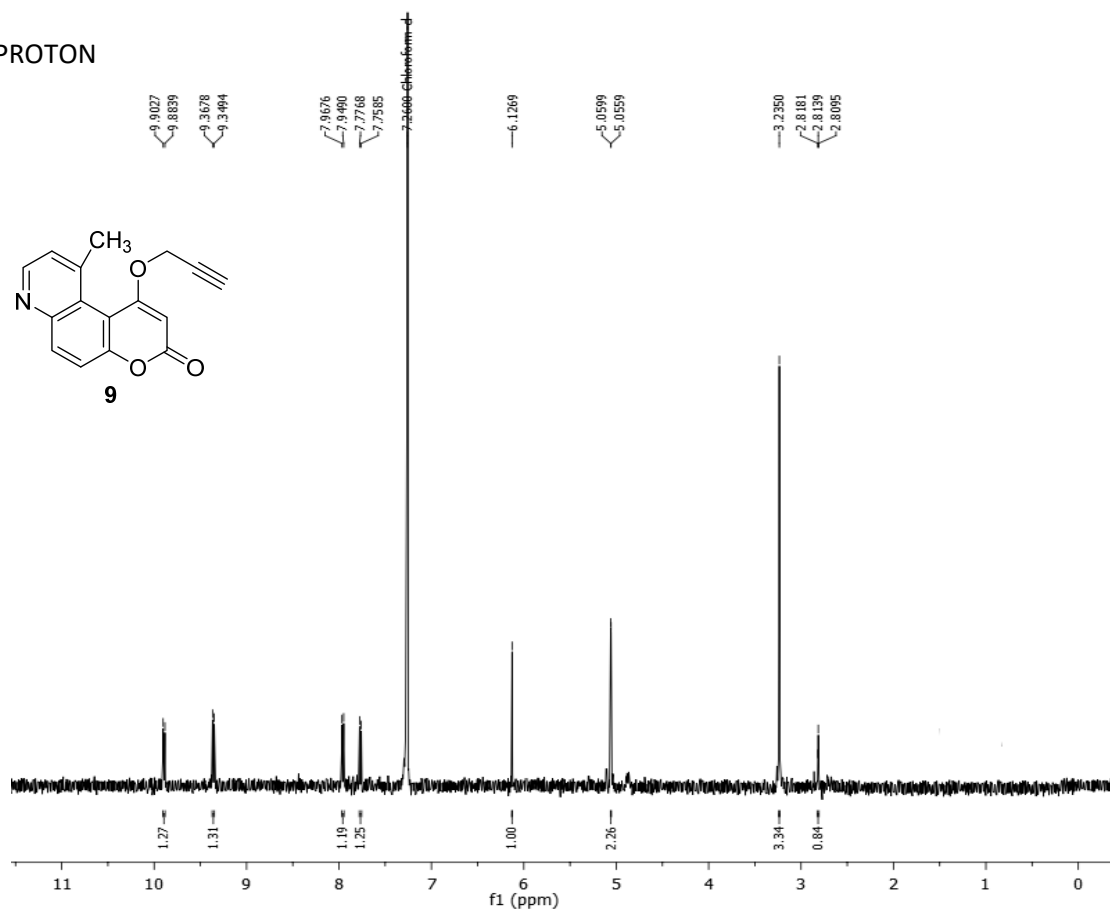




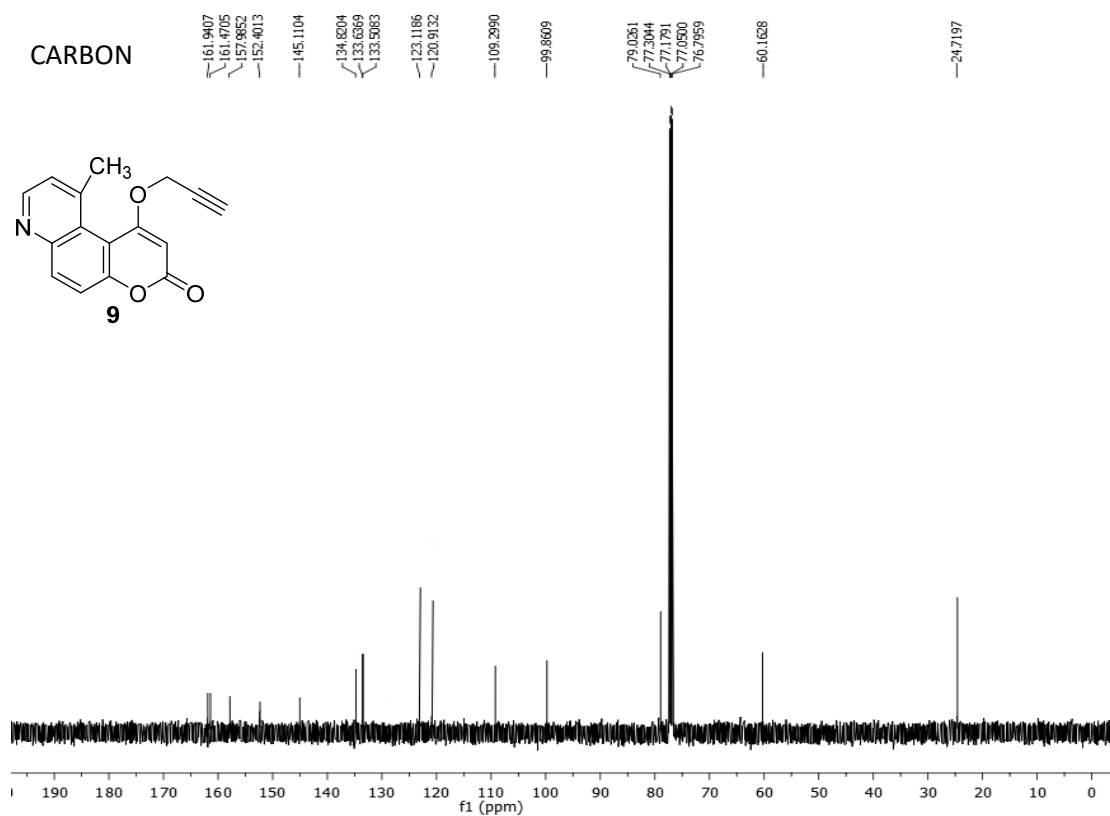
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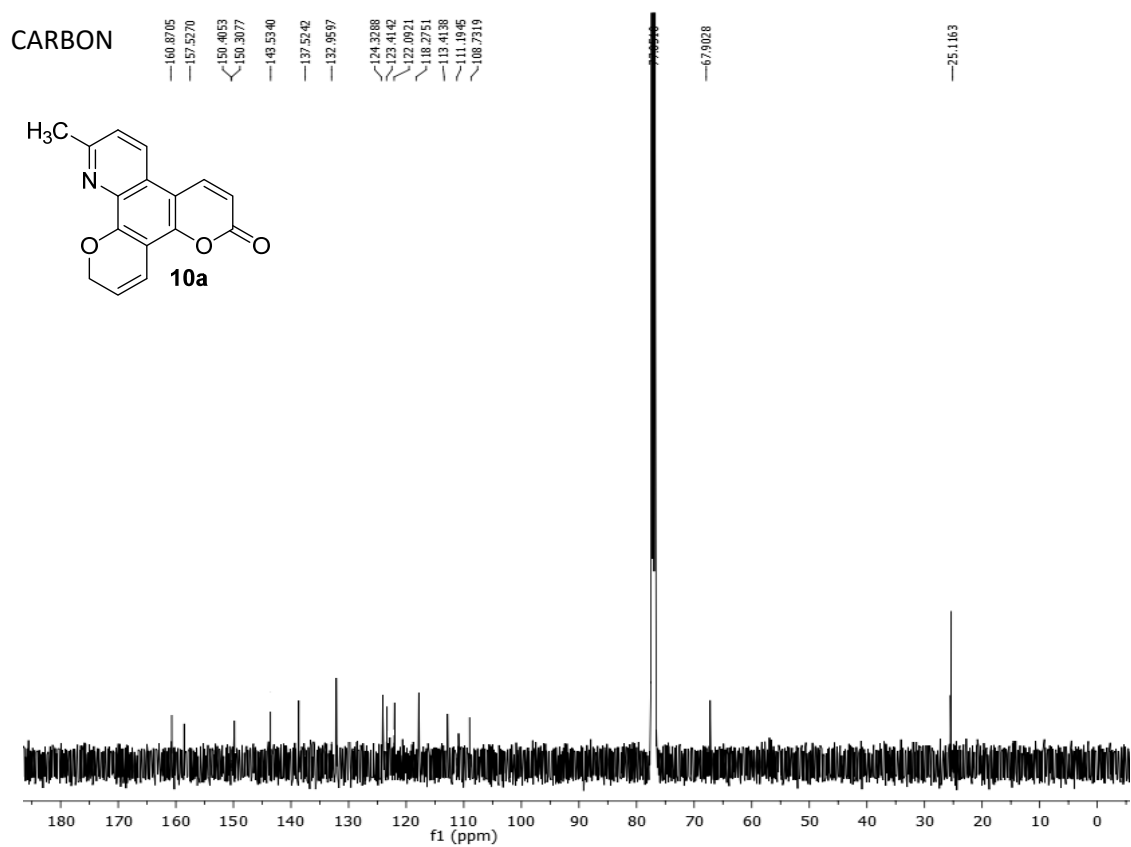
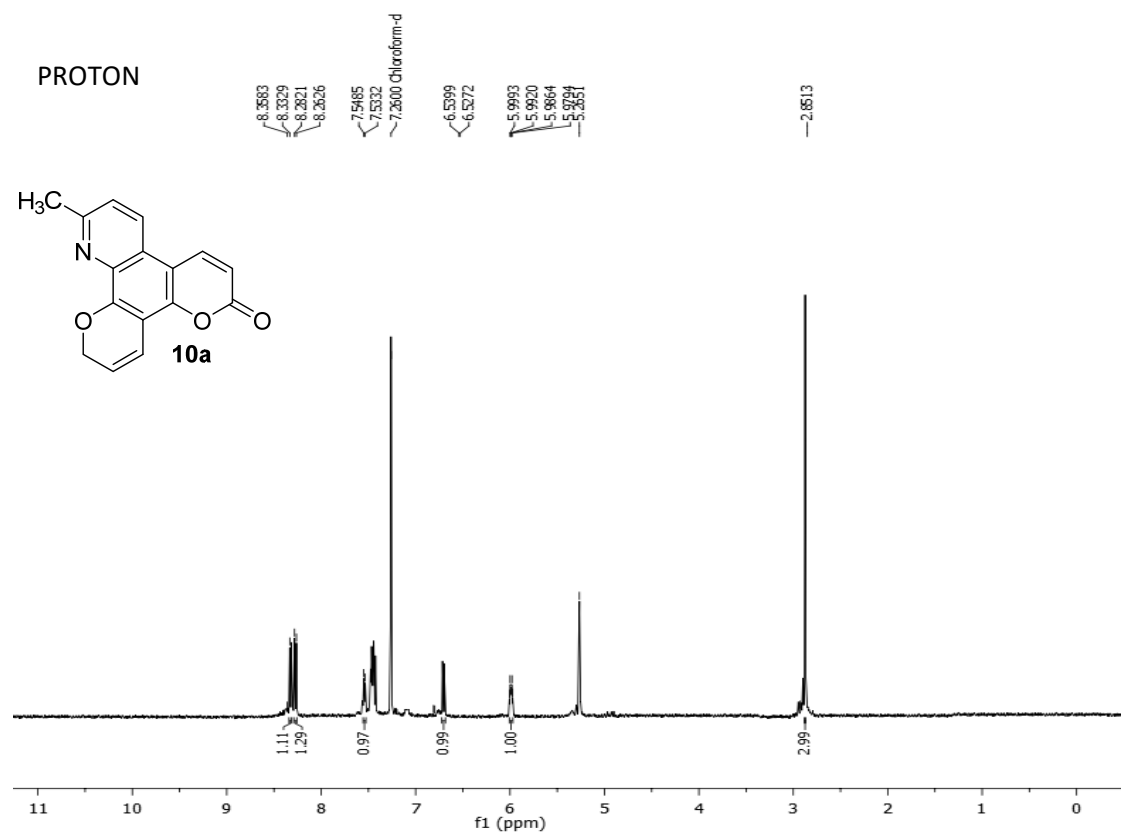


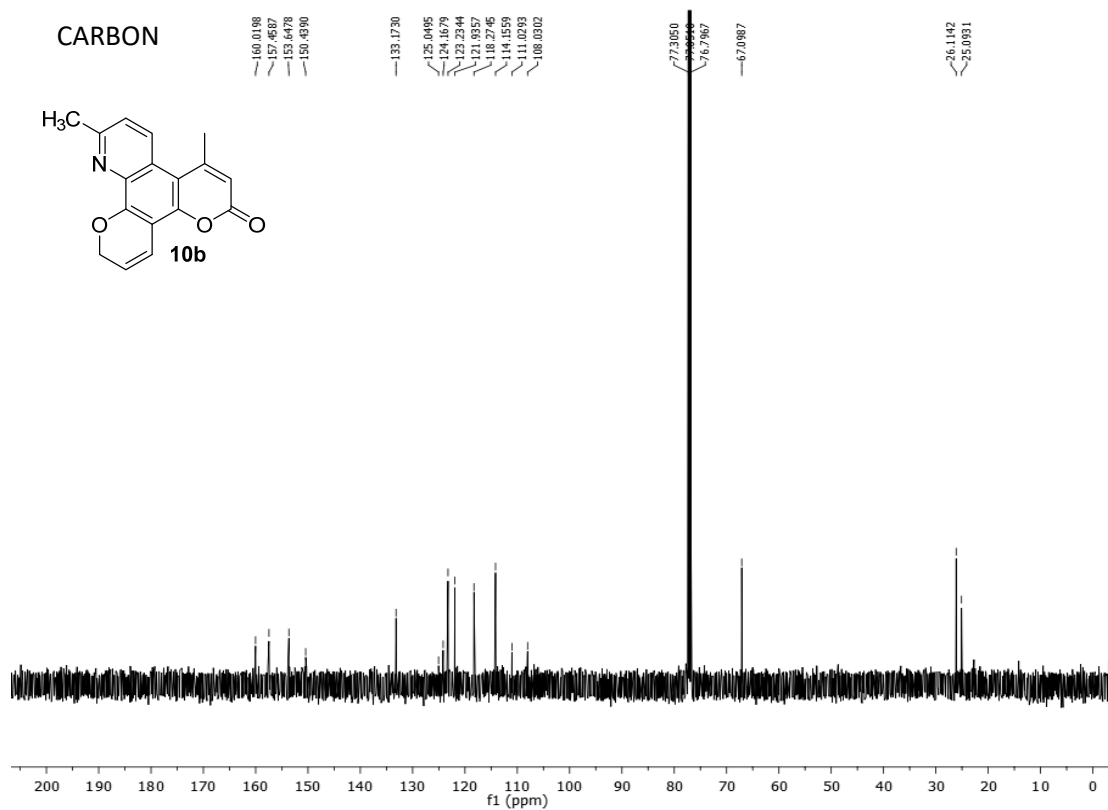
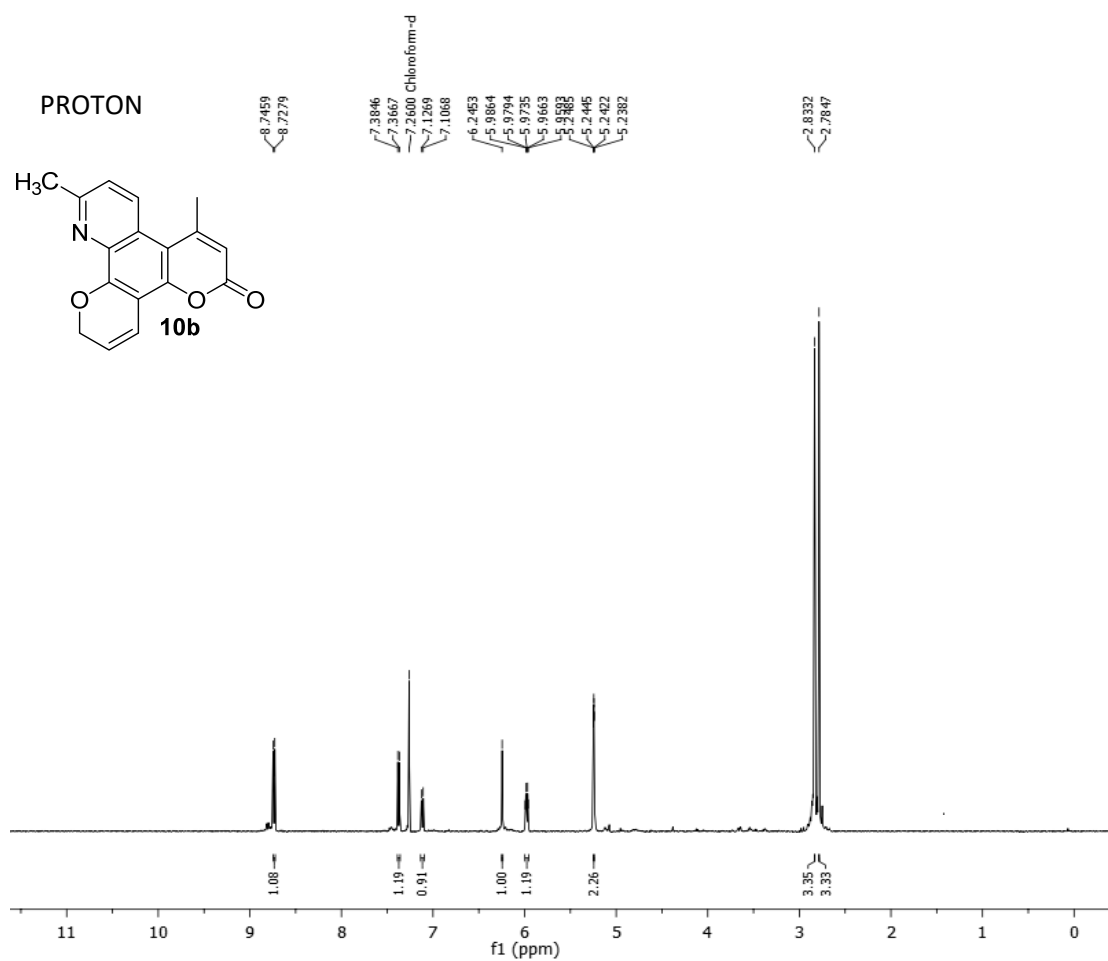
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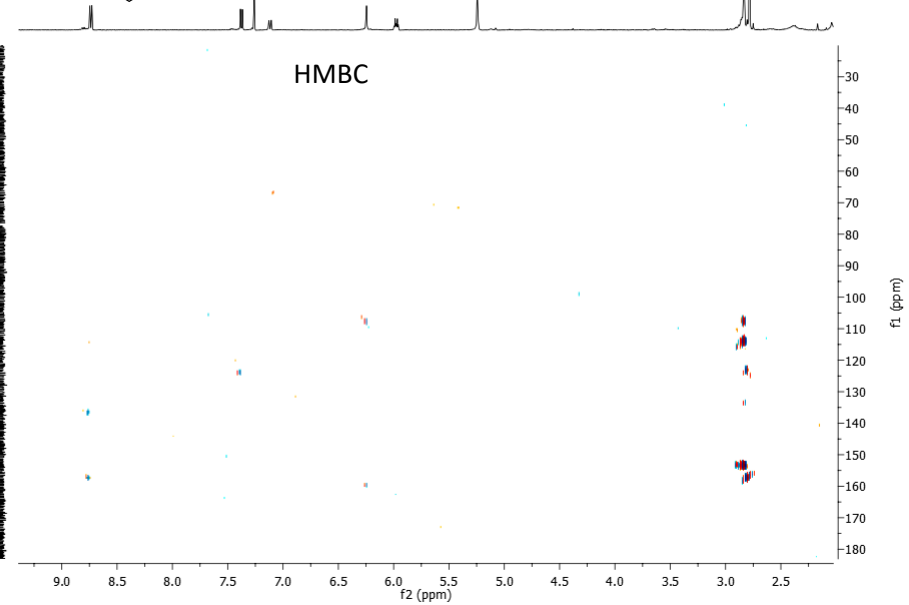
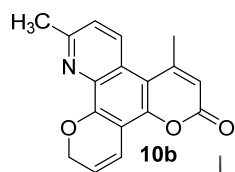
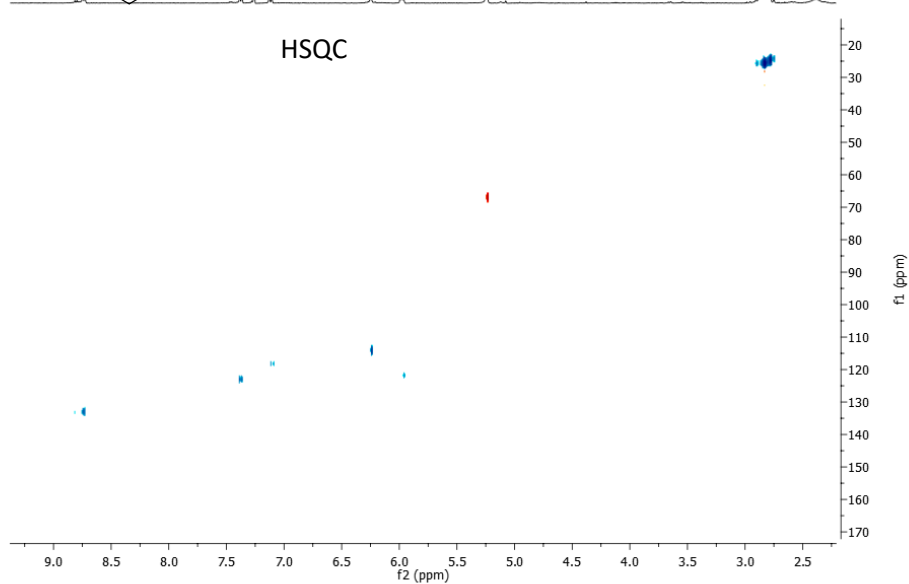
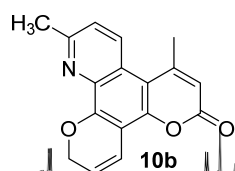


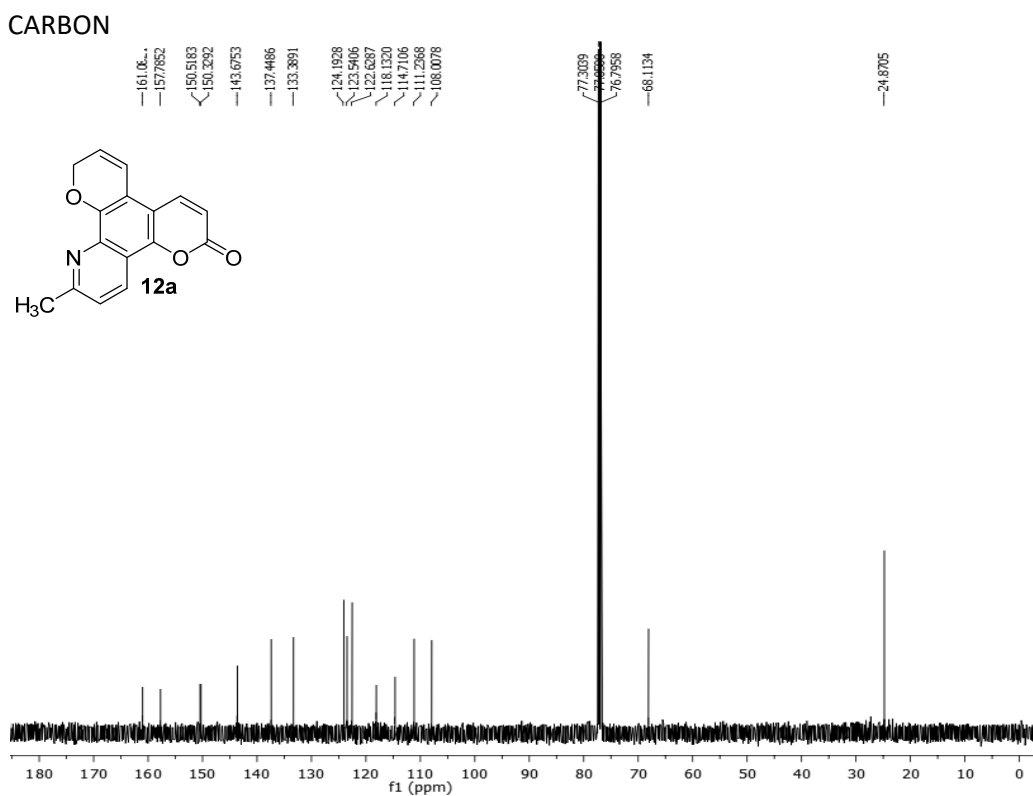
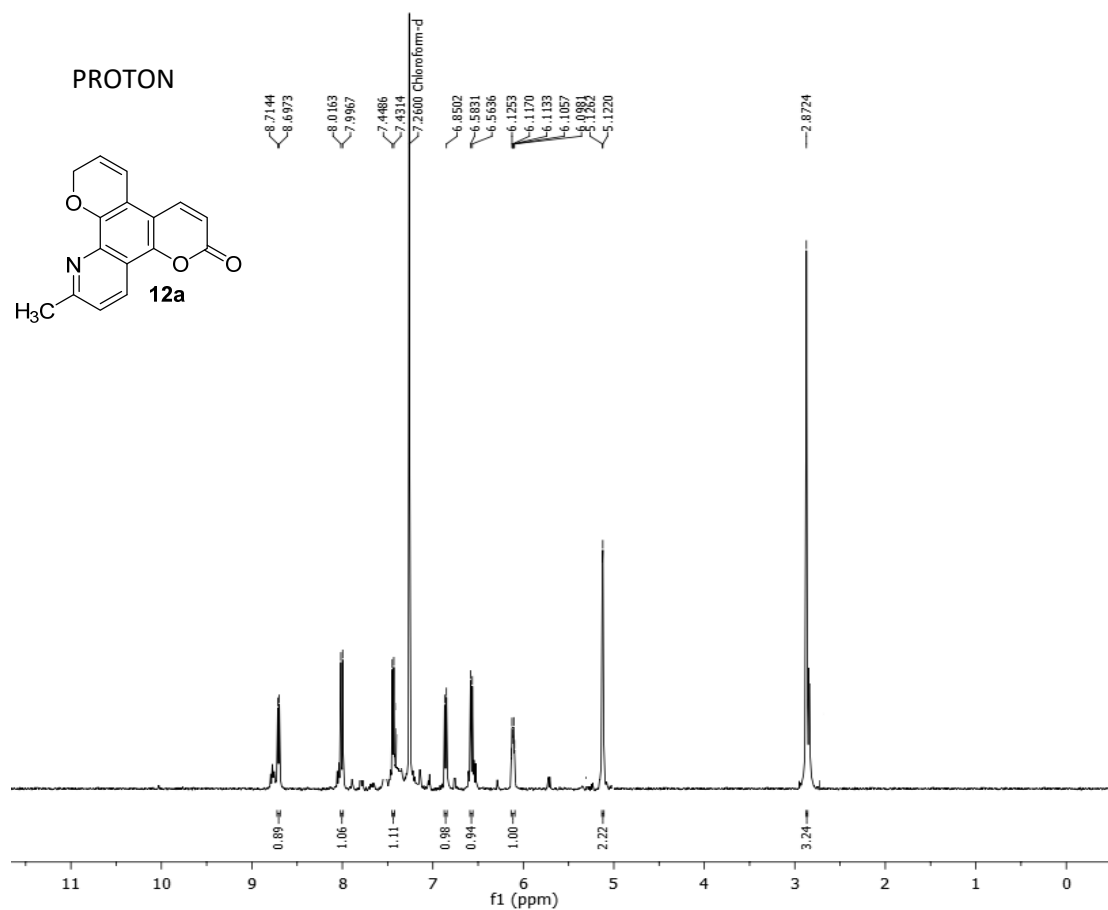
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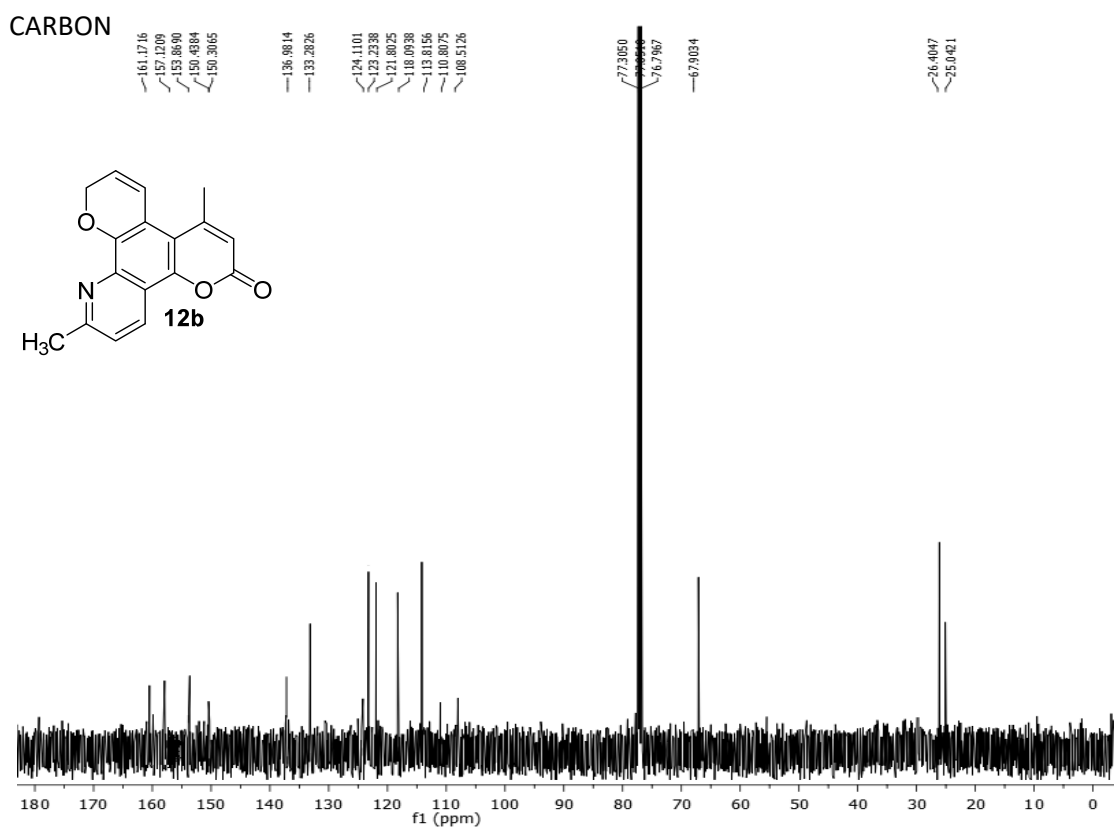
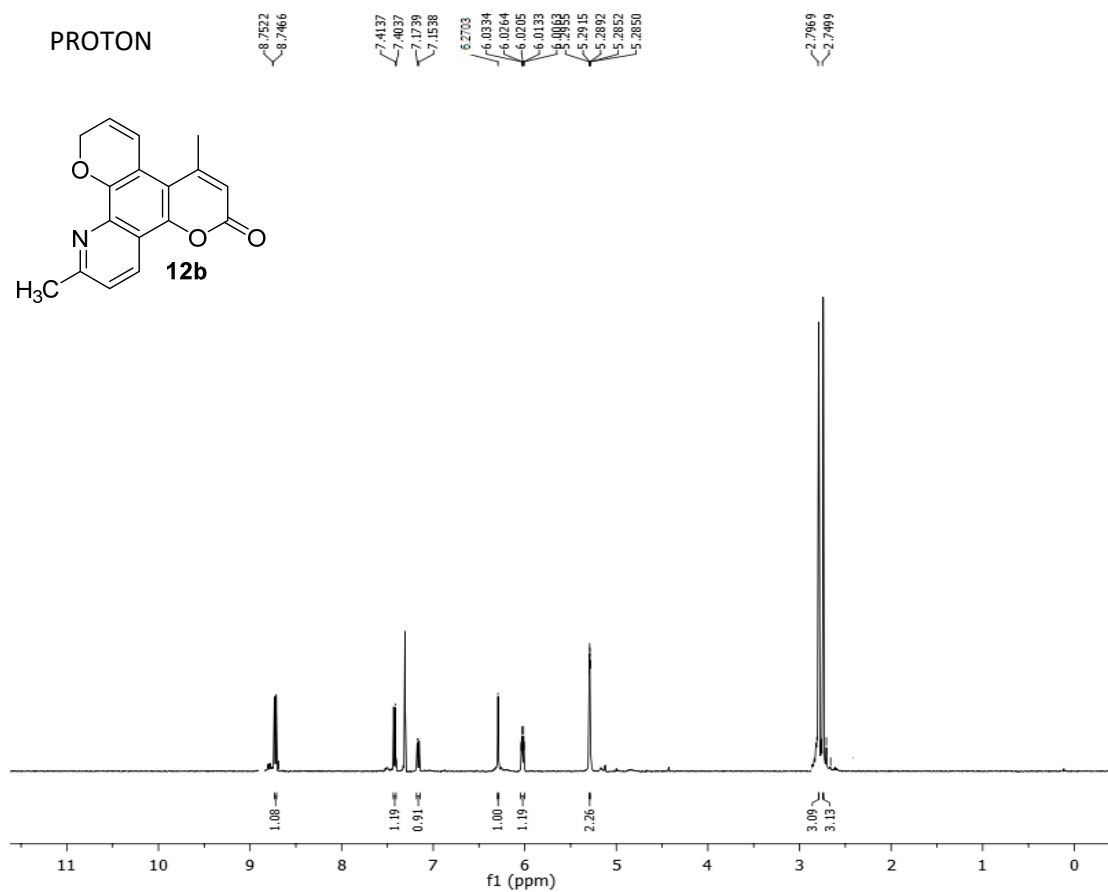




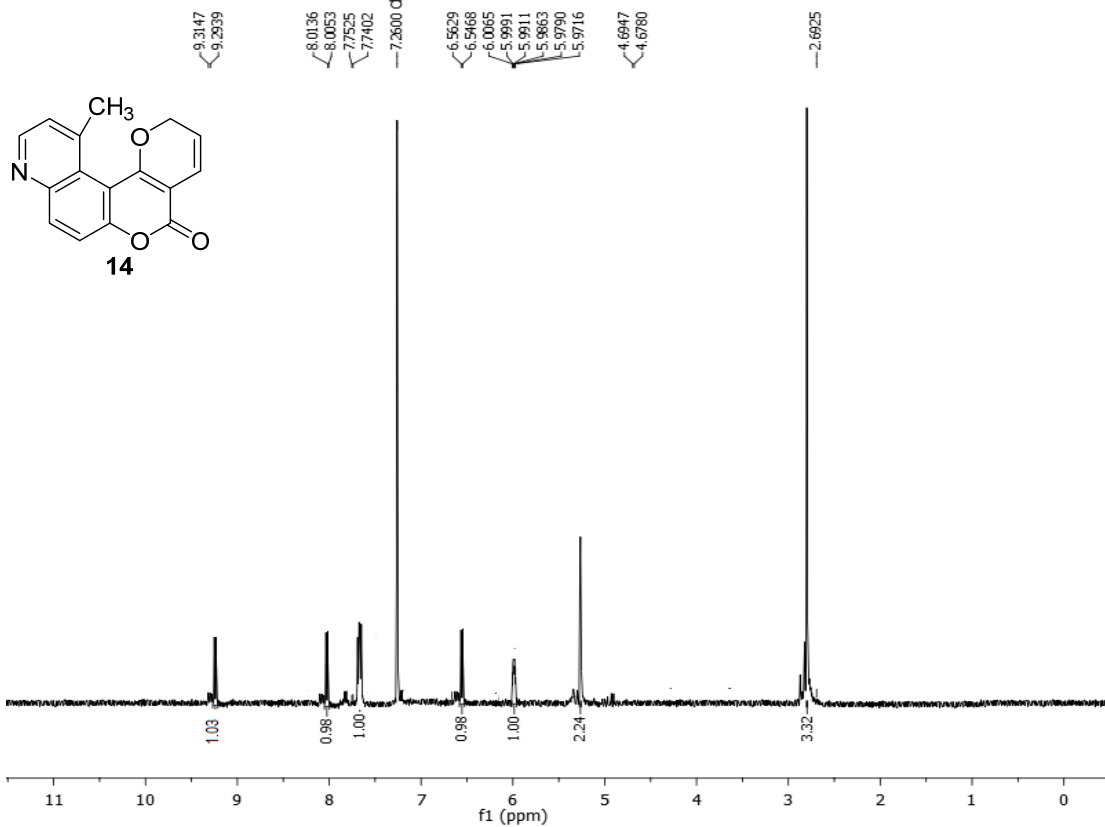




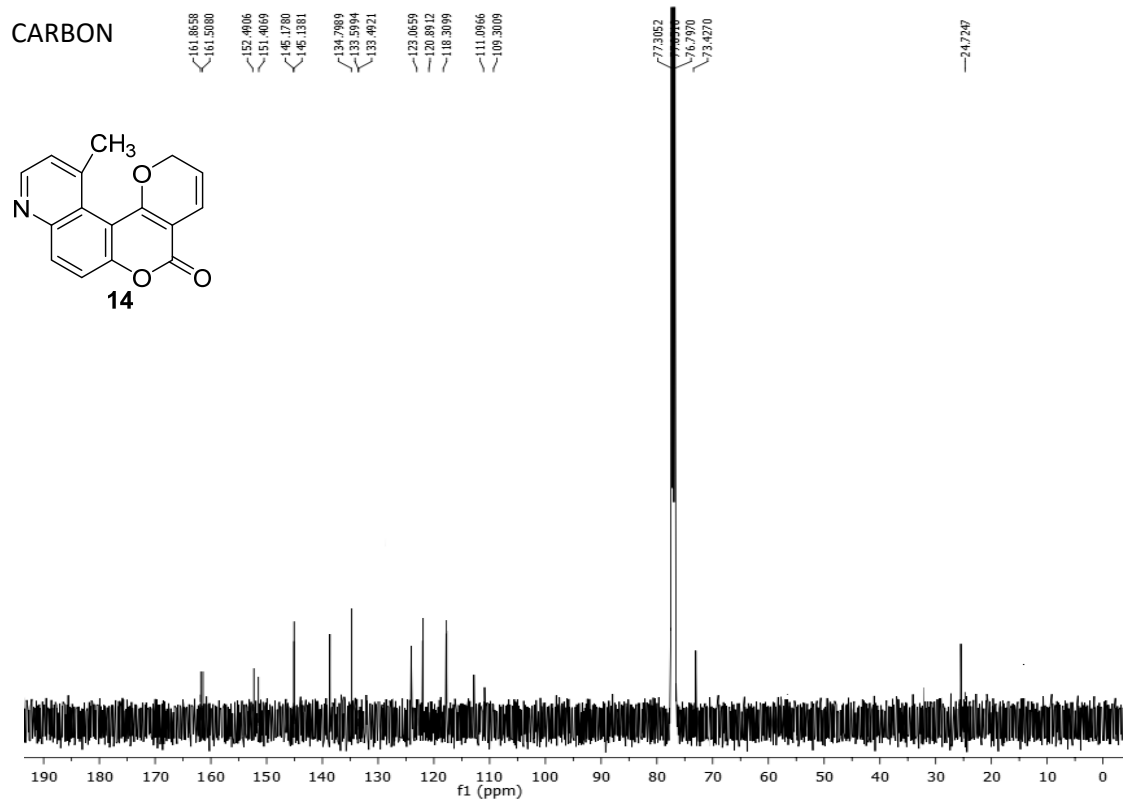




PROTON



CARBON



PROTON

11a

Cc1cc2c(c1)c3cc(C)c(oc3n2)c4cc(=O)oc5ccccc45

Chemical structure of compound 11a is shown. The structure is a complex polycyclic molecule featuring a benzimidazole core fused to a benzene ring, which is further fused to a pyridine ring. A methyl group (H₃C) is attached to the pyridine ring. The structure is labeled 11a.

¹H NMR spectrum (CDCl₃-d) of compound 11a. The x-axis represents the chemical shift in ppm (f1 (ppm)), ranging from 0 to 11. The spectrum shows several peaks corresponding to the protons in the molecule. The peaks are labeled with their chemical shifts (ppm) and integration values.

Peak list (ppm):

- 8.4734
- 8.4563
- 8.4258
- 8.4064
- 7.4750
- 7.4572
- 7.2600 (Chloroform-d)
- 6.9050
- 6.5548
- 6.5353
- 2.8630
- 2.6688

Integration values (from left to right):

- 1.30
- 1.39
- 1.08
- 0.73
- 1.00
- 3.32
- 3.37

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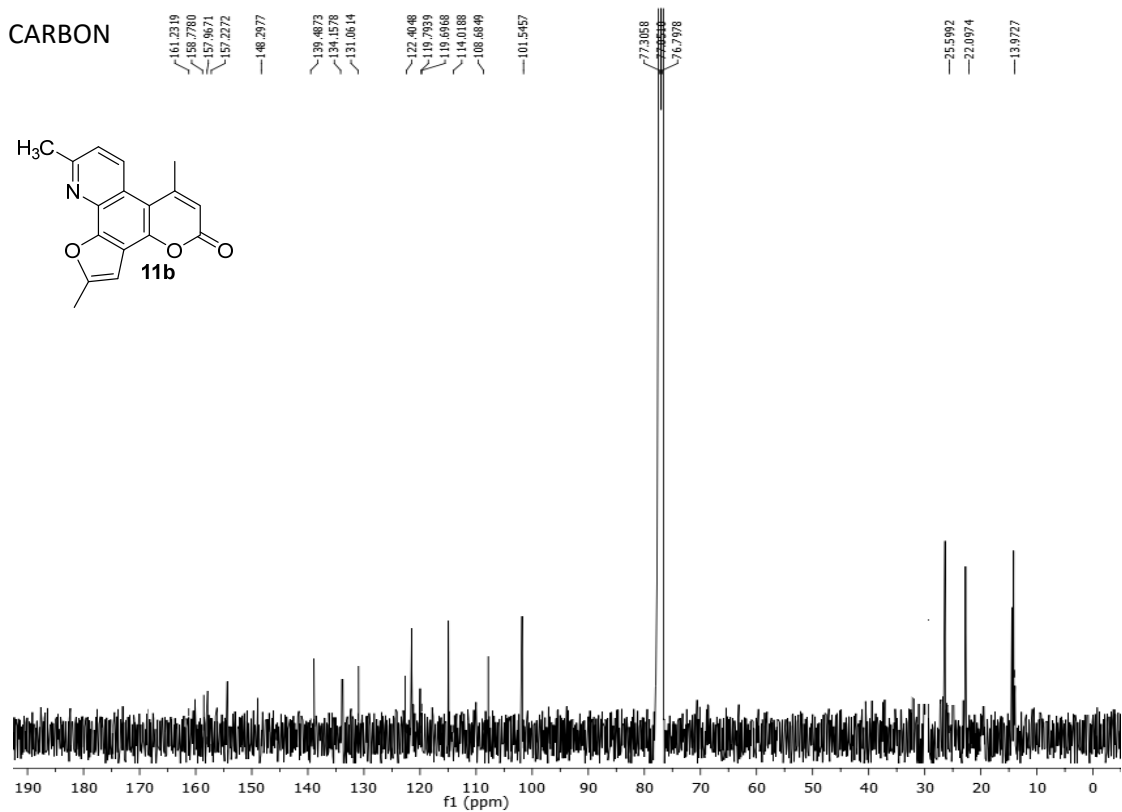
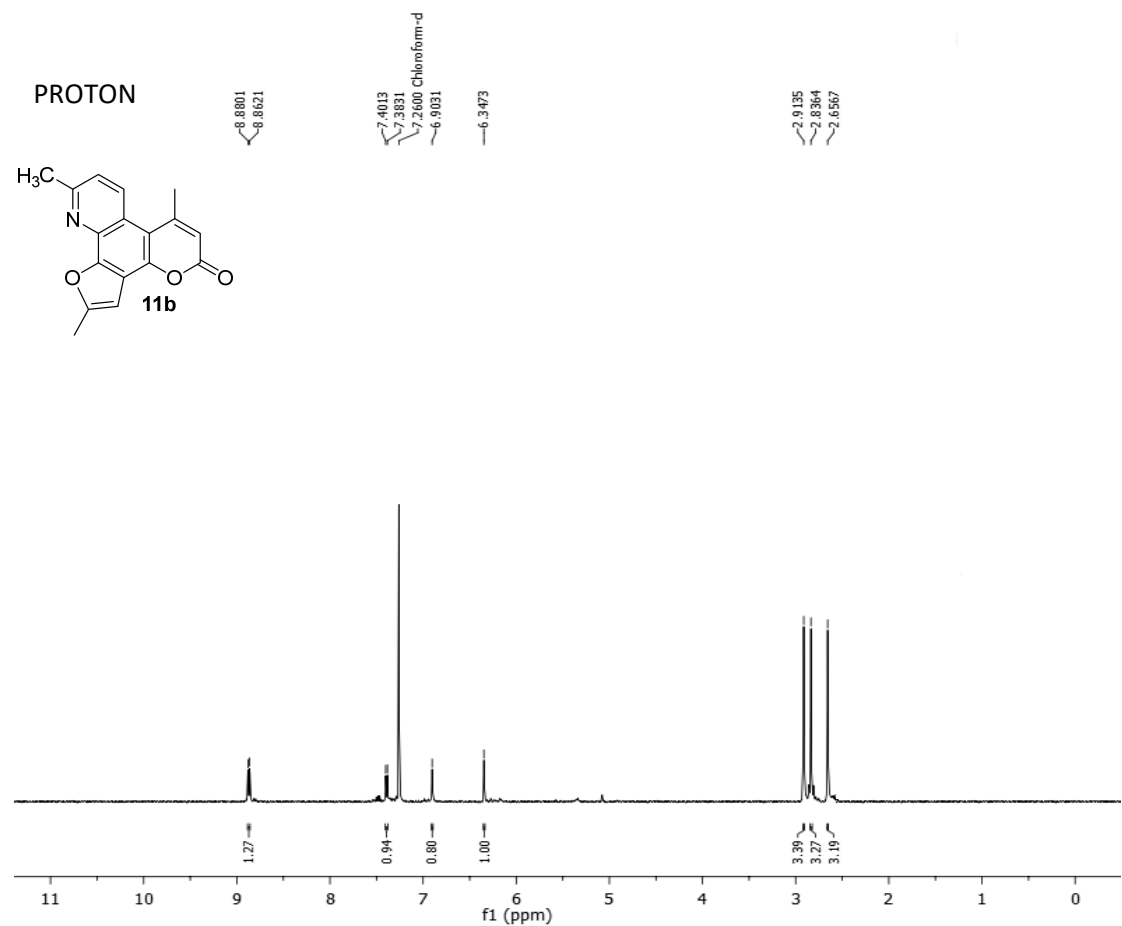
Chemical structure of **11a** is shown. The structure is a tricyclic compound consisting of a pyridine ring fused to a benzene ring, which is further fused to a furan ring. The pyridine ring has a methyl group (H₃C) attached to the nitrogen atom. The furan ring has a methyl group attached to the oxygen atom. The benzene ring has a carbonyl group (C=O) attached to the oxygen atom.

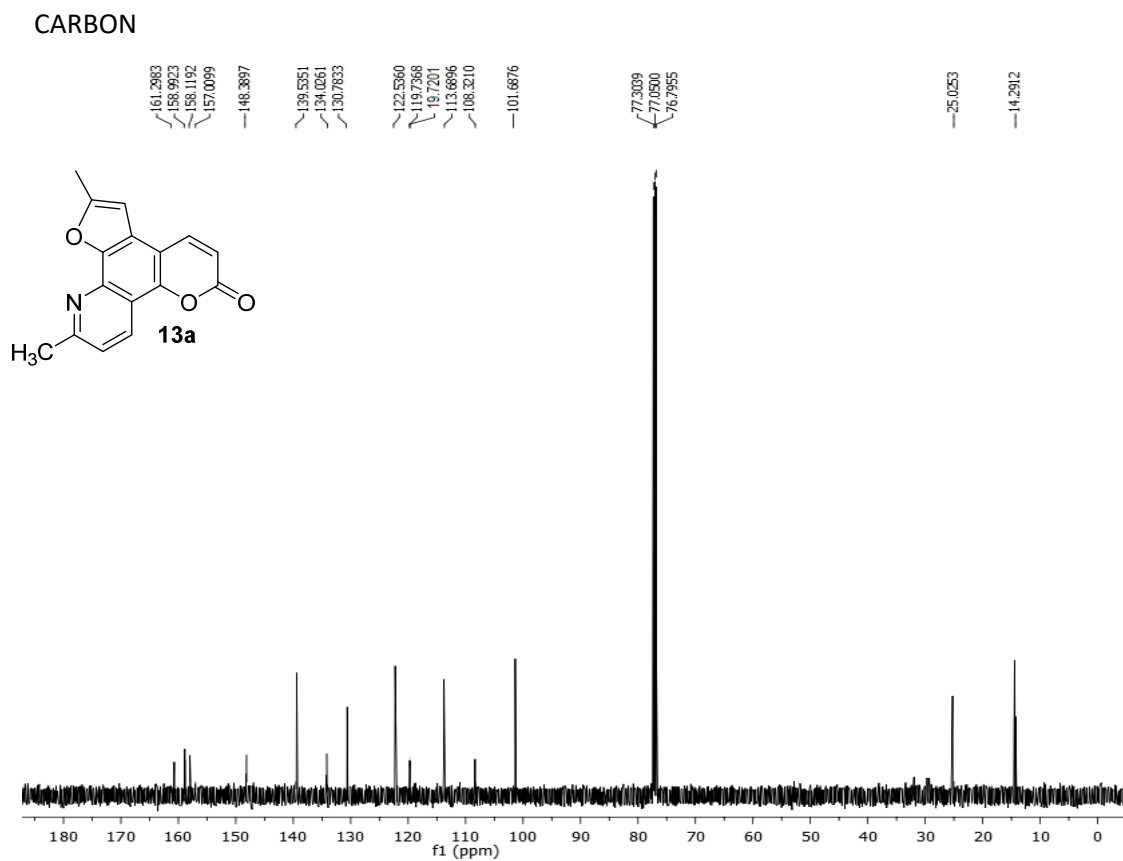
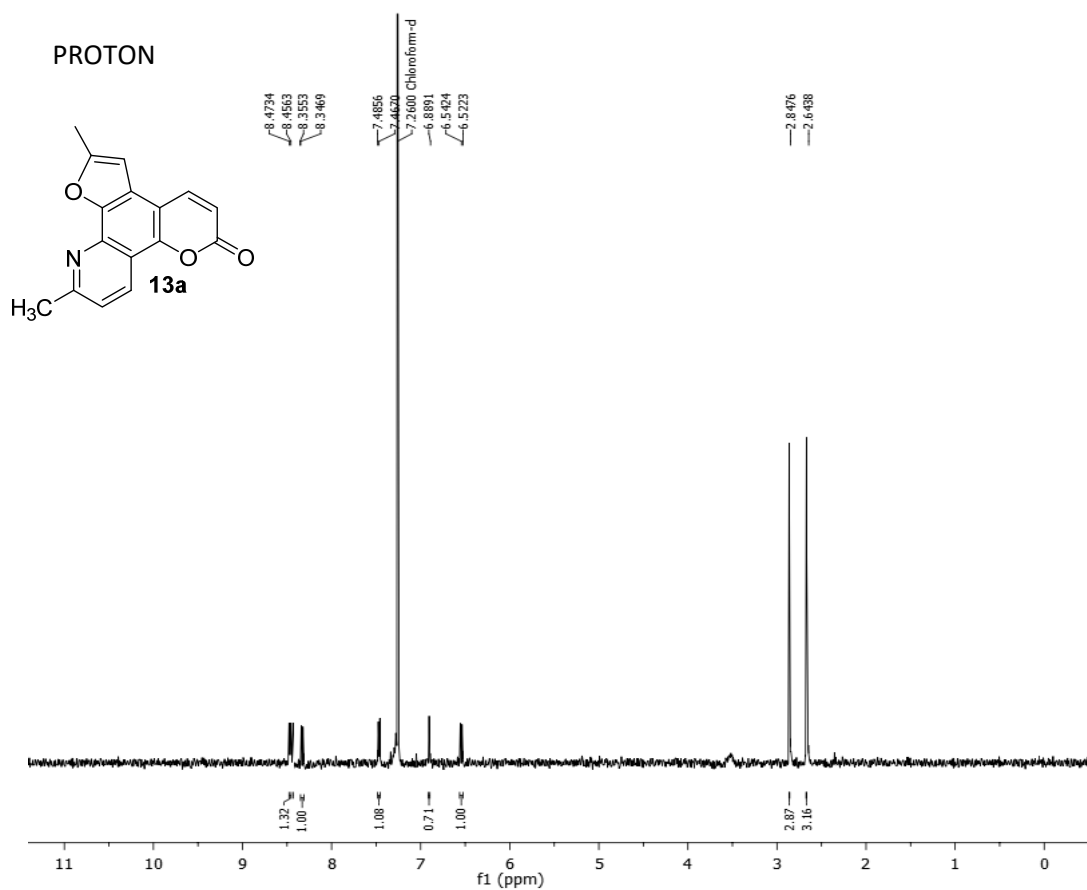
Carbon NMR peaks (ppm) are labeled above the spectrum:

- 160.7093
- 158.8804
- 157.9911
- 157.0651
- 146.2161
- 139.4057
- 134.2733
- 130.6153
- 122.2681
- 119.7968
- 119.7091
- 113.7747
- 108.3549
- 101.3538
- 77.3039
- 77.0629
- 76.9955
- 25.2388
- 14.4464

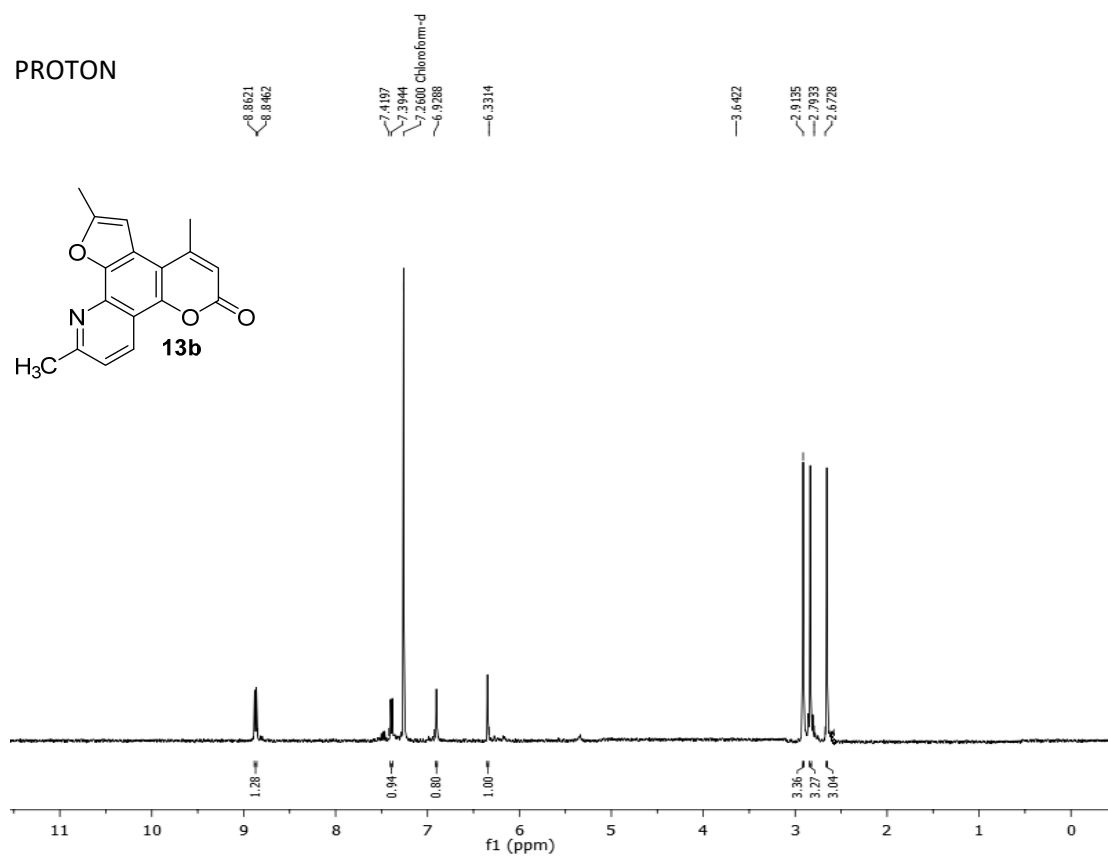
190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0

f1 (ppm)

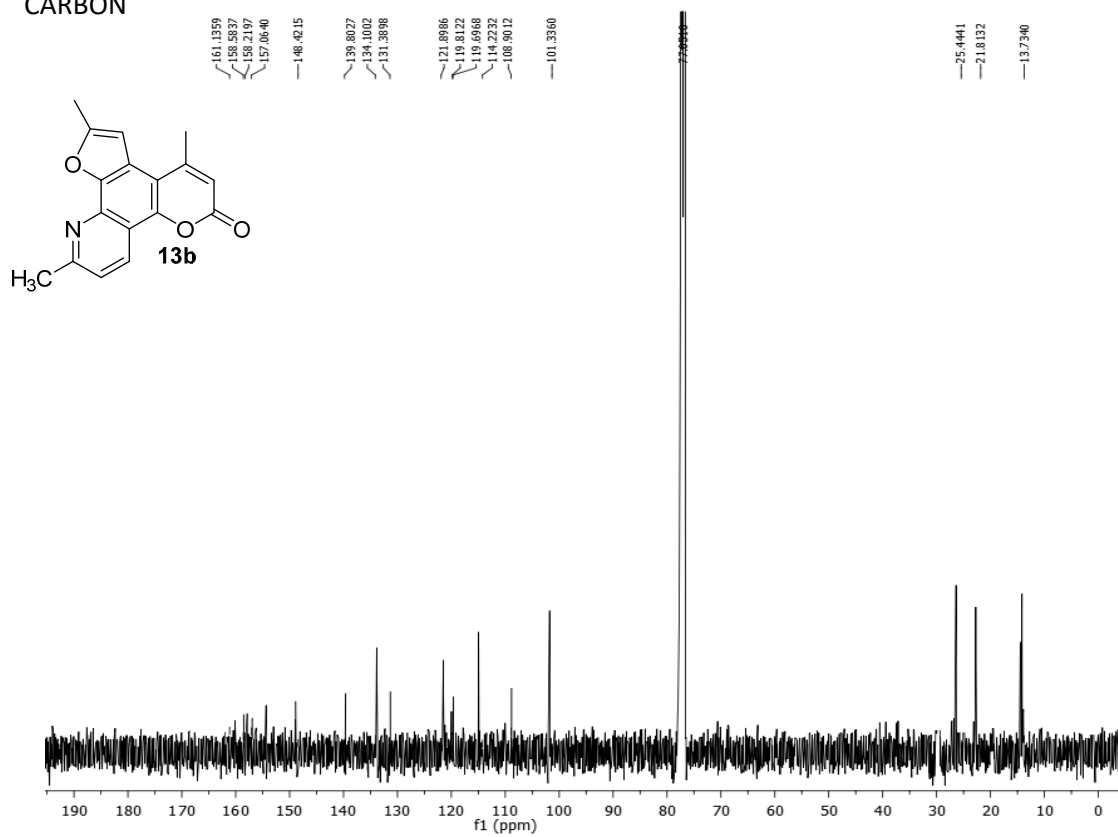




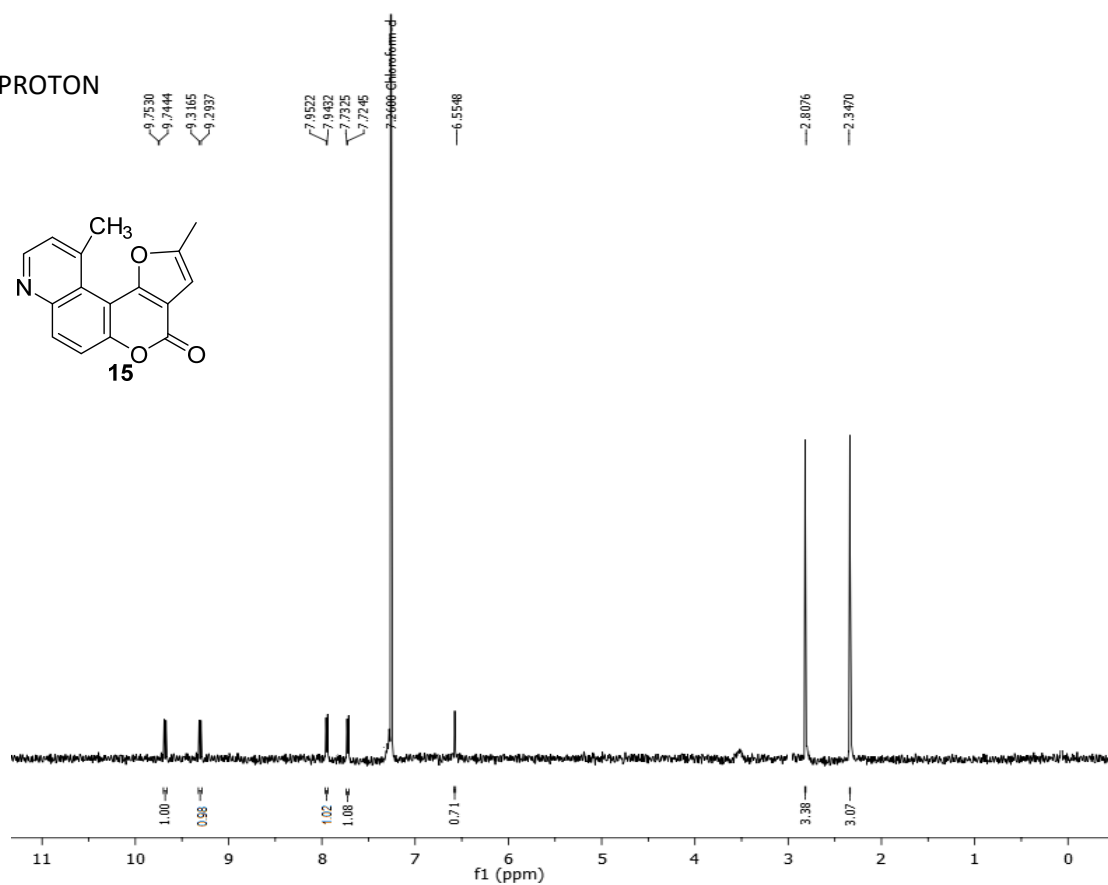
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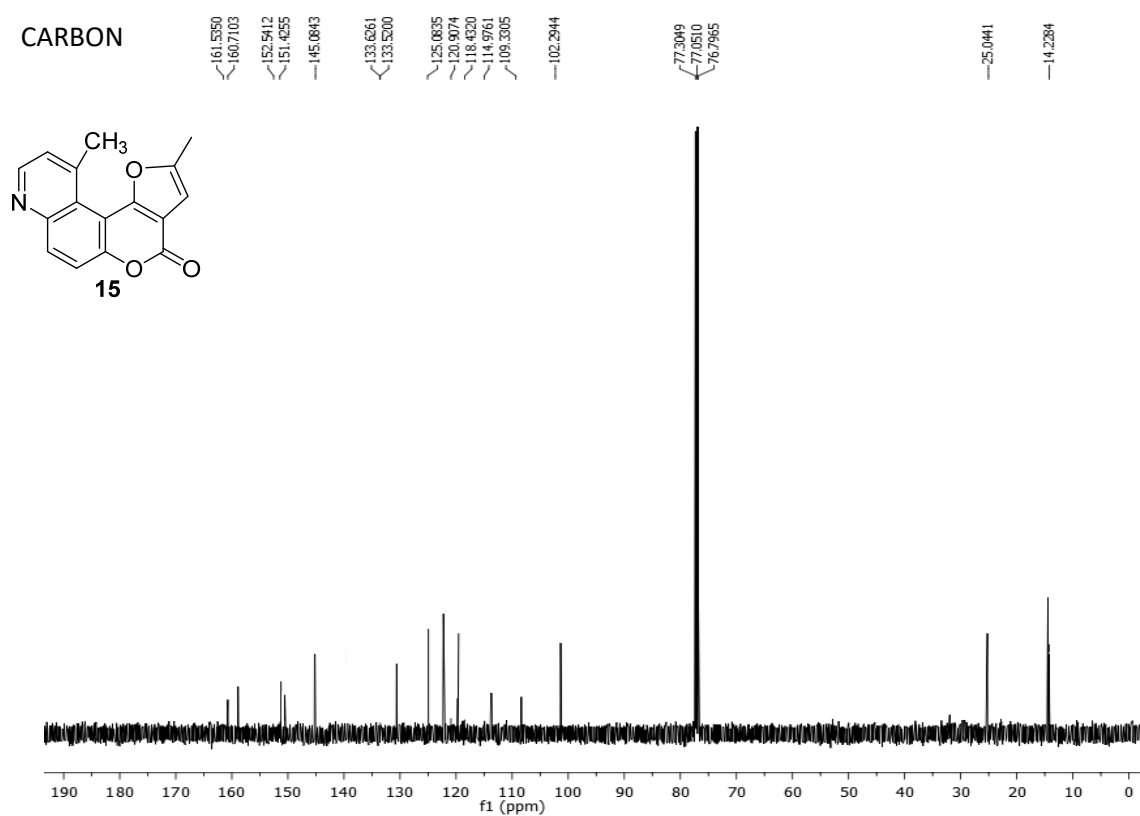
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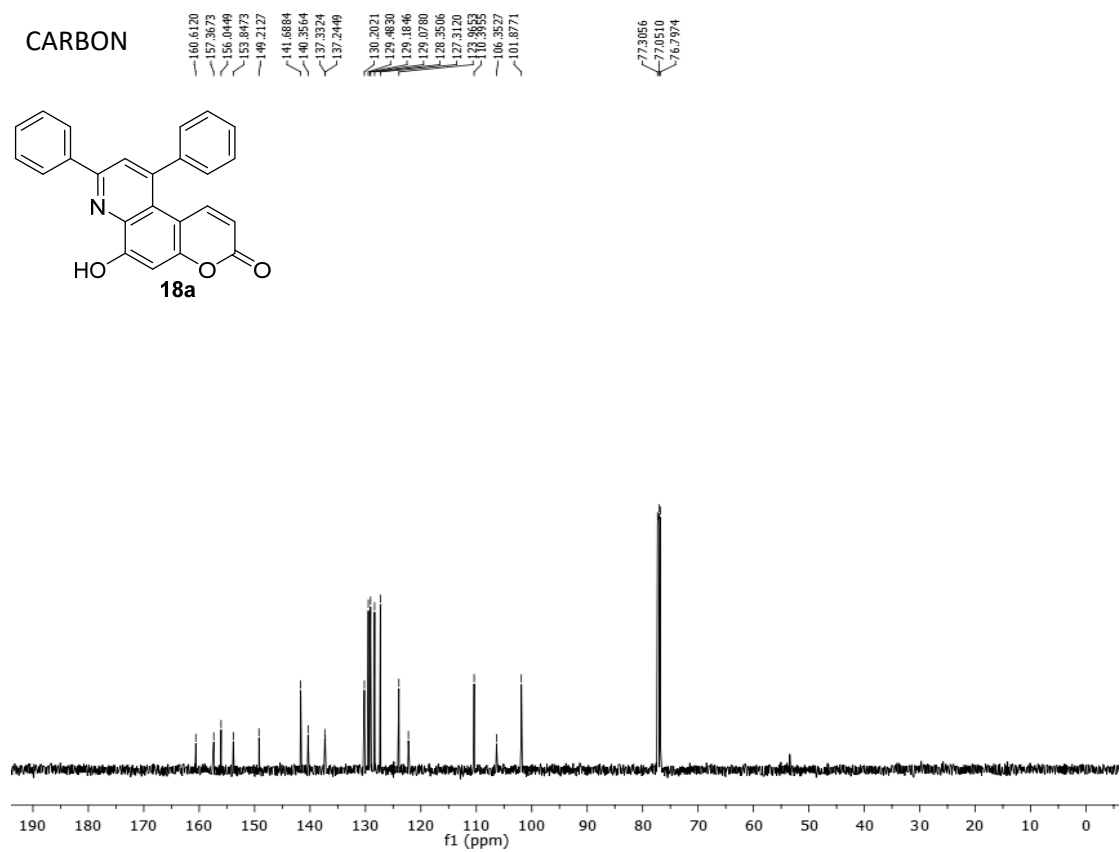
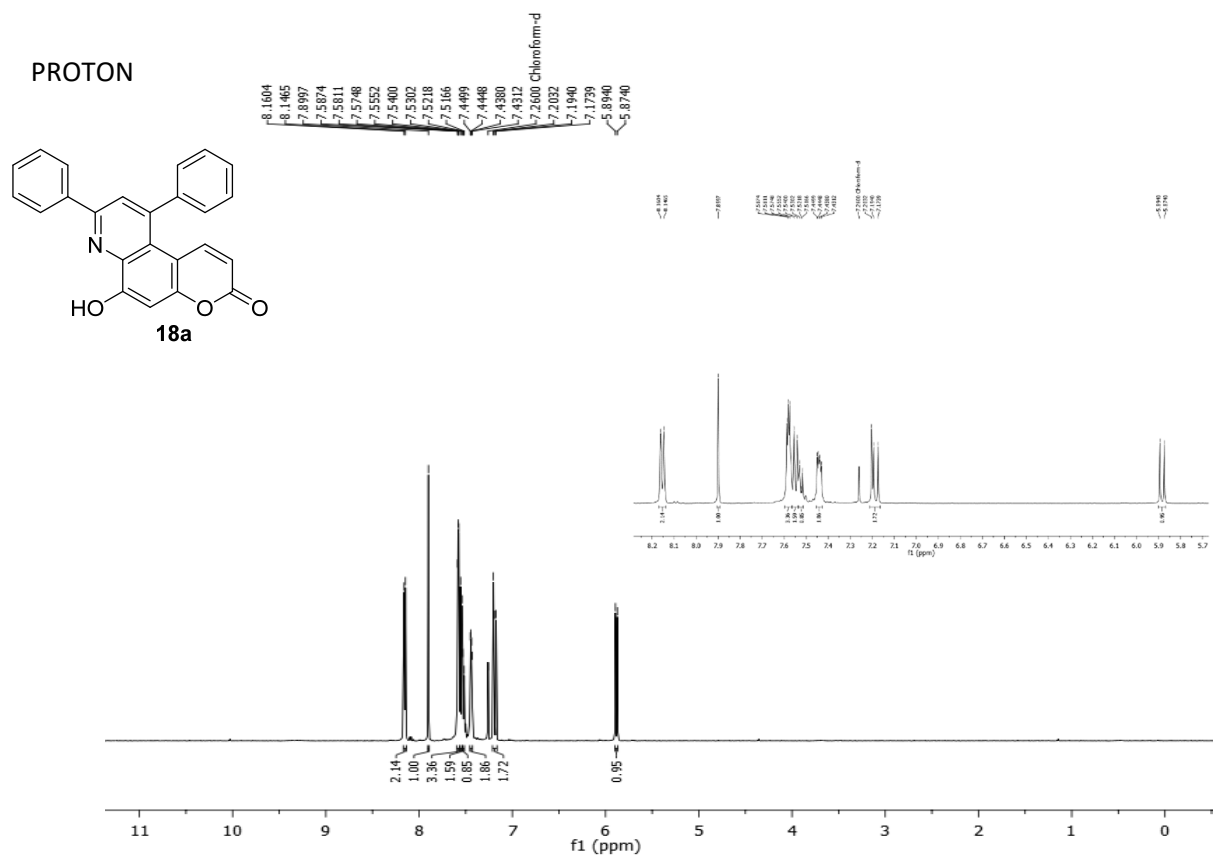


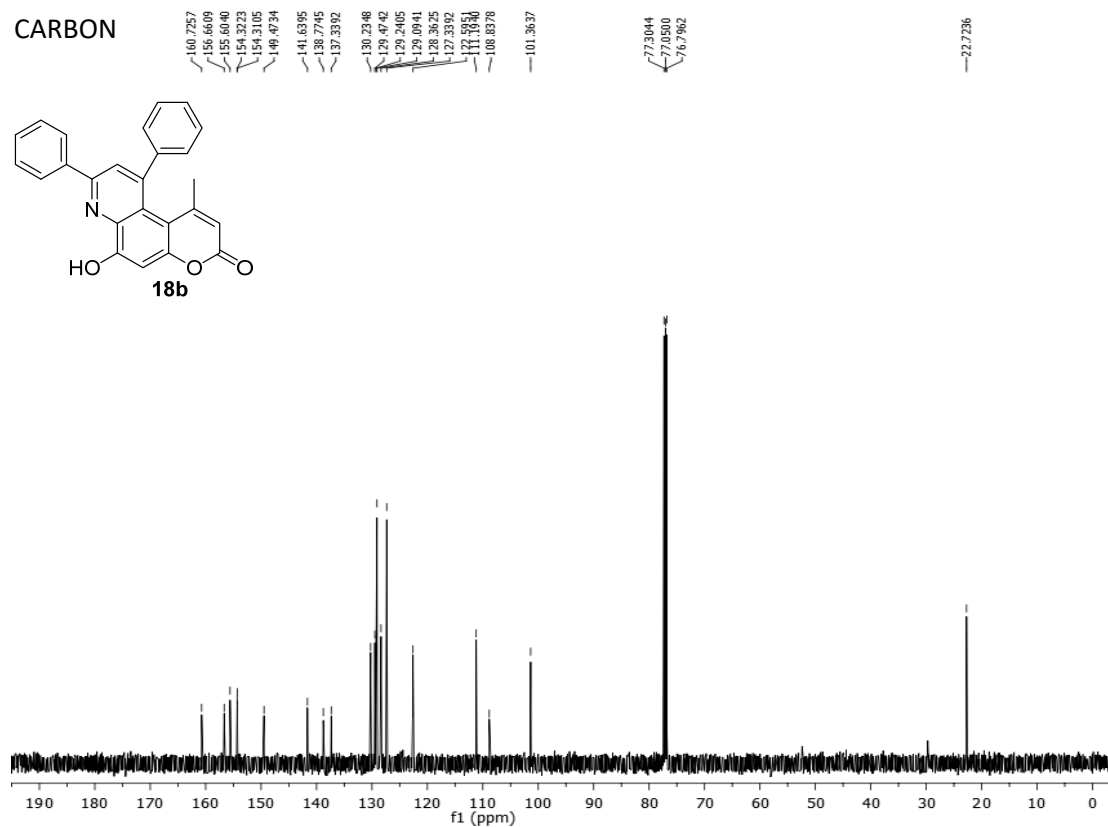
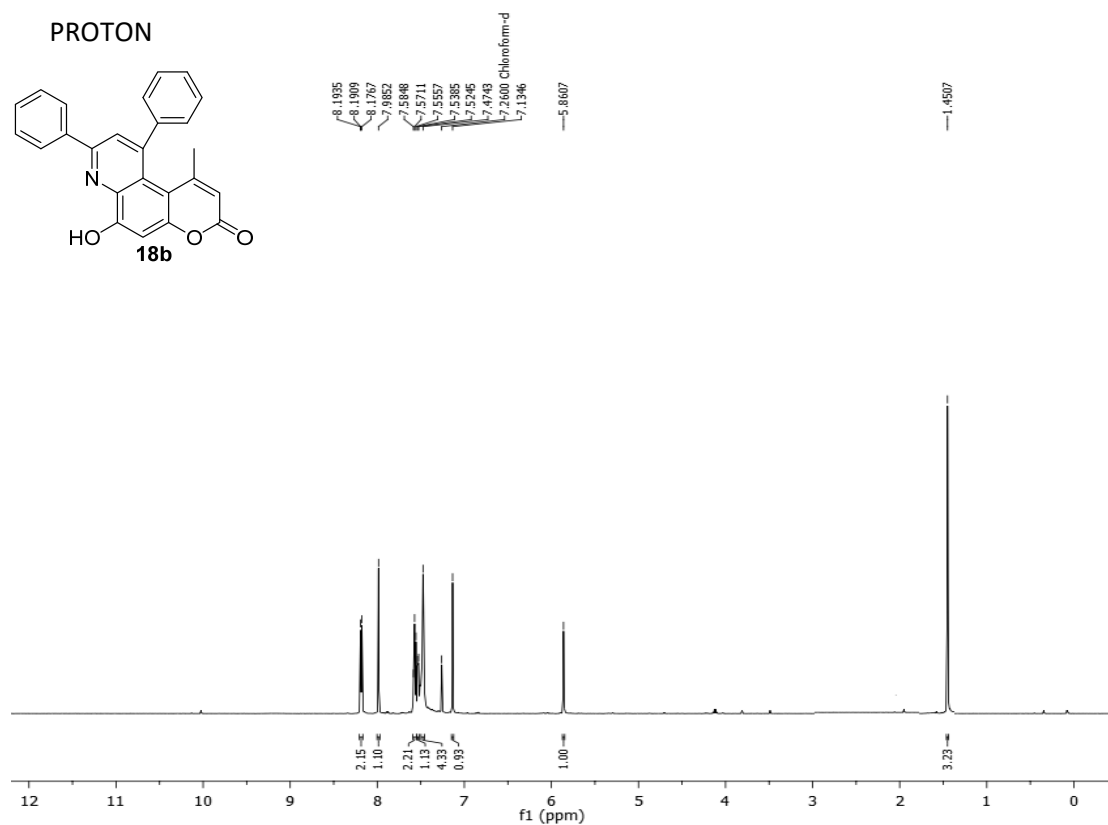
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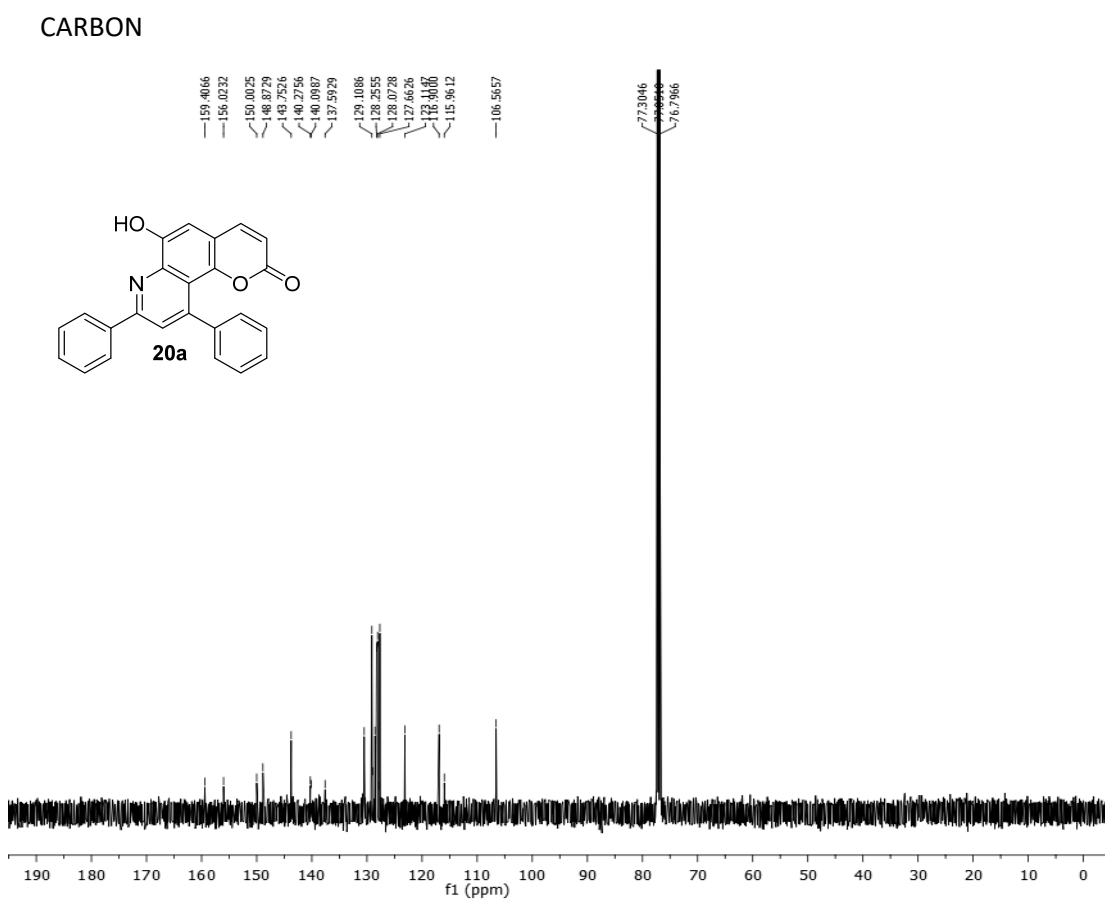
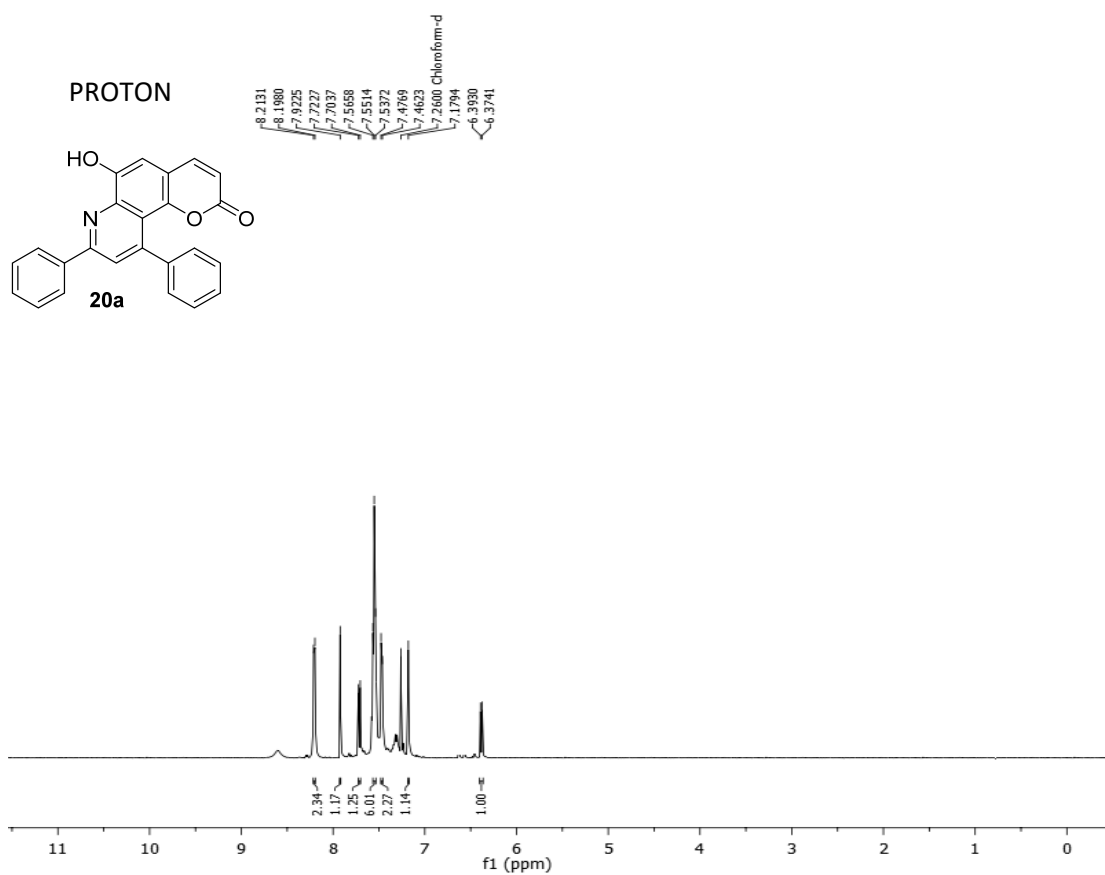


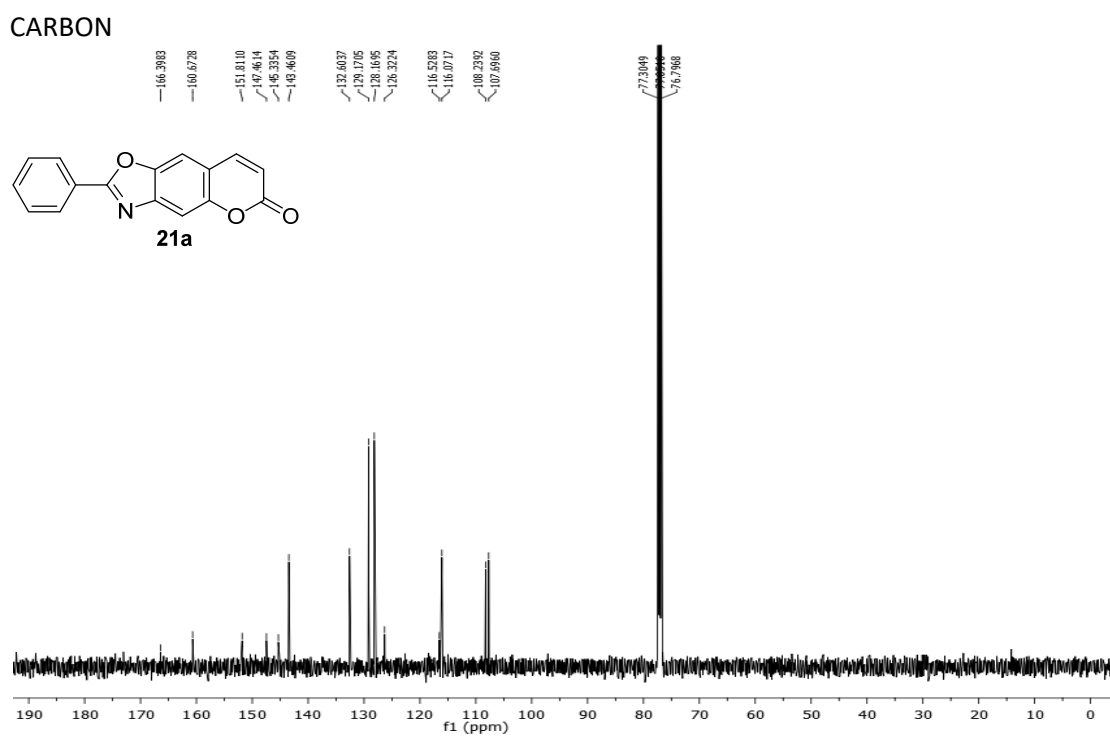
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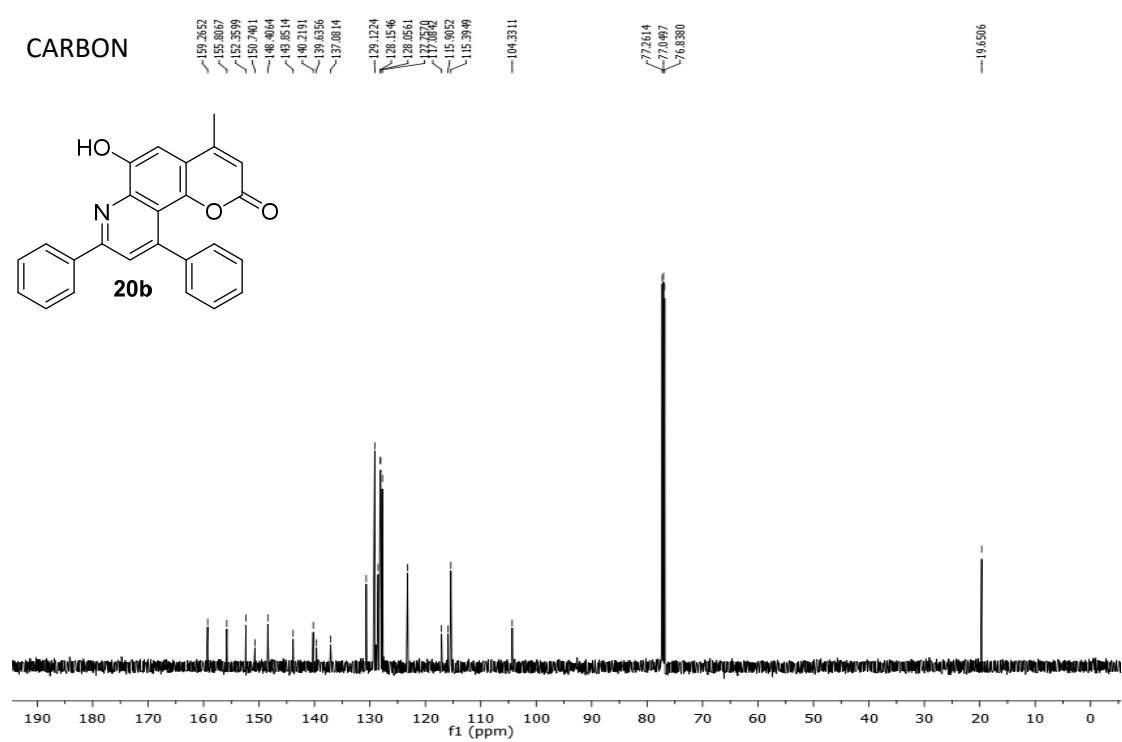
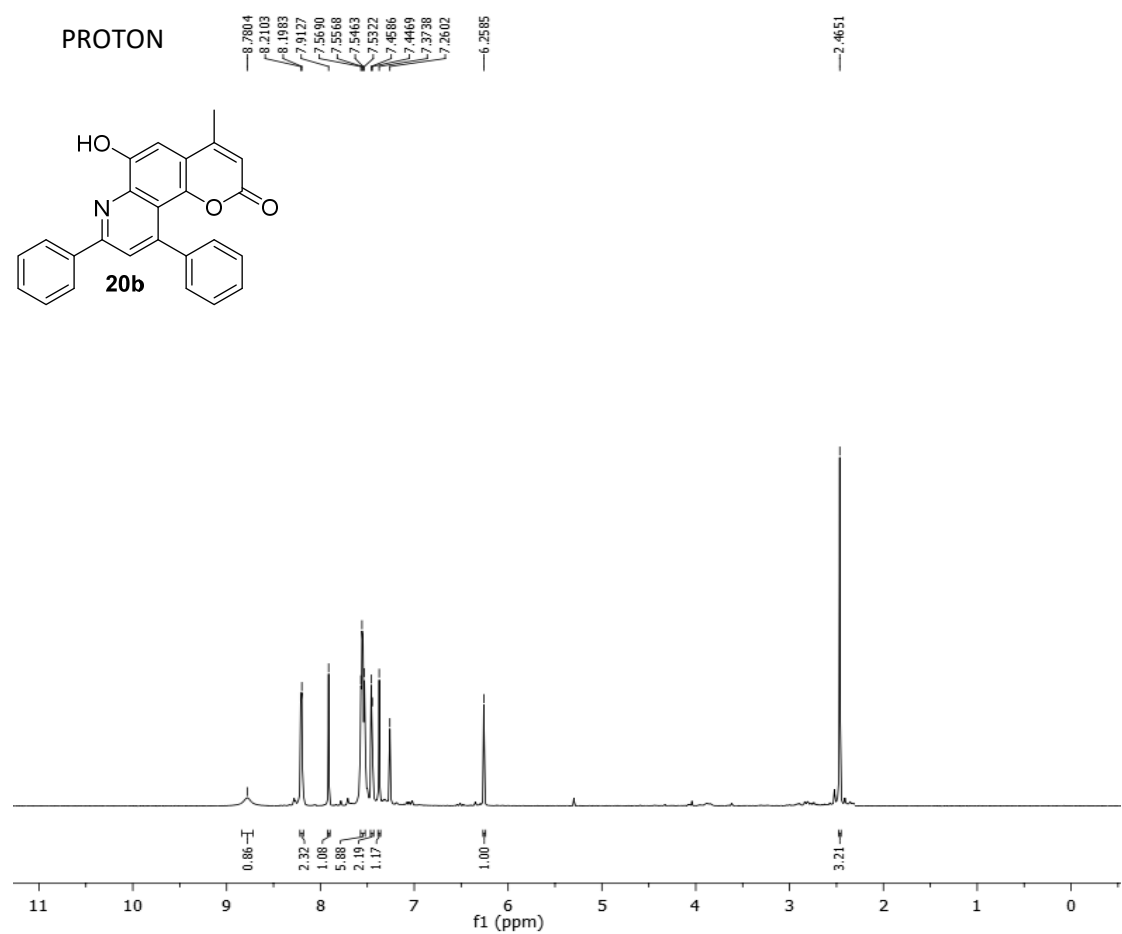


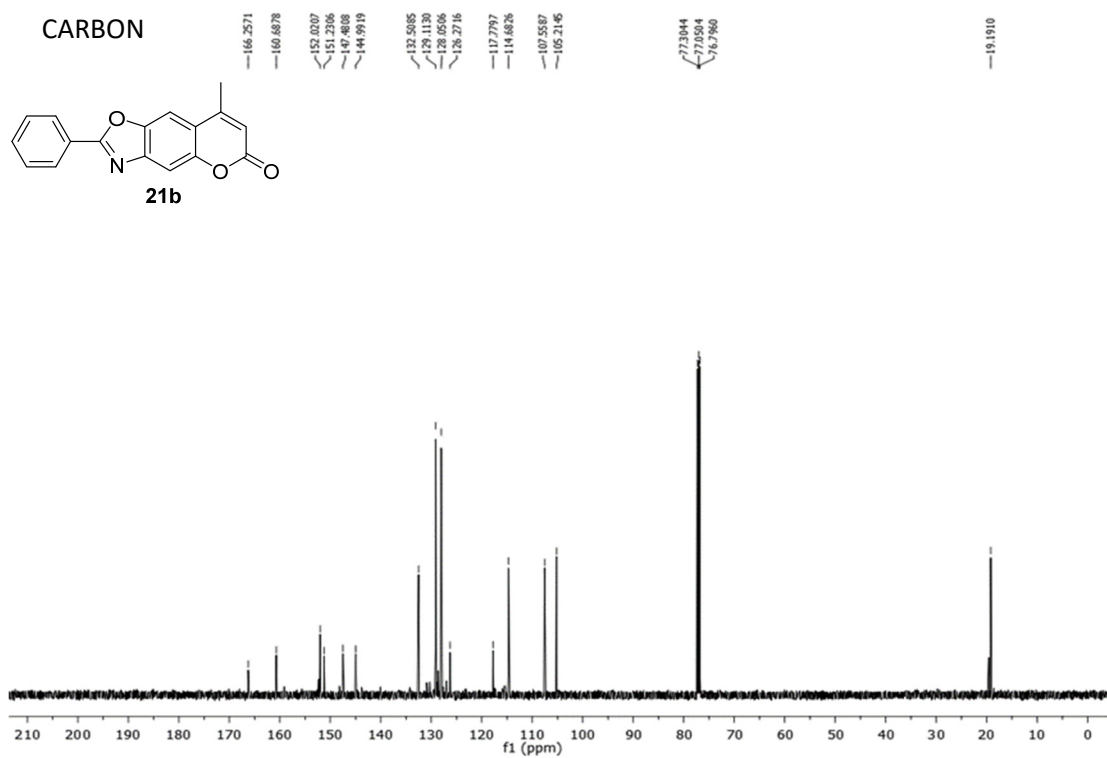
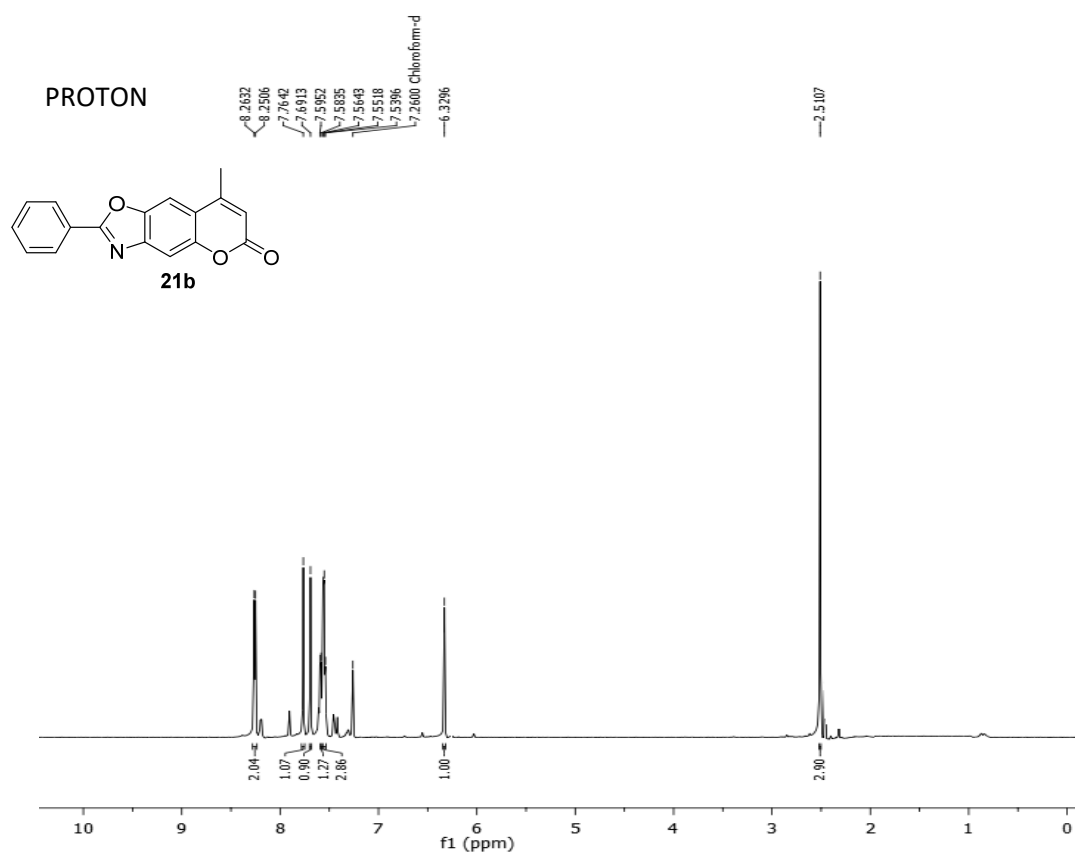




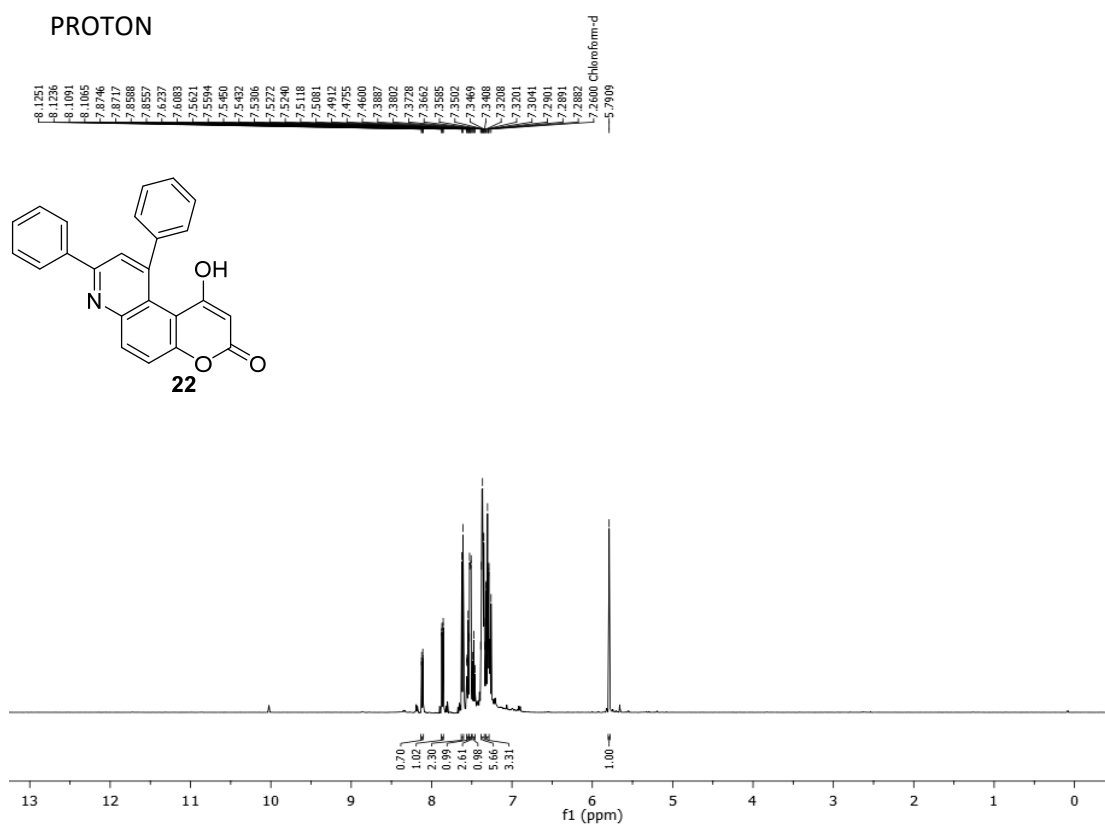




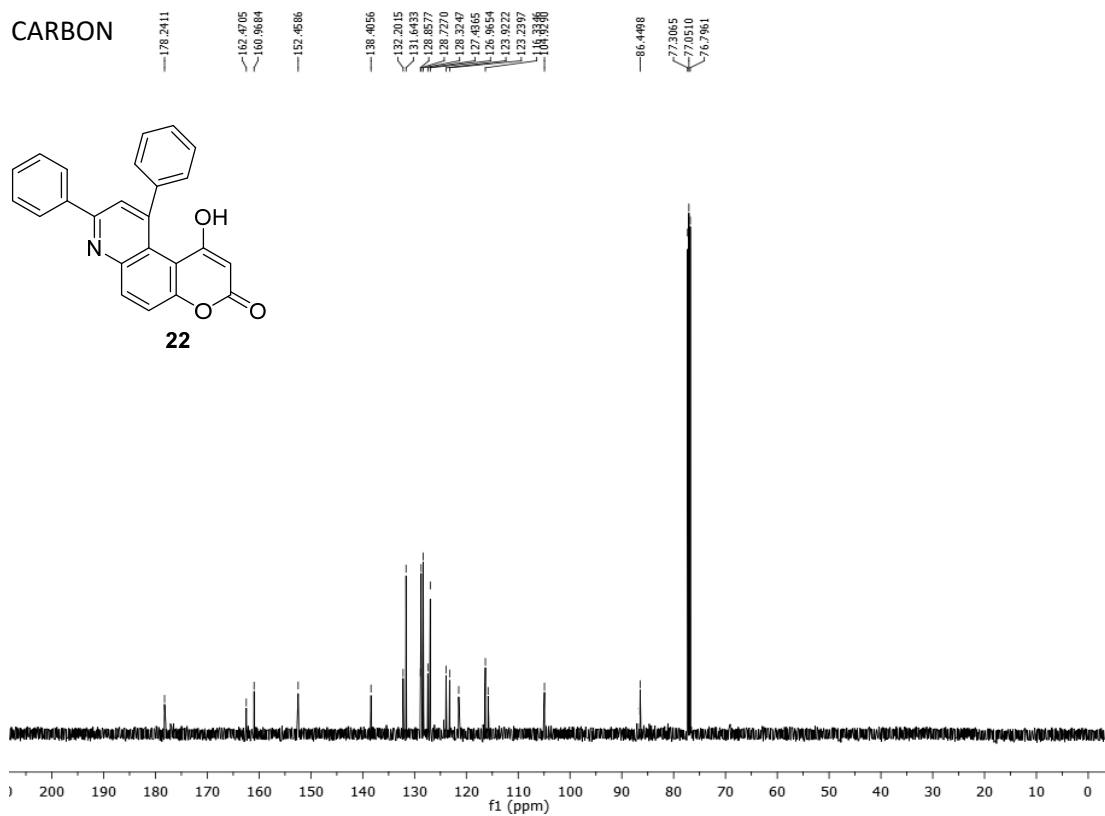




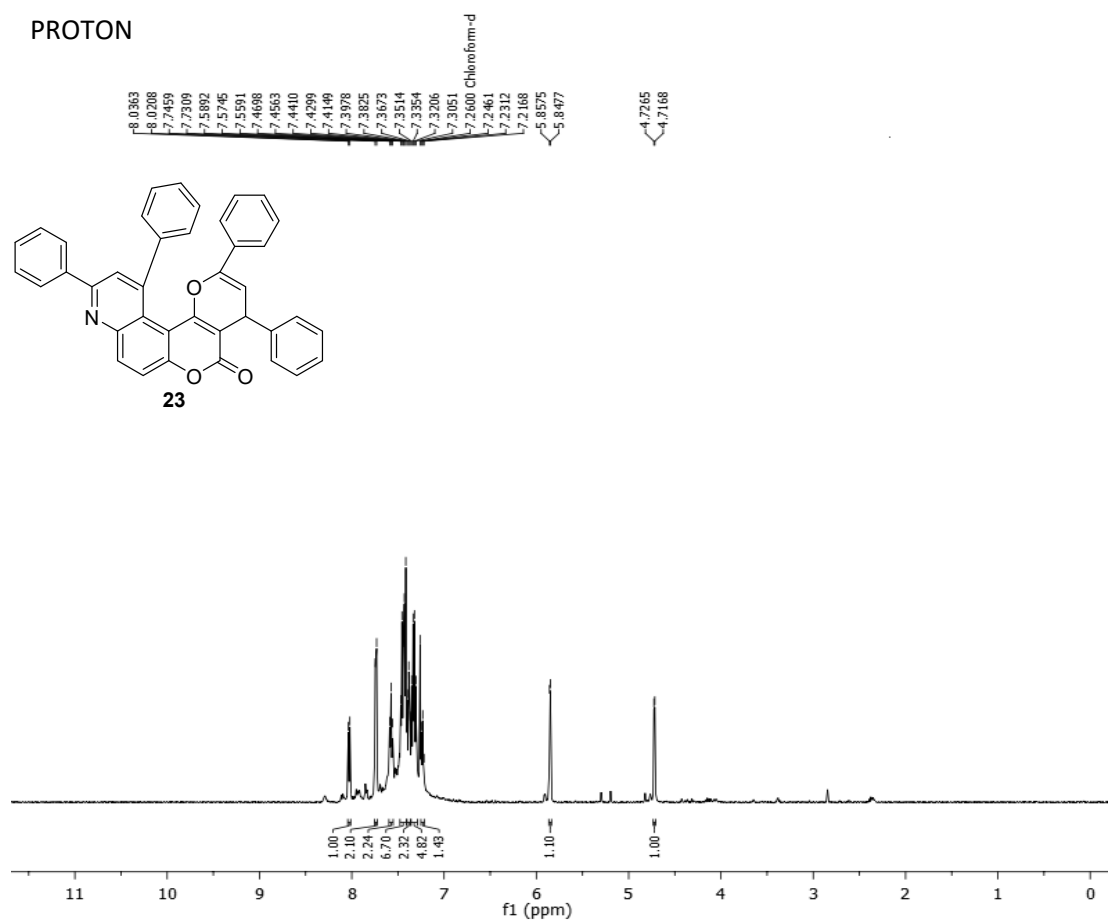
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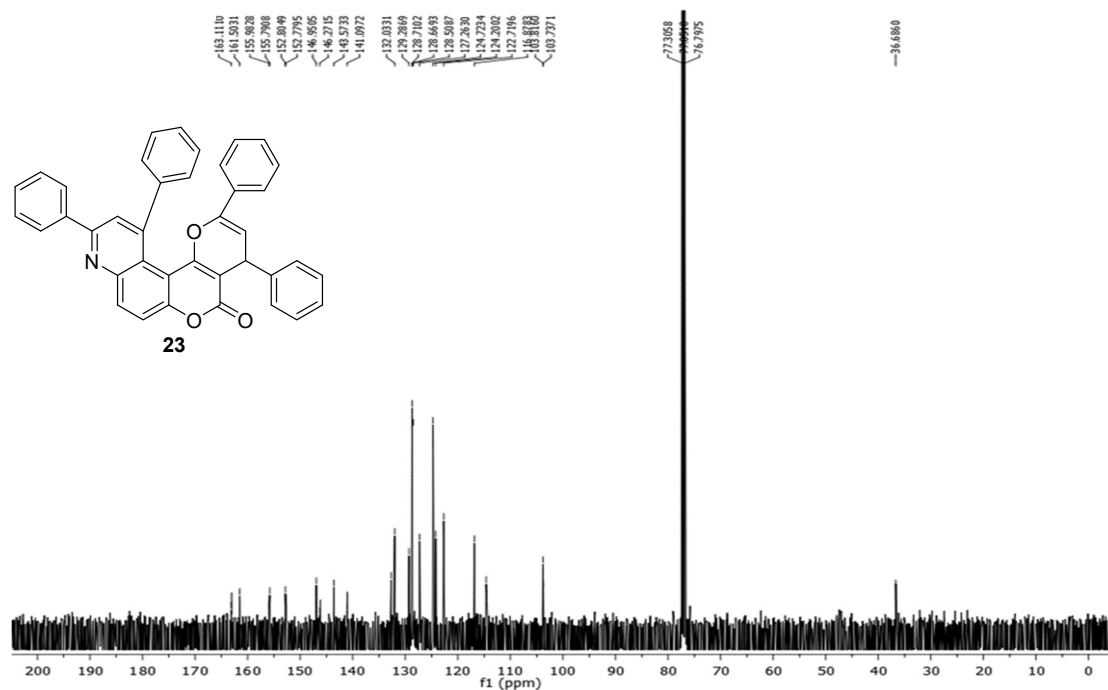
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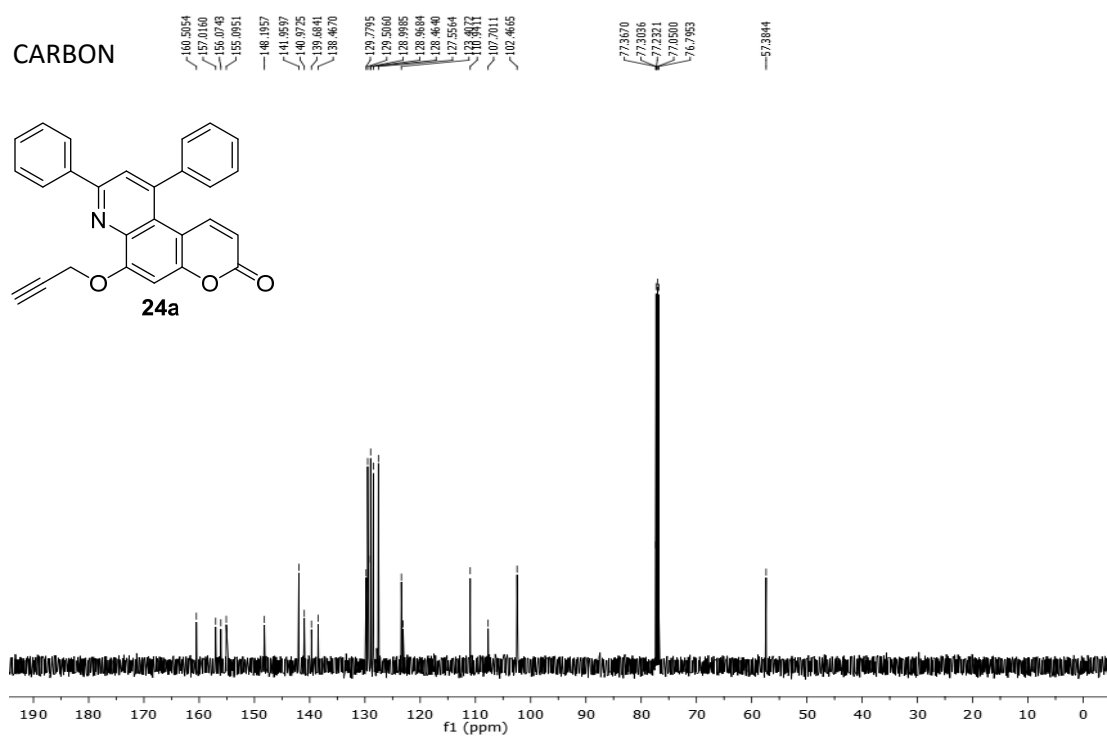
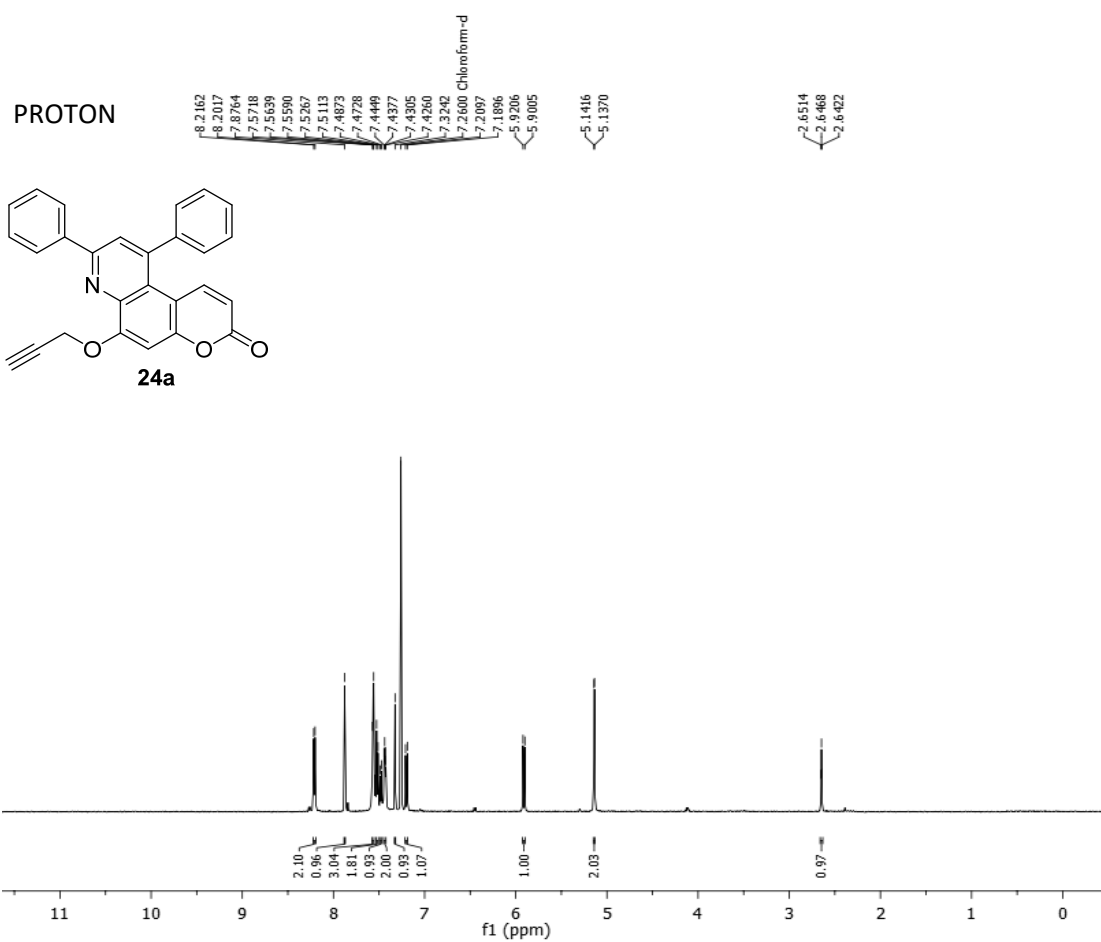


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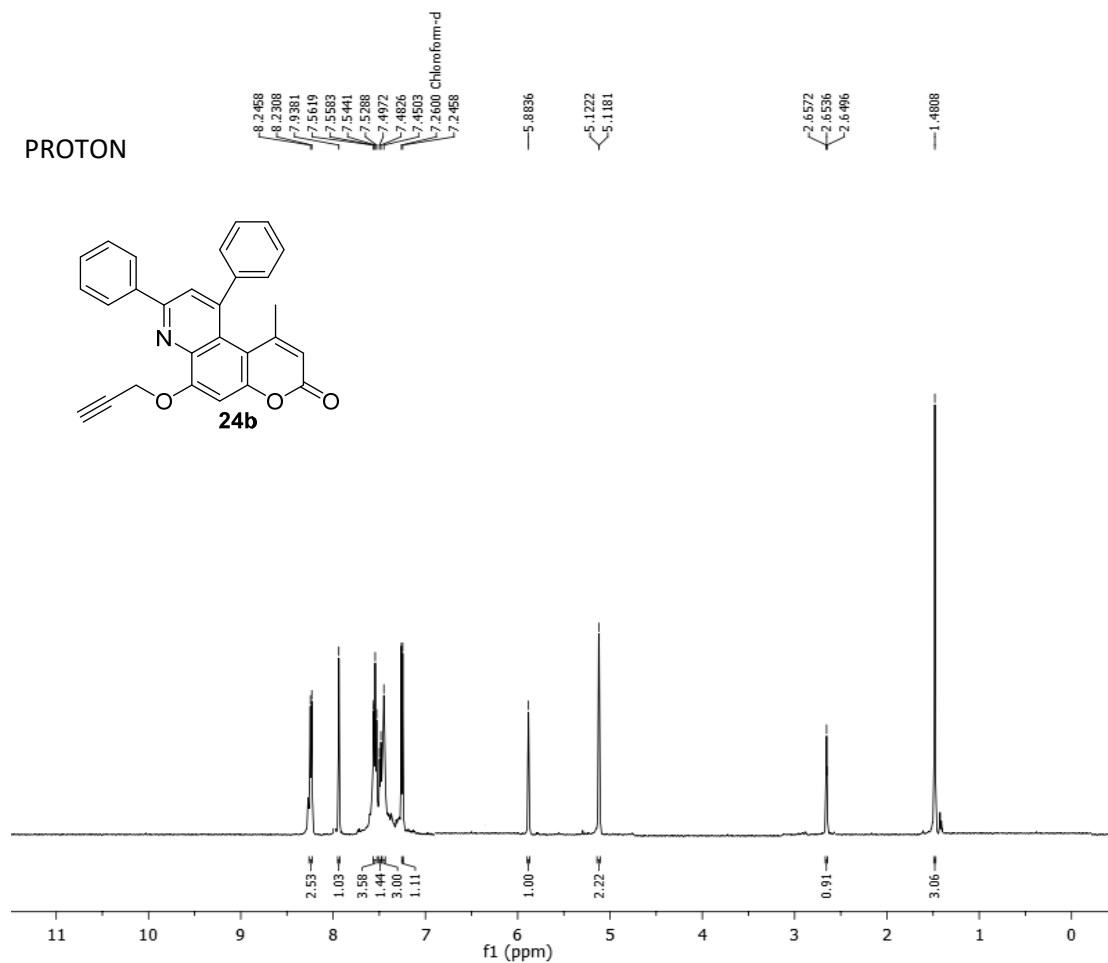


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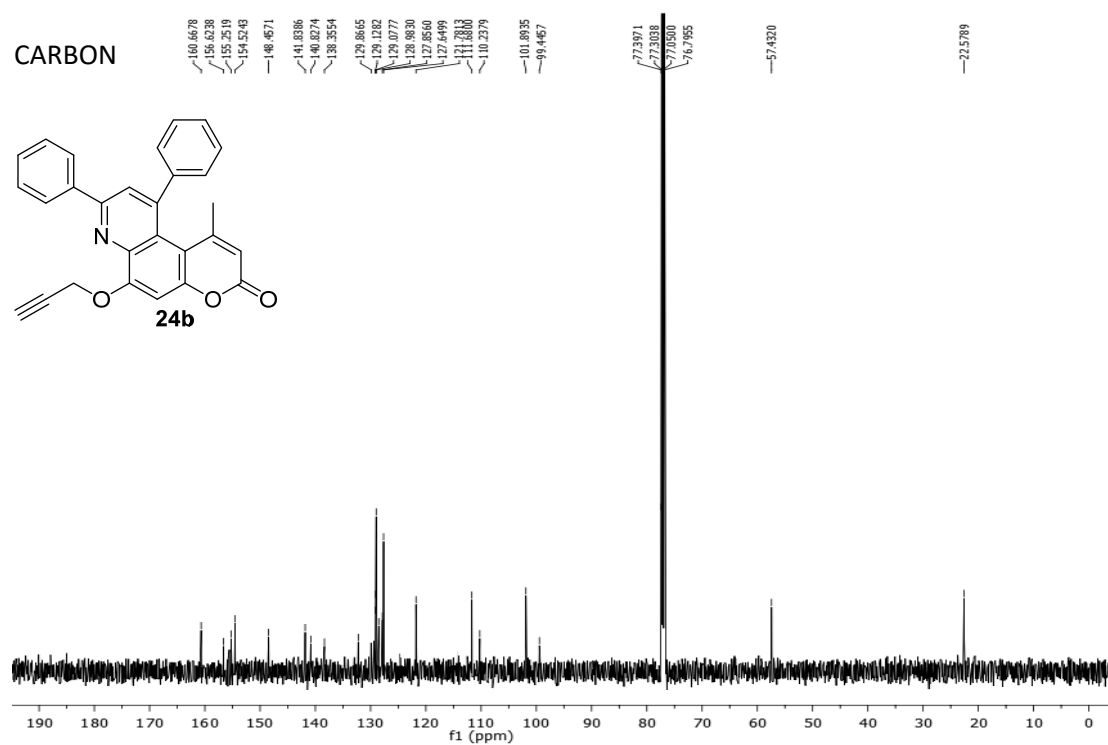


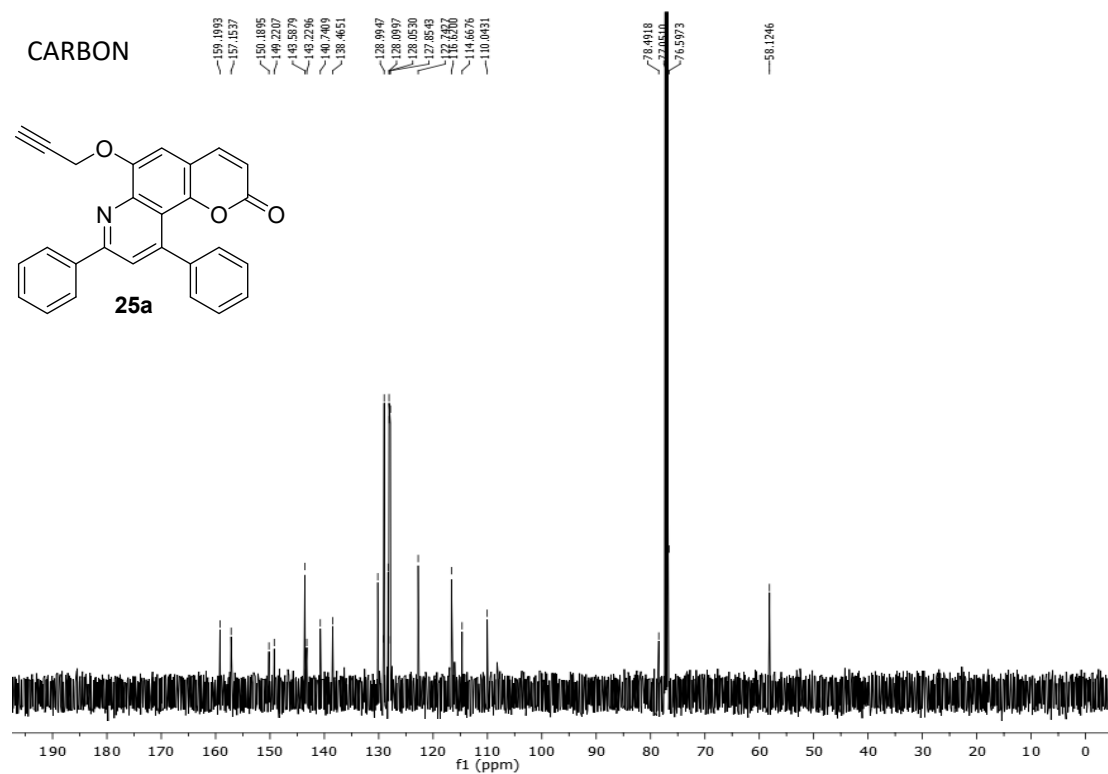
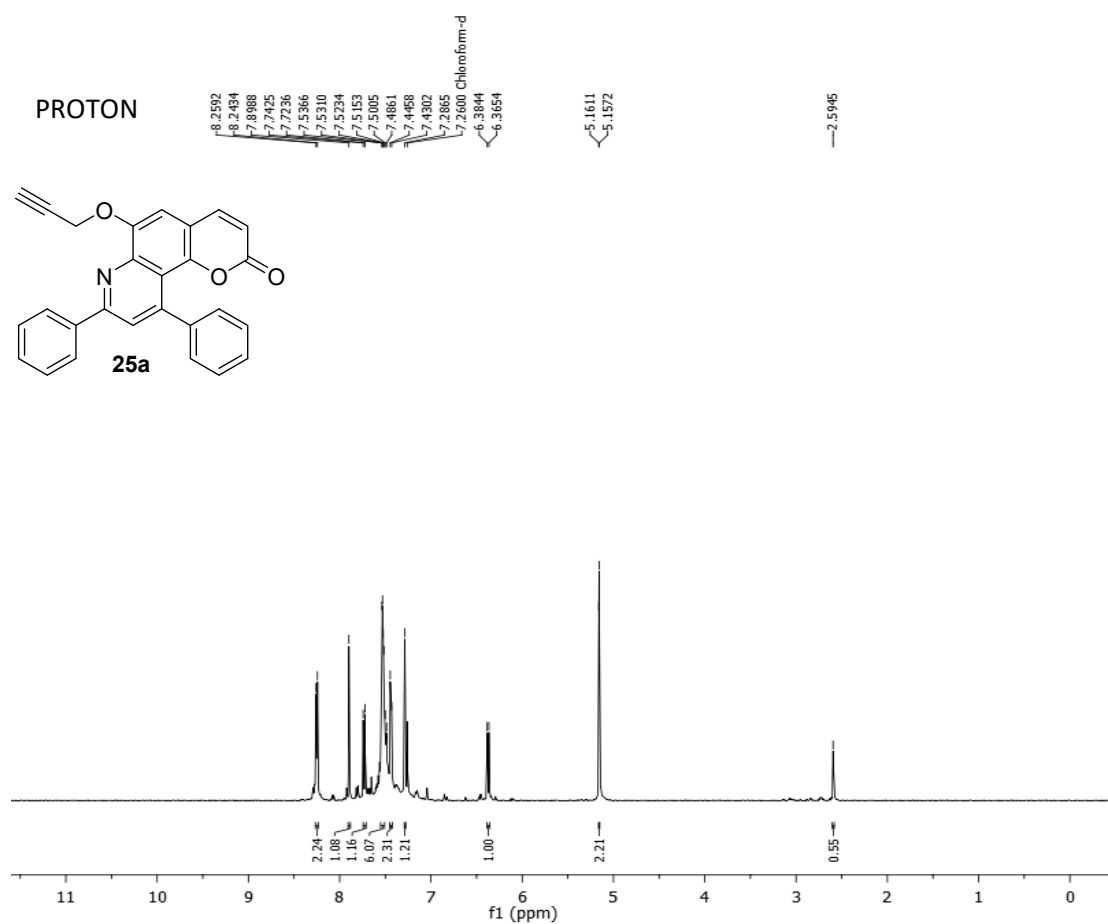
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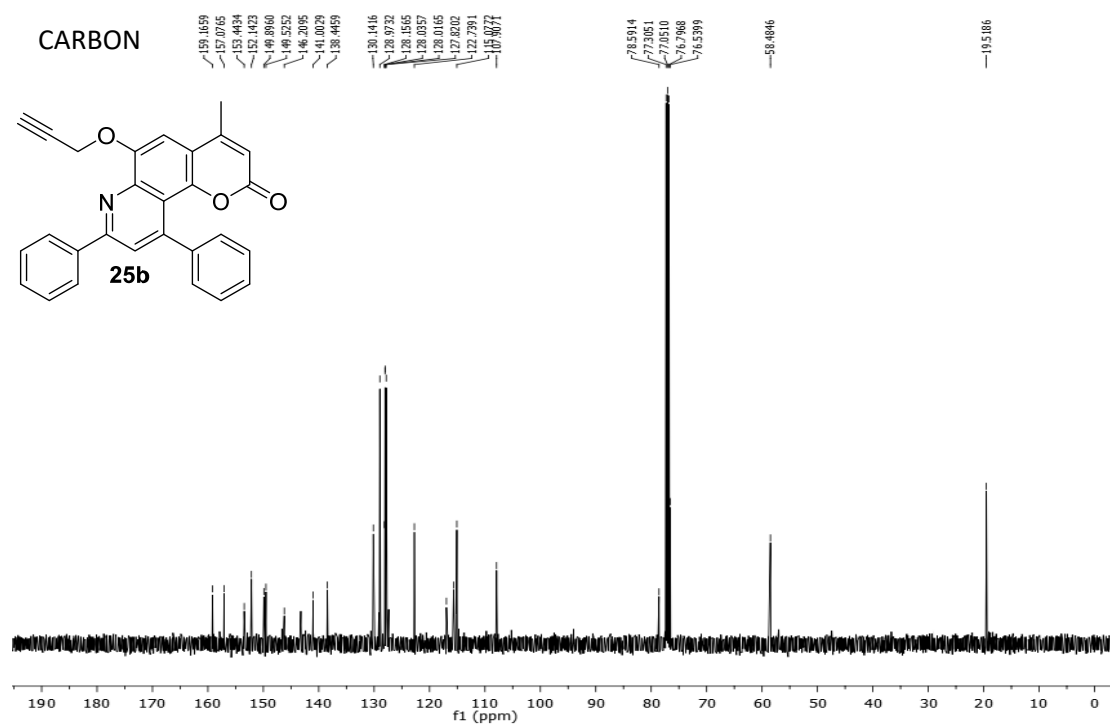
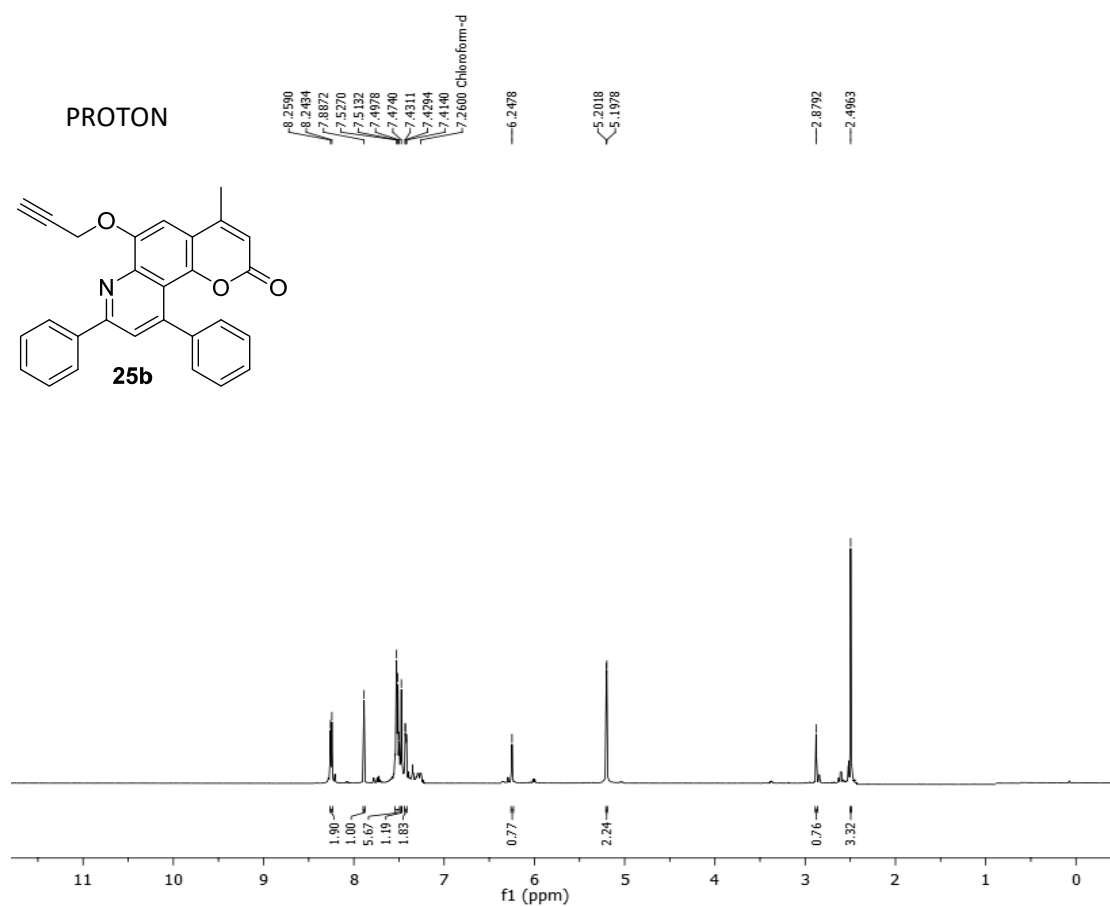


Εικόνα 1

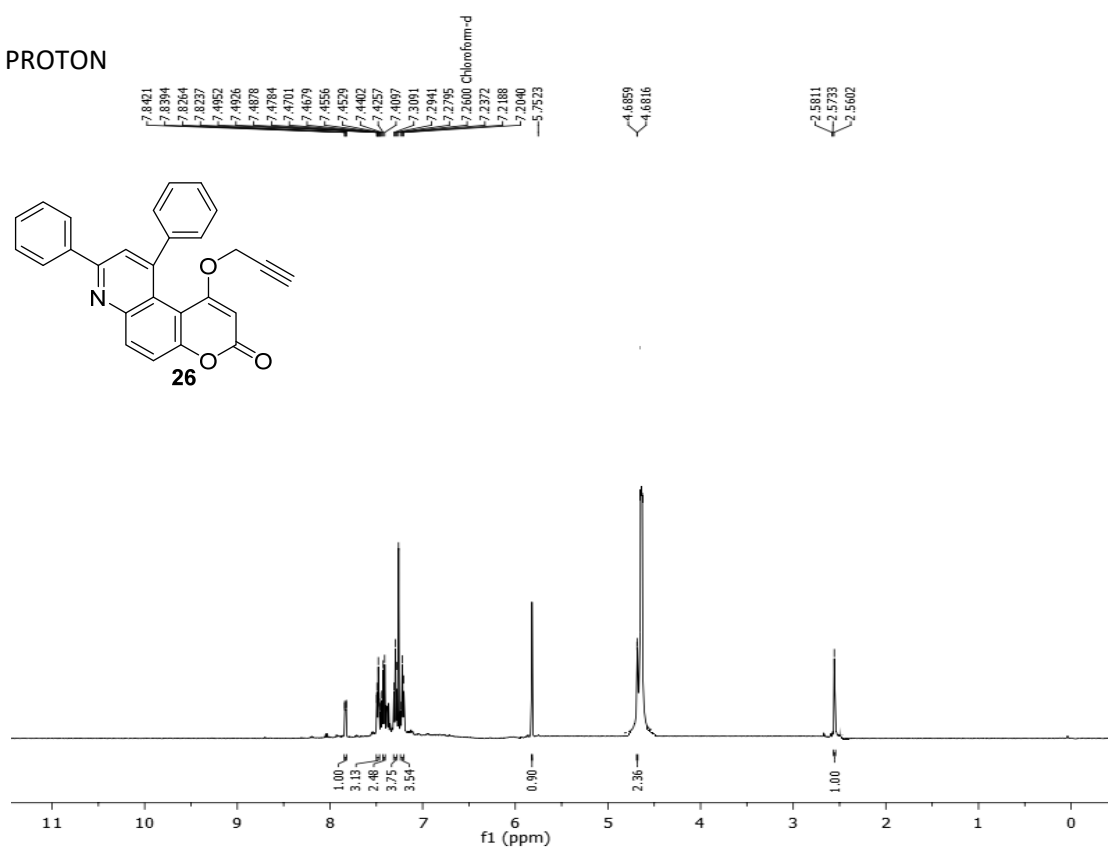
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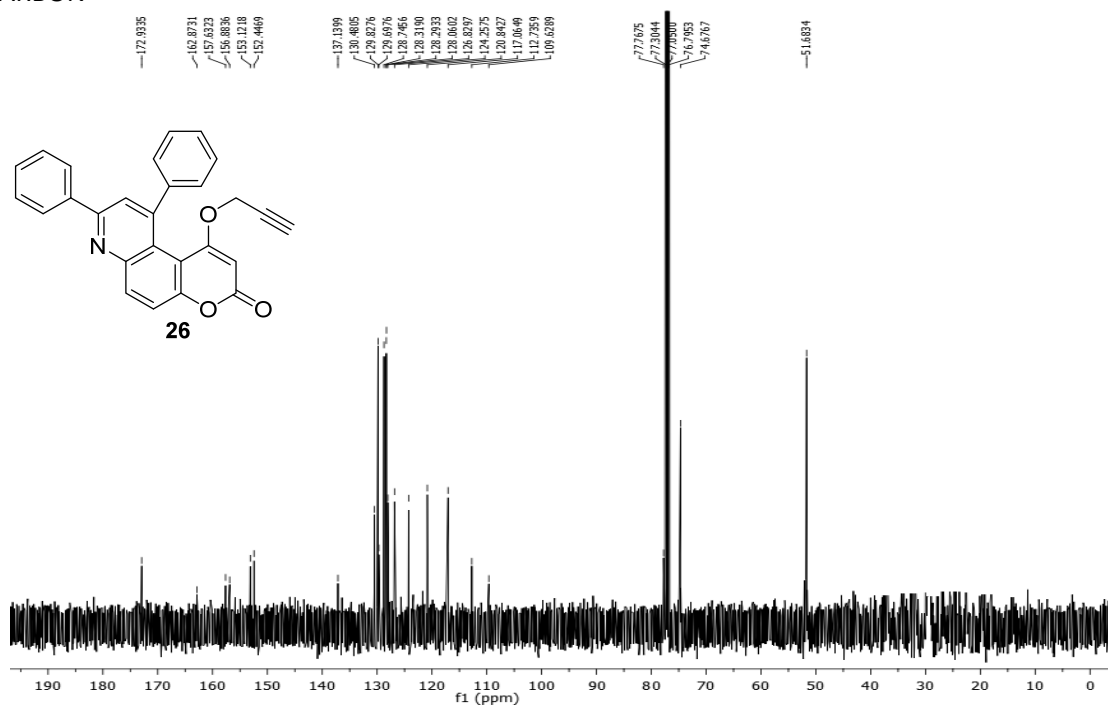




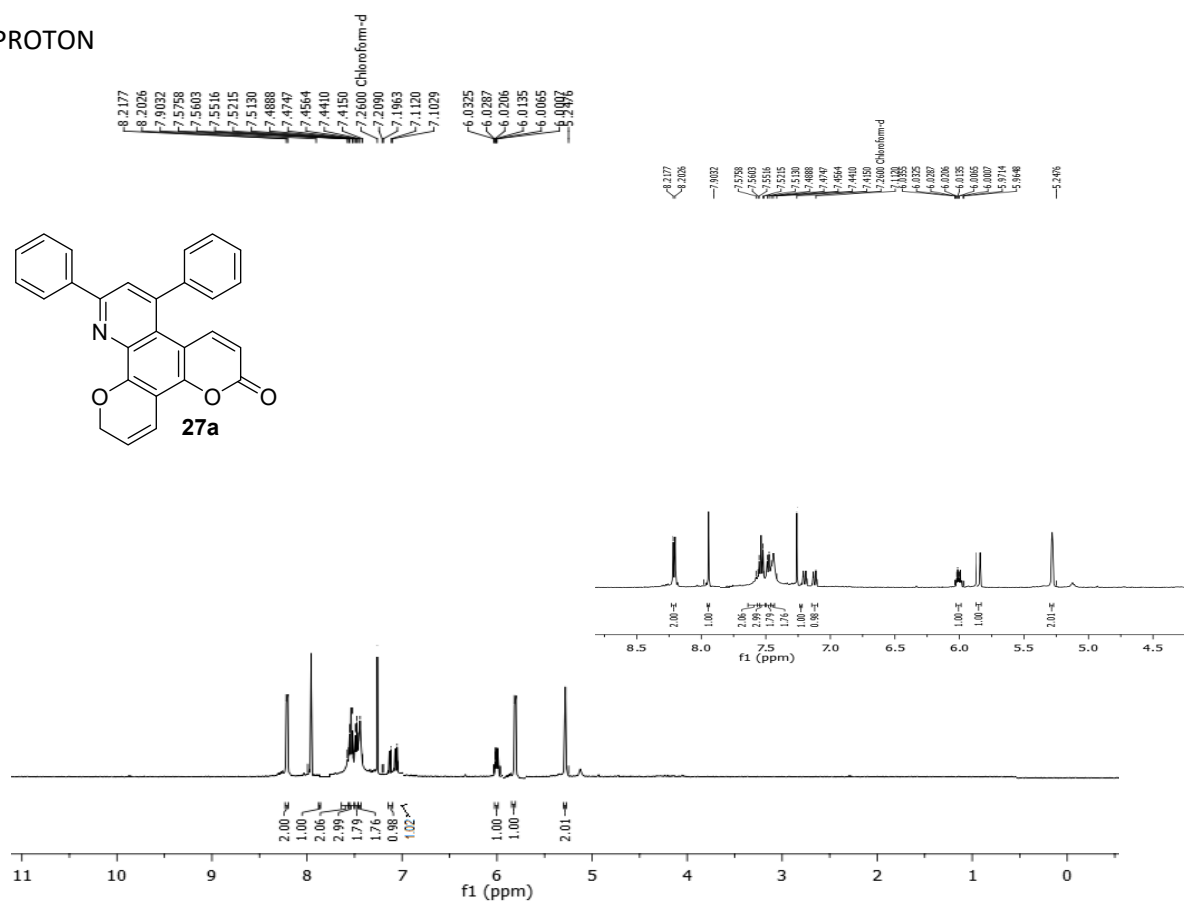
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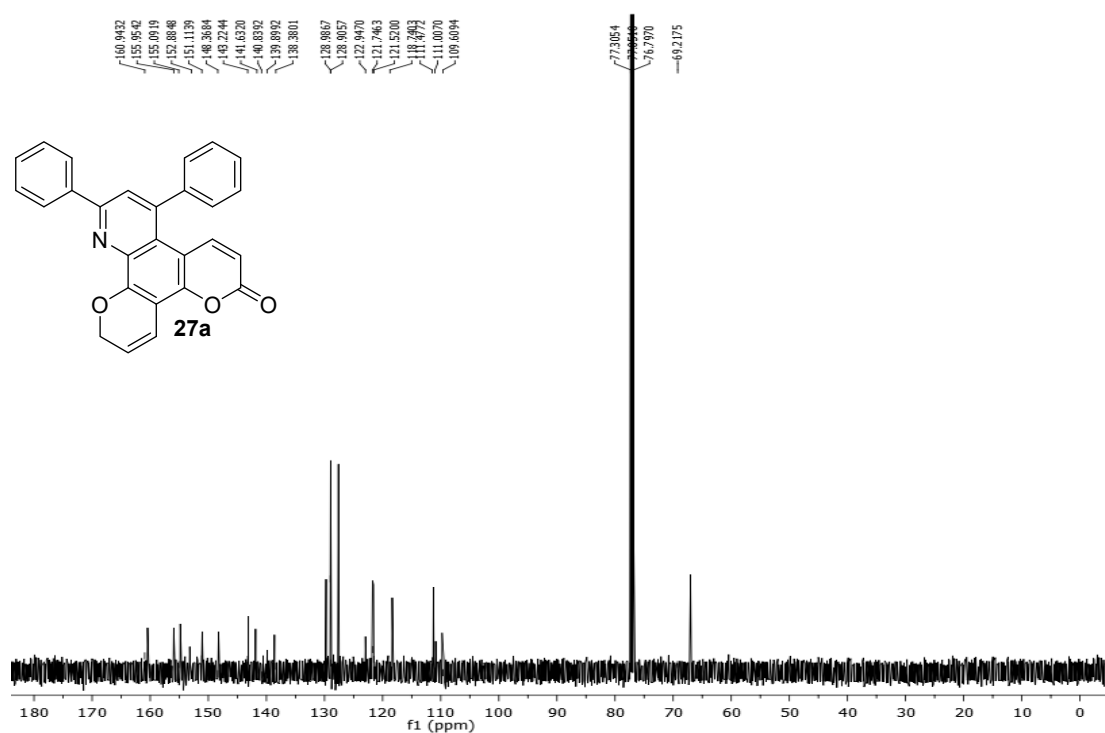
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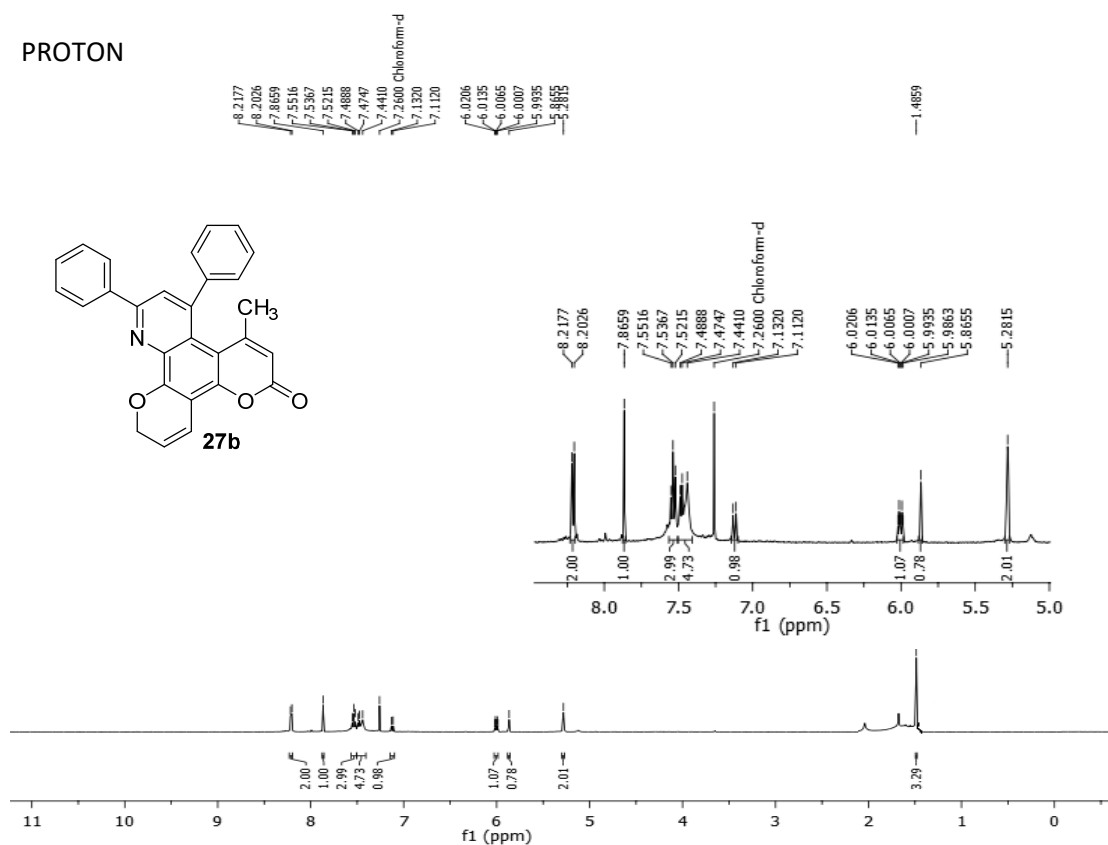
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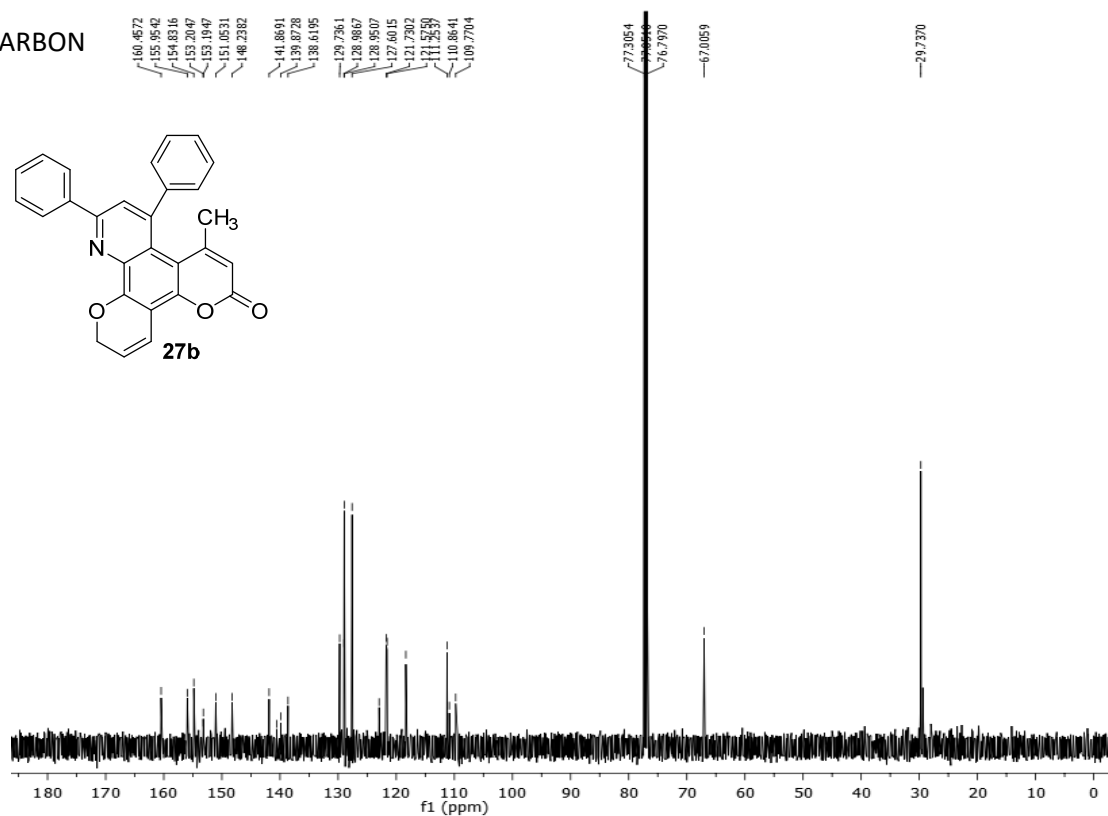
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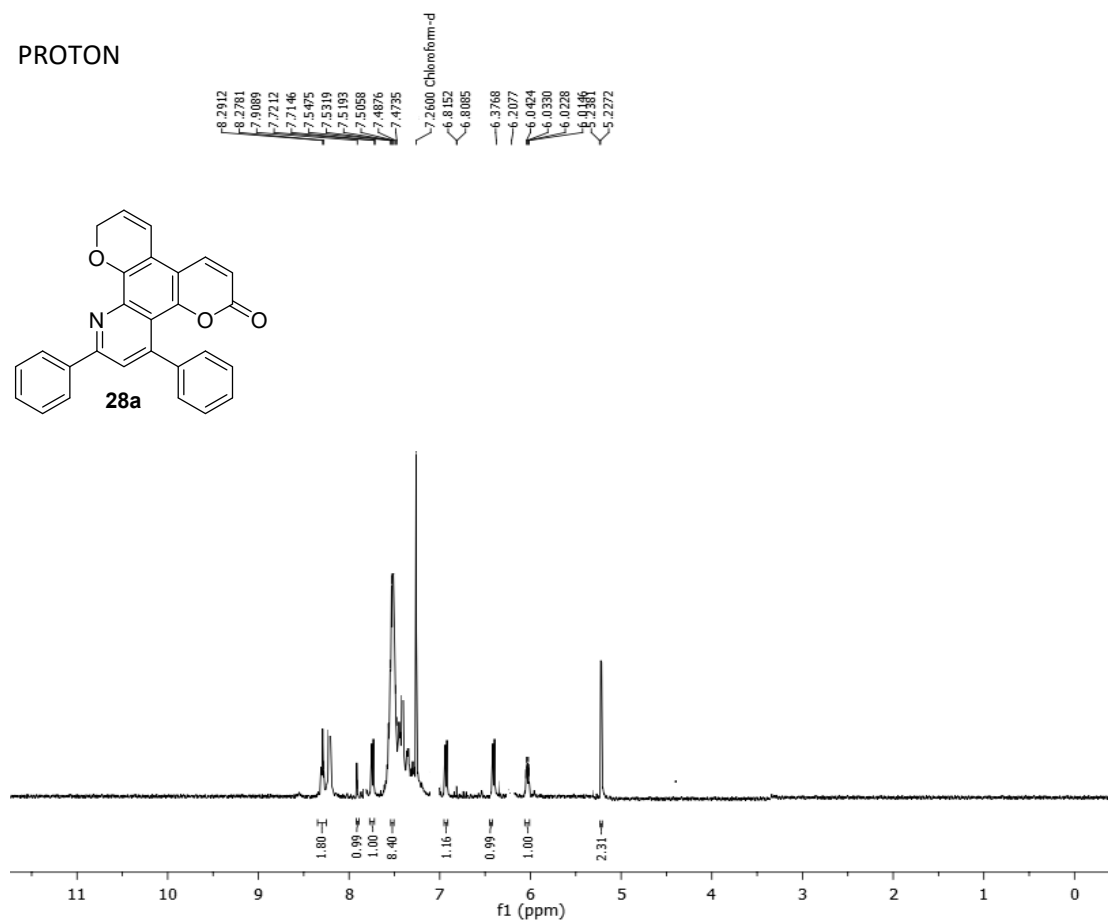
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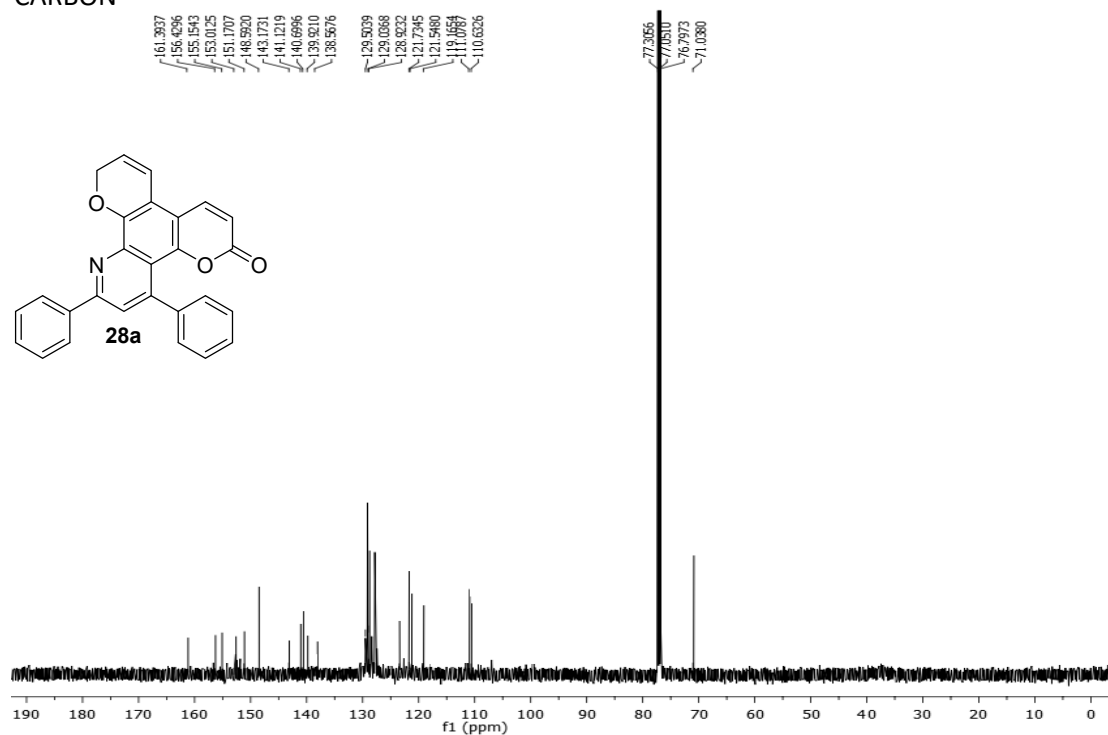
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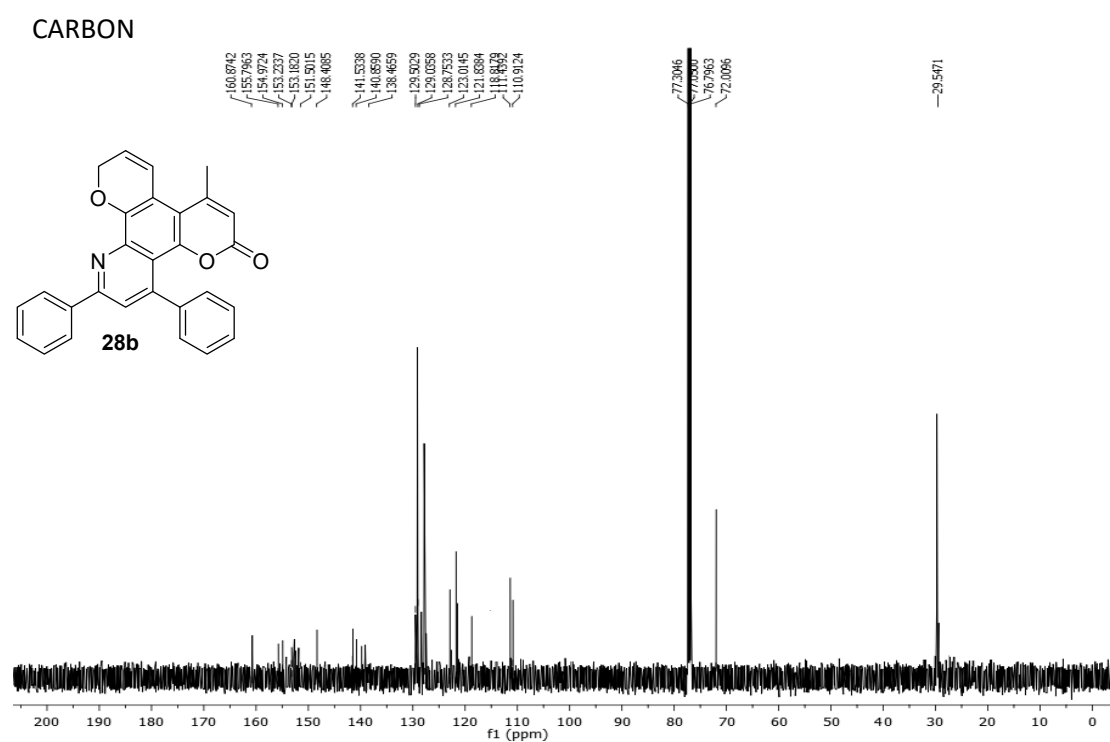
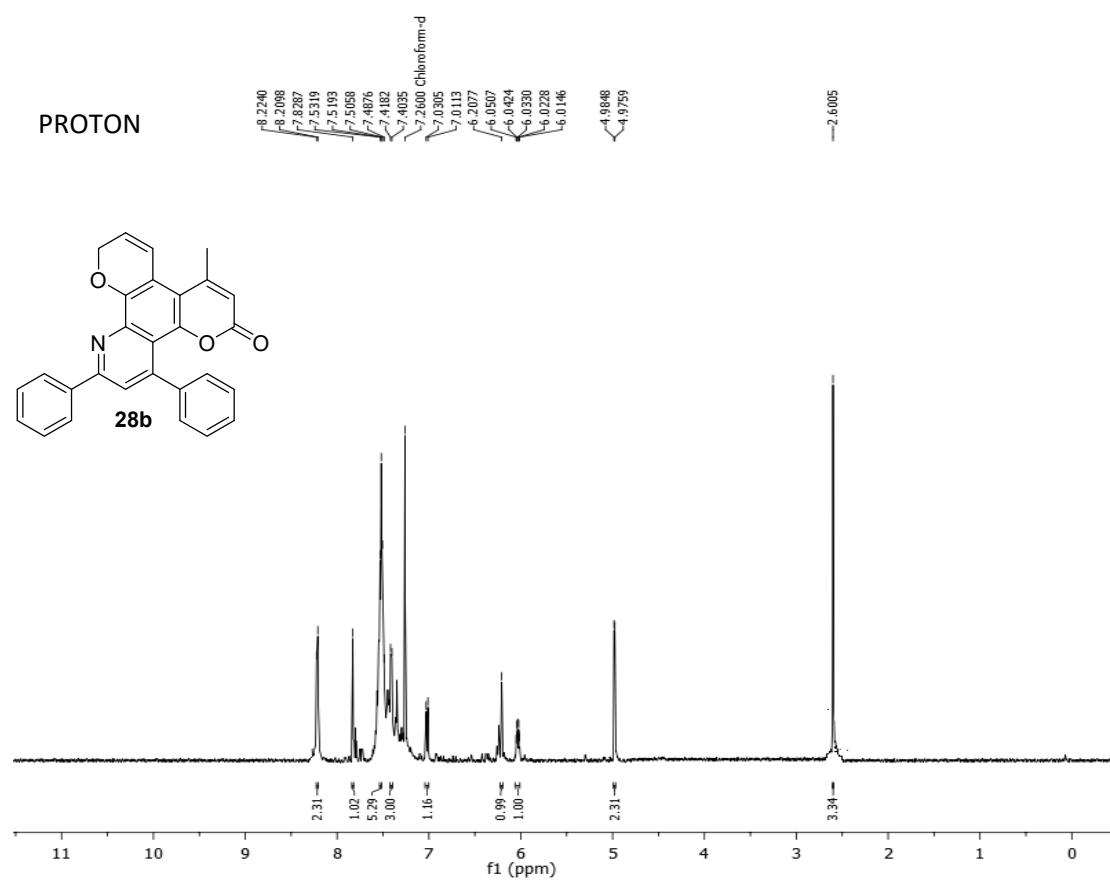


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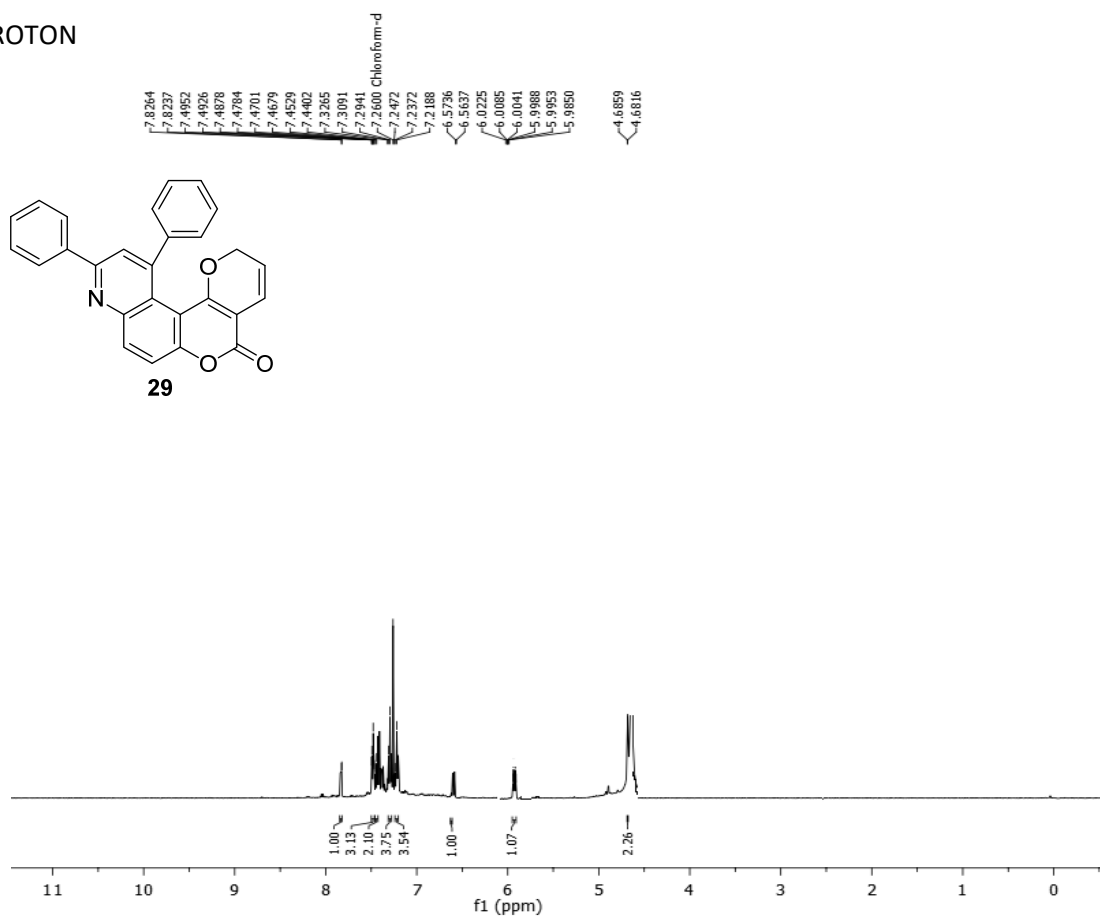


CARBON





PROTON



CARBON

