

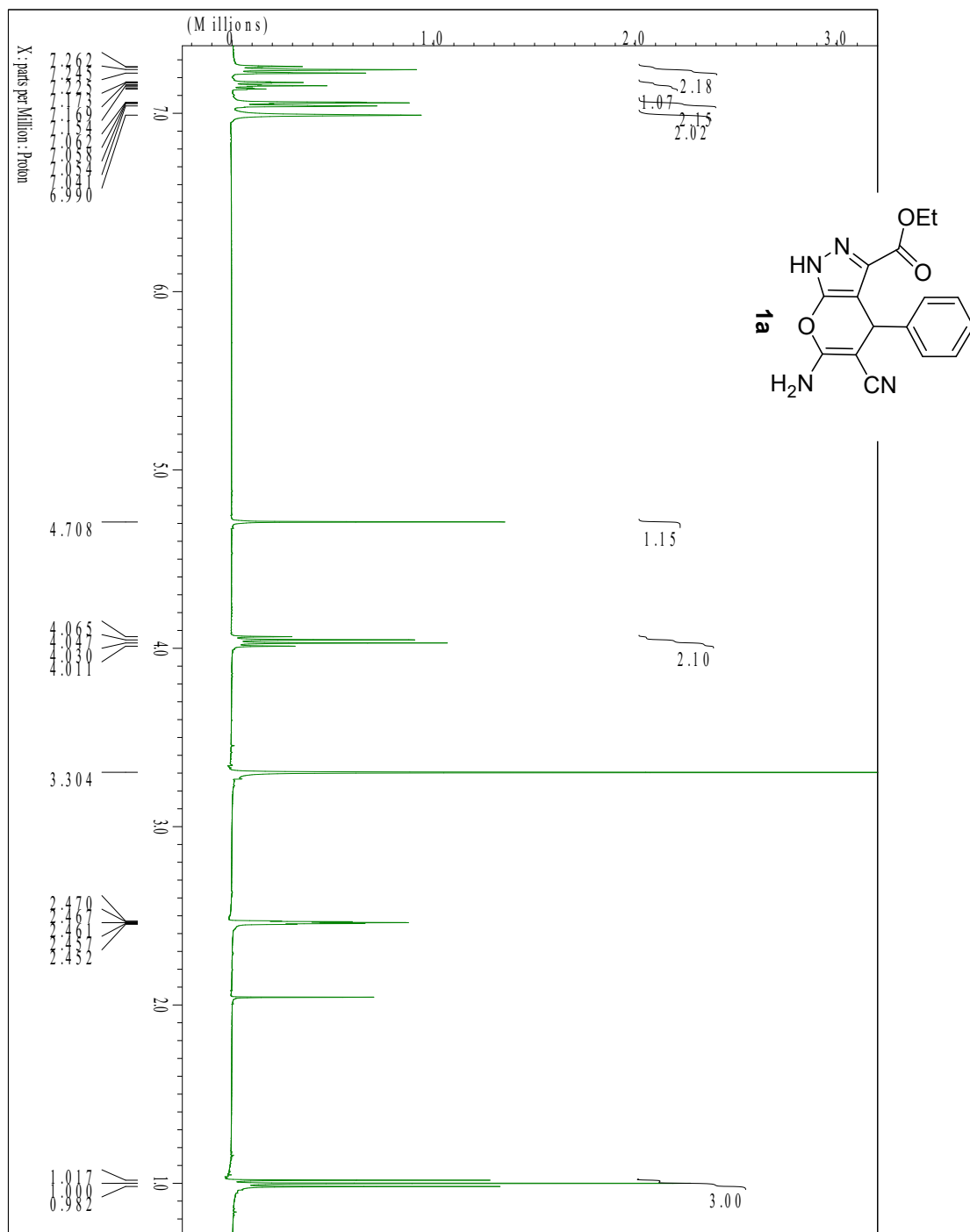
## Supporting Information

*Org. Commun.* 11:x (2018) x-x

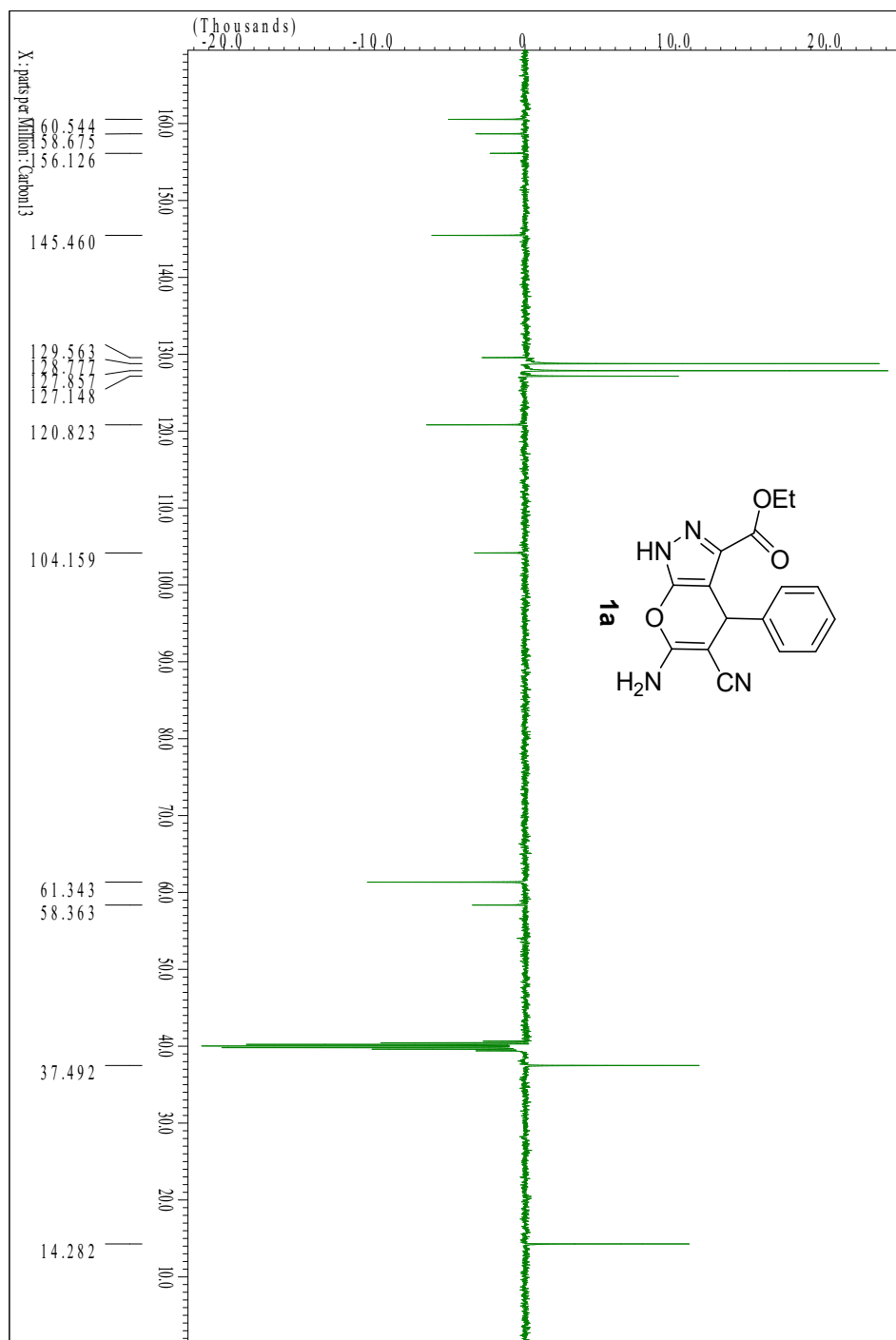
### Practical synthesis and electronic study of non-spiro and spiropyrano[2,3-*c*]pyrazole-3-carboxylate derivatives via uncatalyzed domino one-pot, four-component reactions

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Table of Contents	Figure No	Page No
S1. <sup>1</sup> H-NMR data of compound <b>1a</b>	S1	2
S2. <sup>13</sup> C NMR data of compound <b>1a</b>	S2	3
S3. <sup>1</sup> H-NMR data of compound <b>1e</b>	S3	4
S4. <sup>13</sup> C NMR data of compound <b>1e</b>	S4	5
S5. <sup>1</sup> H-NMR data of compound <b>1h</b>	S5	6
S6. <sup>13</sup> C NMR data of compound <b>1h</b>	S6	7
S7. <sup>1</sup> H-NMR data of compound <b>1i</b>	S7	8
S8. <sup>13</sup> C NMR data of compound <b>1i</b>	S8	9
S9. <sup>1</sup> H-NMR data of compound <b>1j</b>	S9	10
S10. <sup>13</sup> C NMR data of compound <b>1j</b>	S10	11
S11. <sup>1</sup> H-NMR data of compound <b>1o</b>	S11	12
S12. <sup>1</sup> H-NMR data of compound <b>1q</b>	S12	13
S13. <sup>13</sup> C NMR data of compound <b>1q</b>	S13	14
S14. <sup>1</sup> H-NMR data of compound <b>1r</b>	S14	15
S15. <sup>13</sup> C NMR data of compound <b>1r</b>	S15	16
S16. <sup>1</sup> H-NMR data of compound <b>1s</b>	S16	17
S17. <sup>13</sup> C NMR data of compound <b>1s</b>	S17	18



**Figure S1.** <sup>1</sup>H NMR data of compound **1a**,



**Figure S2.**  $^{13}\text{C}$  NMR data of compound **1a**

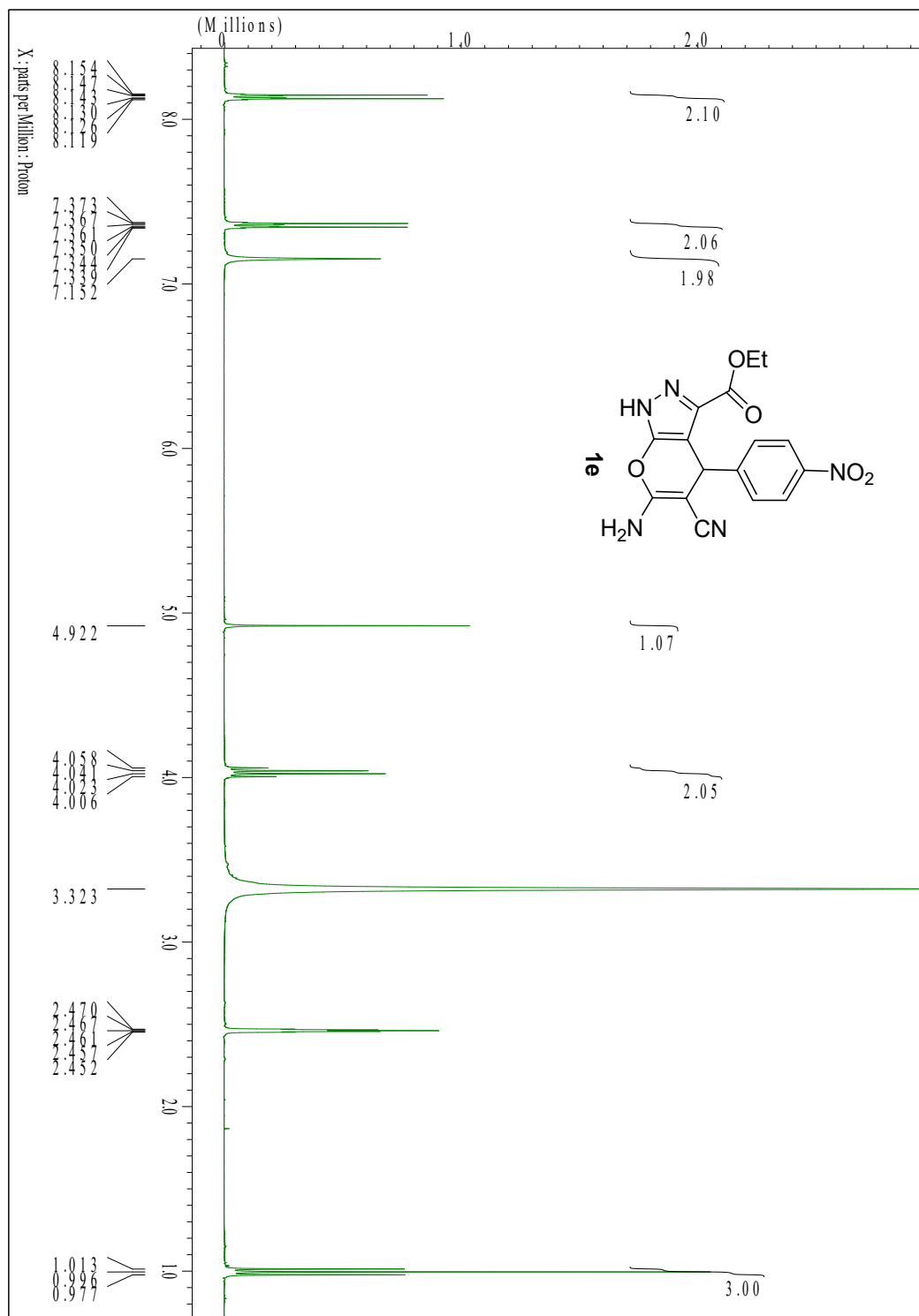
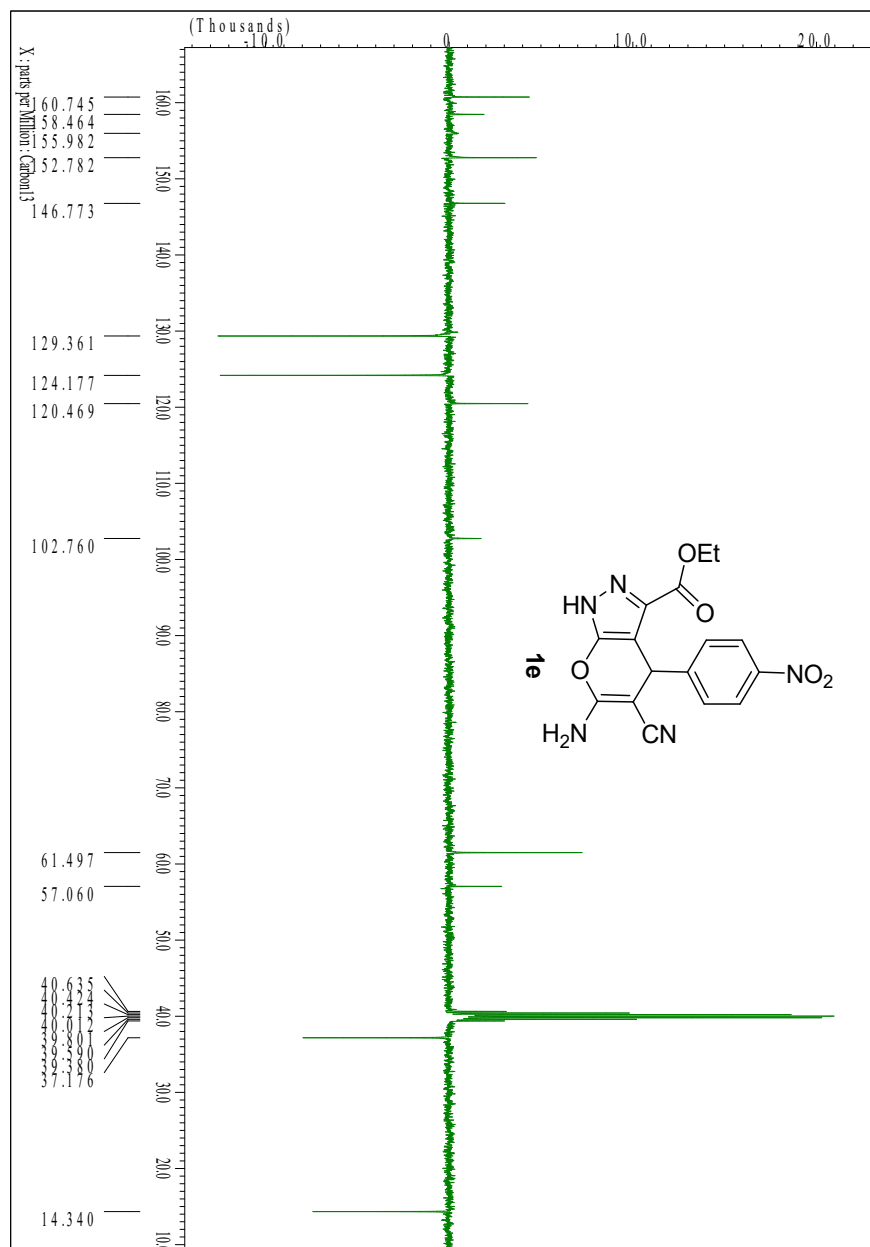
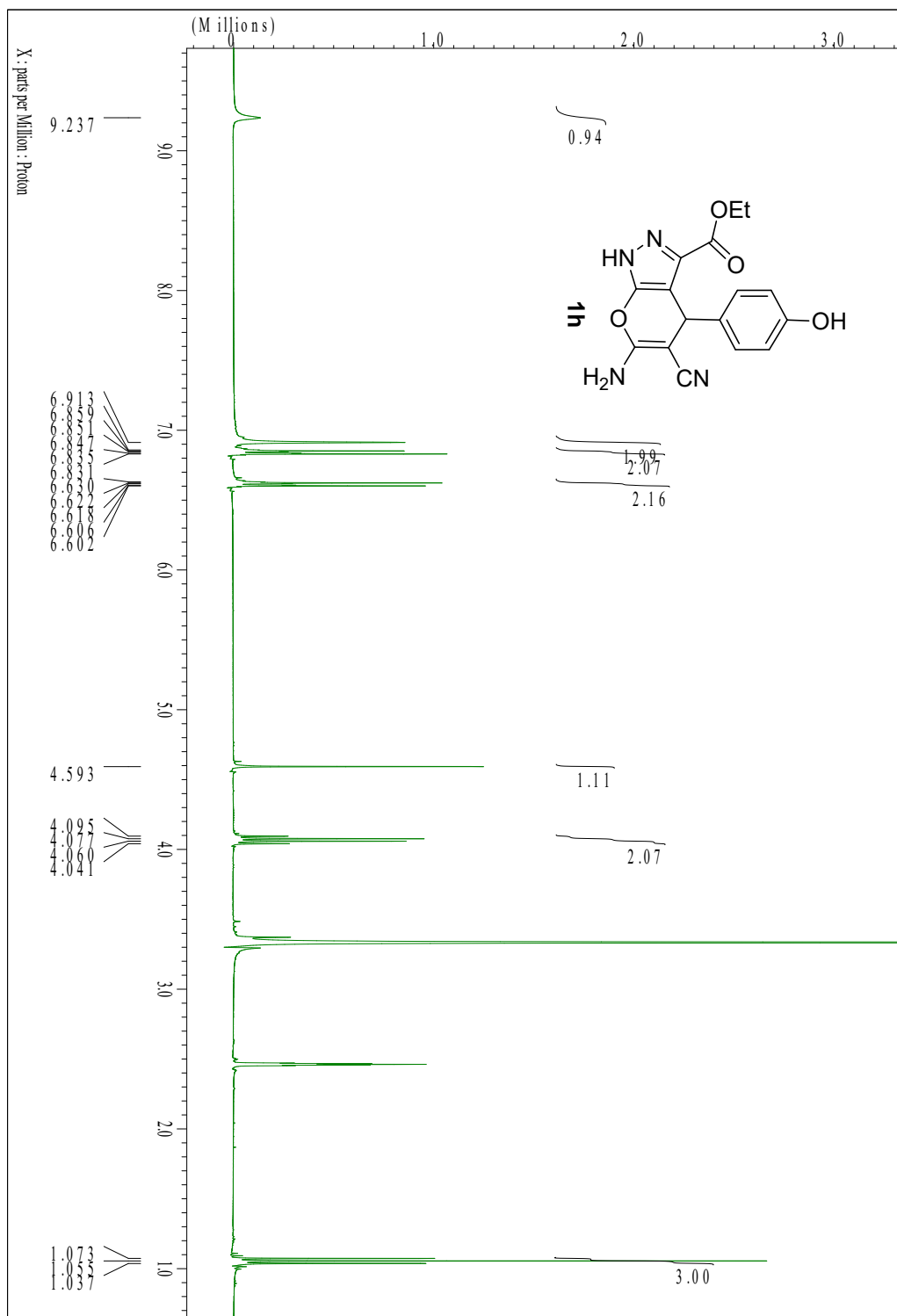


Figure S3.  $^1\text{H}$  NMR data of compound **1e**

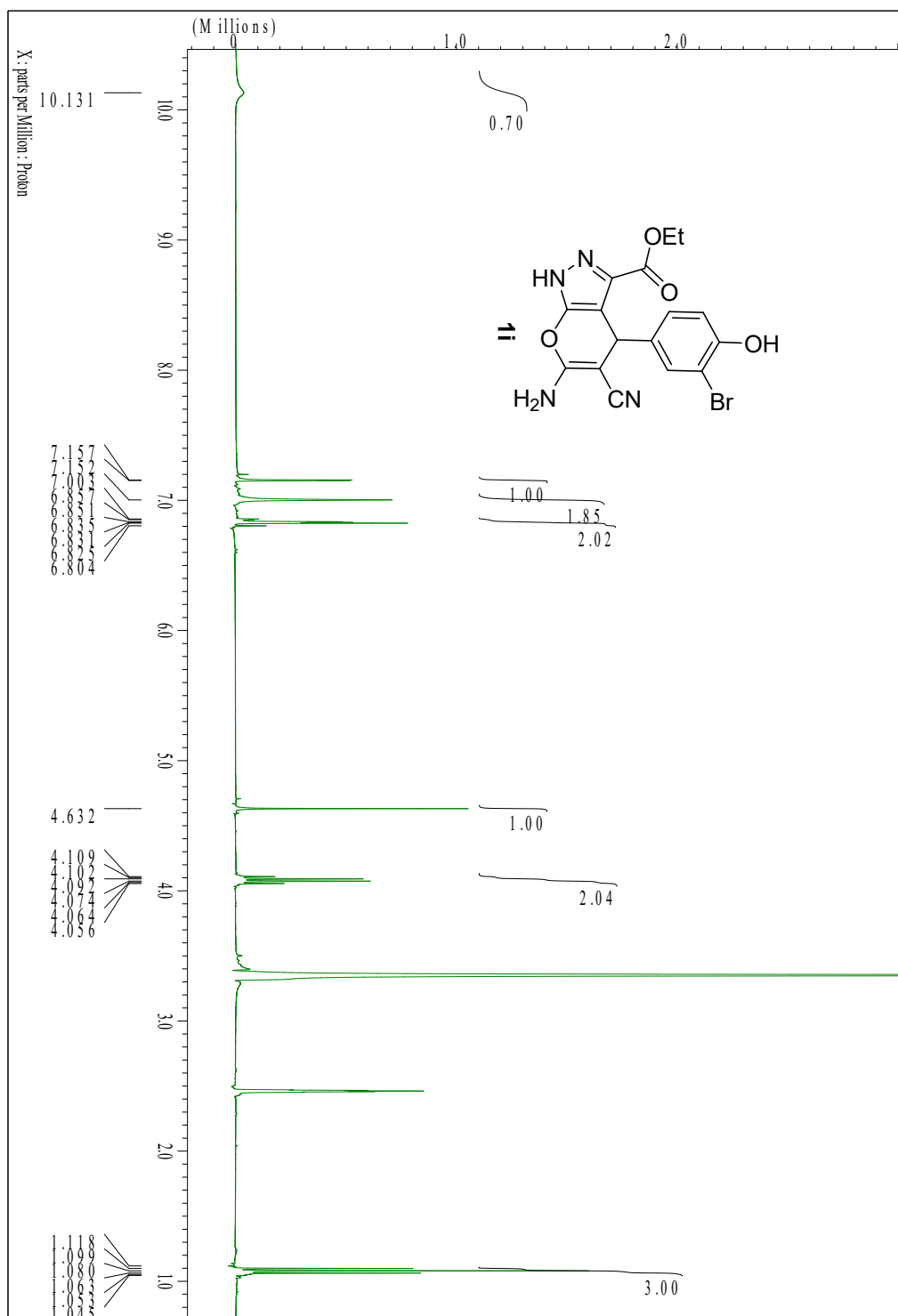


**Figure S4.**  $^{13}\text{C}$  NMR data of compound **1e**



**Figure S5.**  $^1\text{H}$  NMR data of compound **1h**

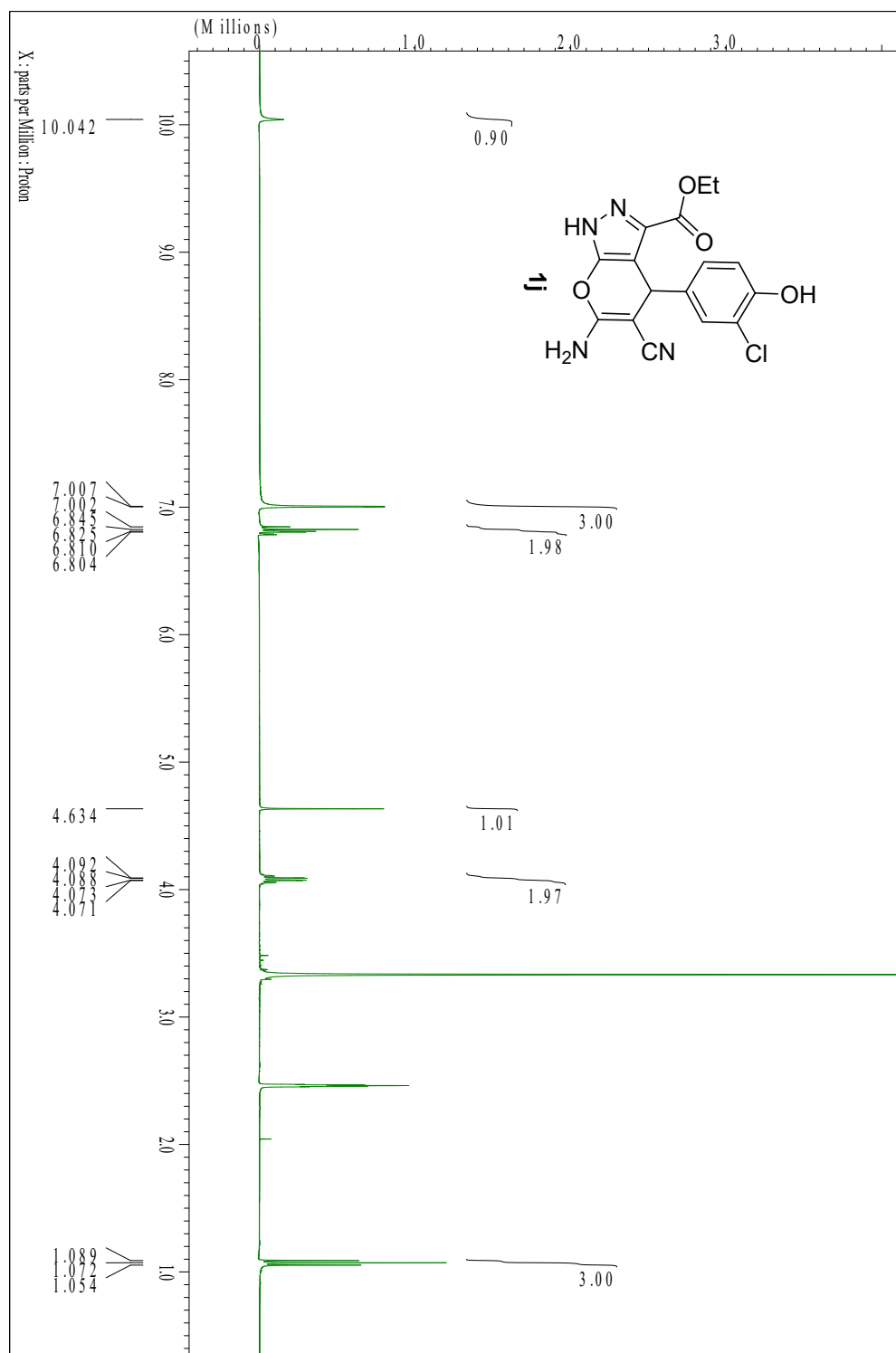




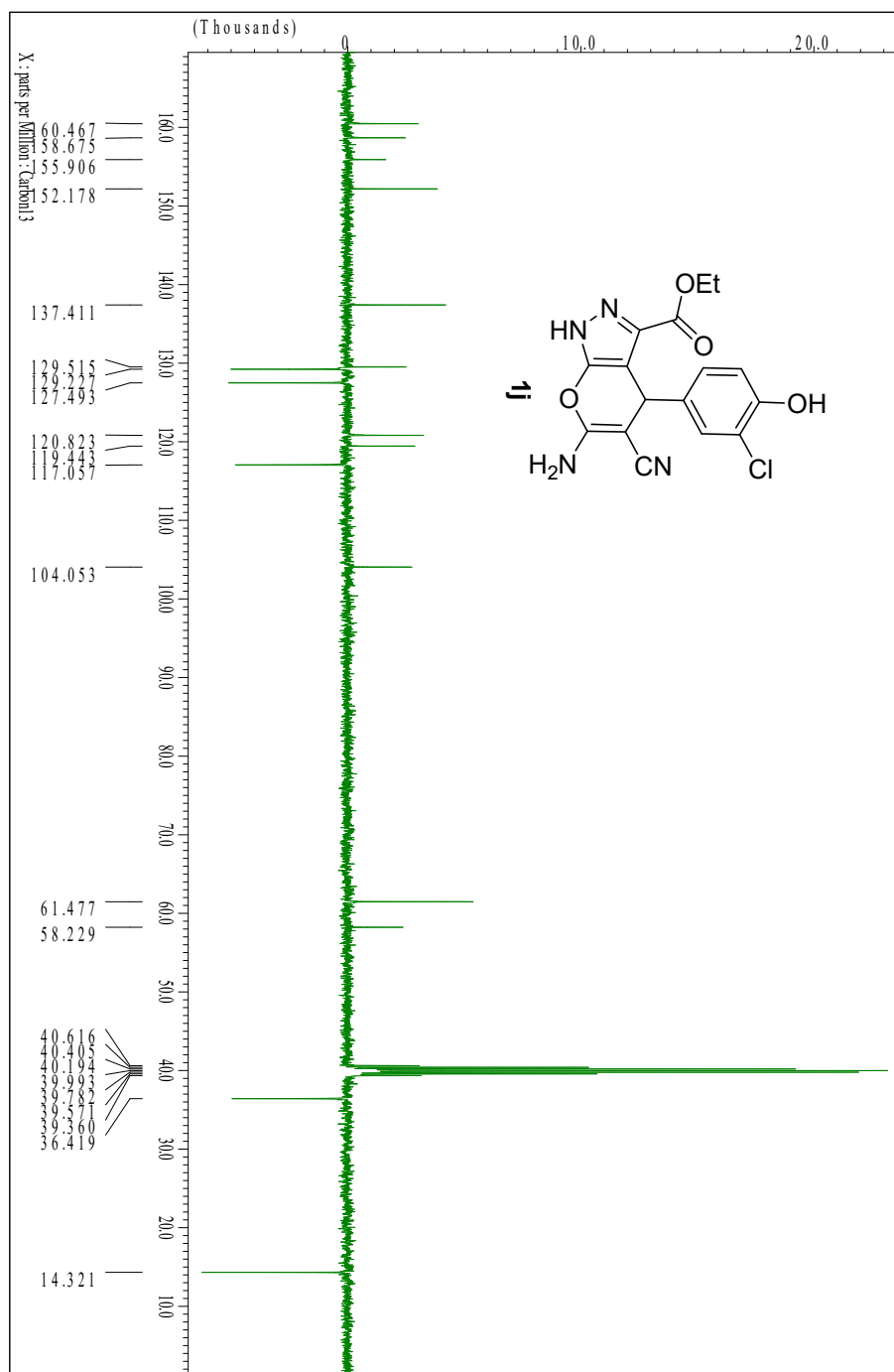
**Figure S7.** <sup>1</sup>H NMR data of compound **1i**



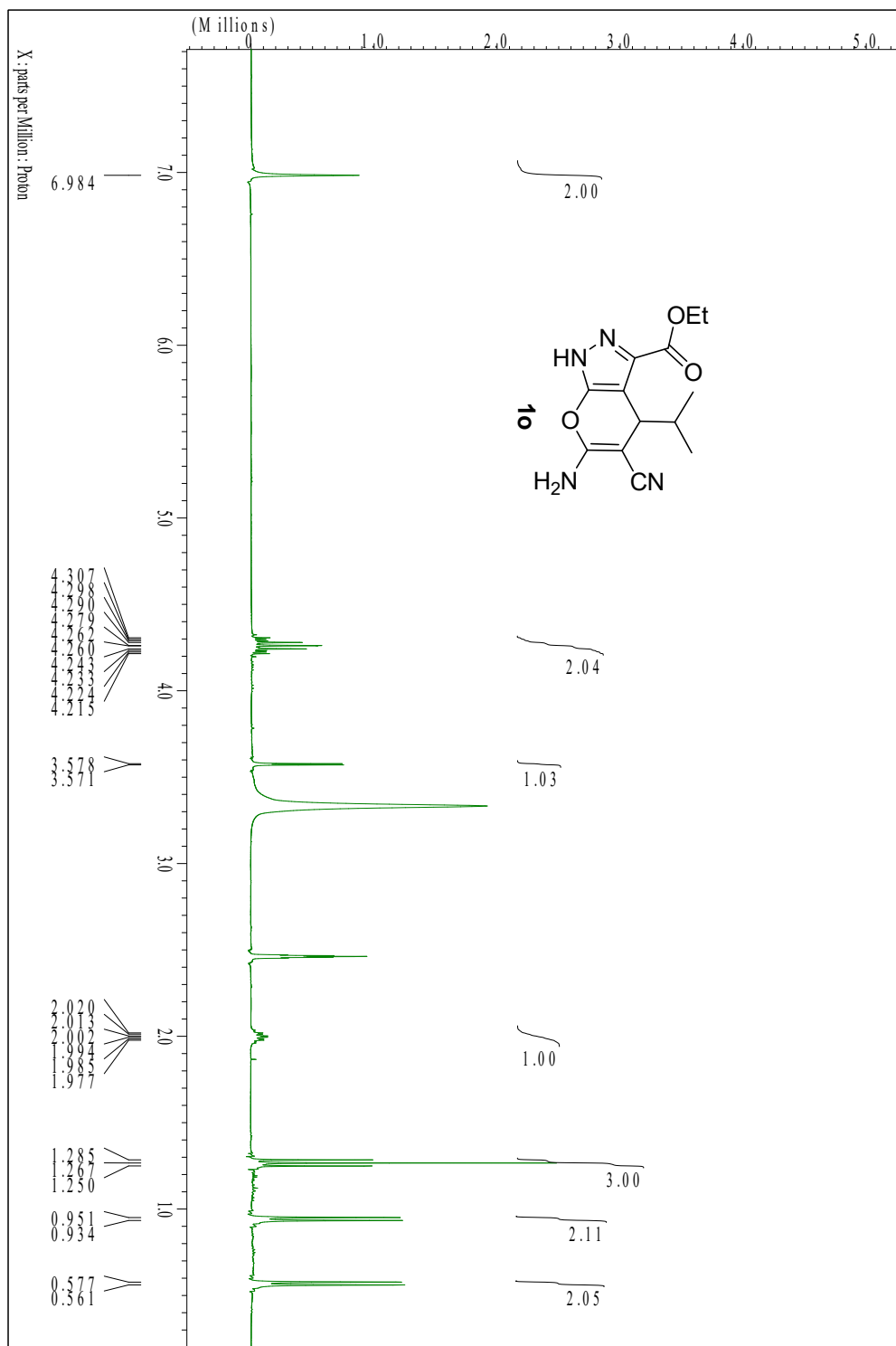




**Figure S9.** <sup>1</sup>H NMR data of compound **1j**



**Figure S10.**  $^{13}\text{C}$  NMR data of compound **1j**



**Figure S11.**  $^1\text{H}$  NMR data of compound **10**

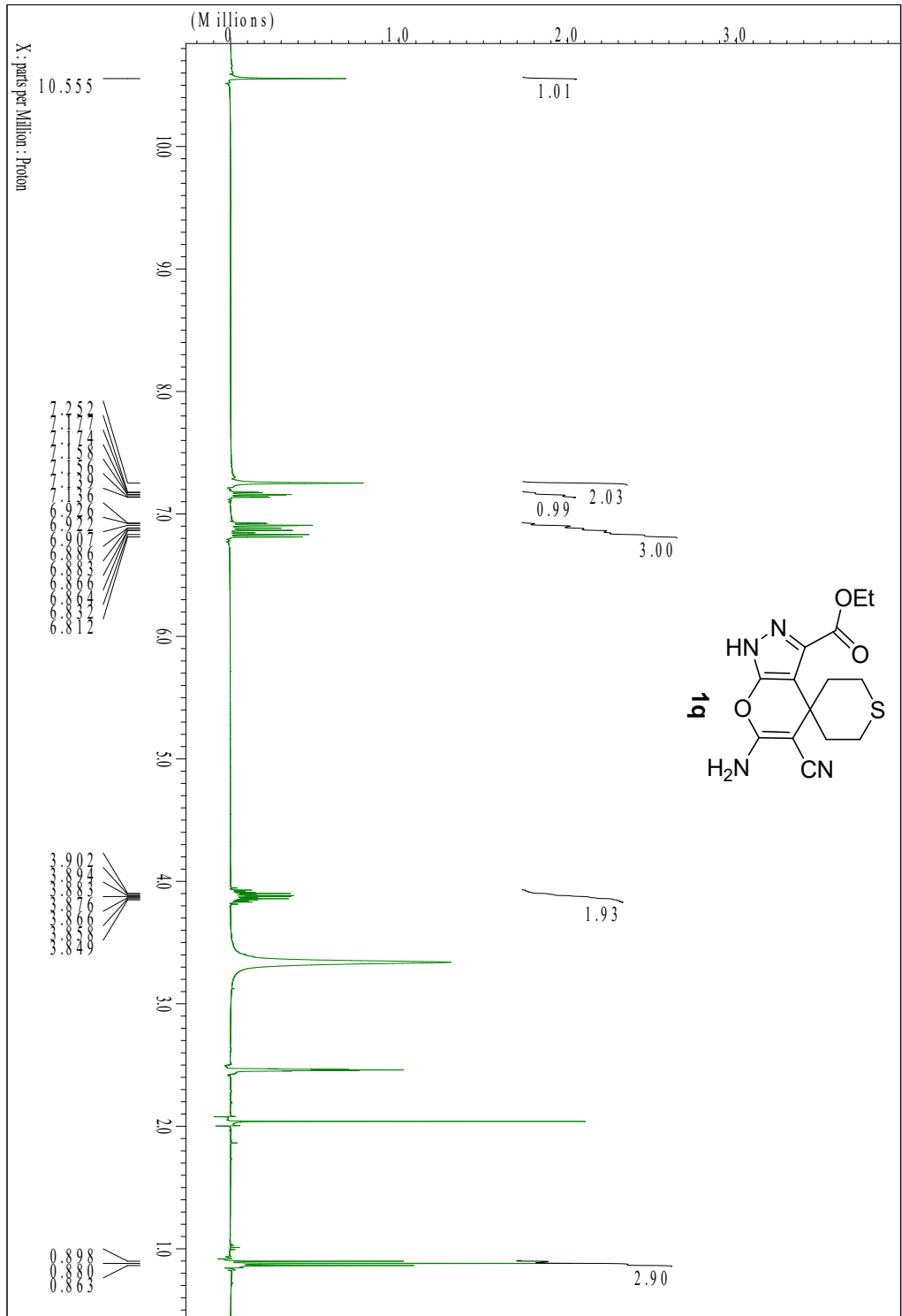
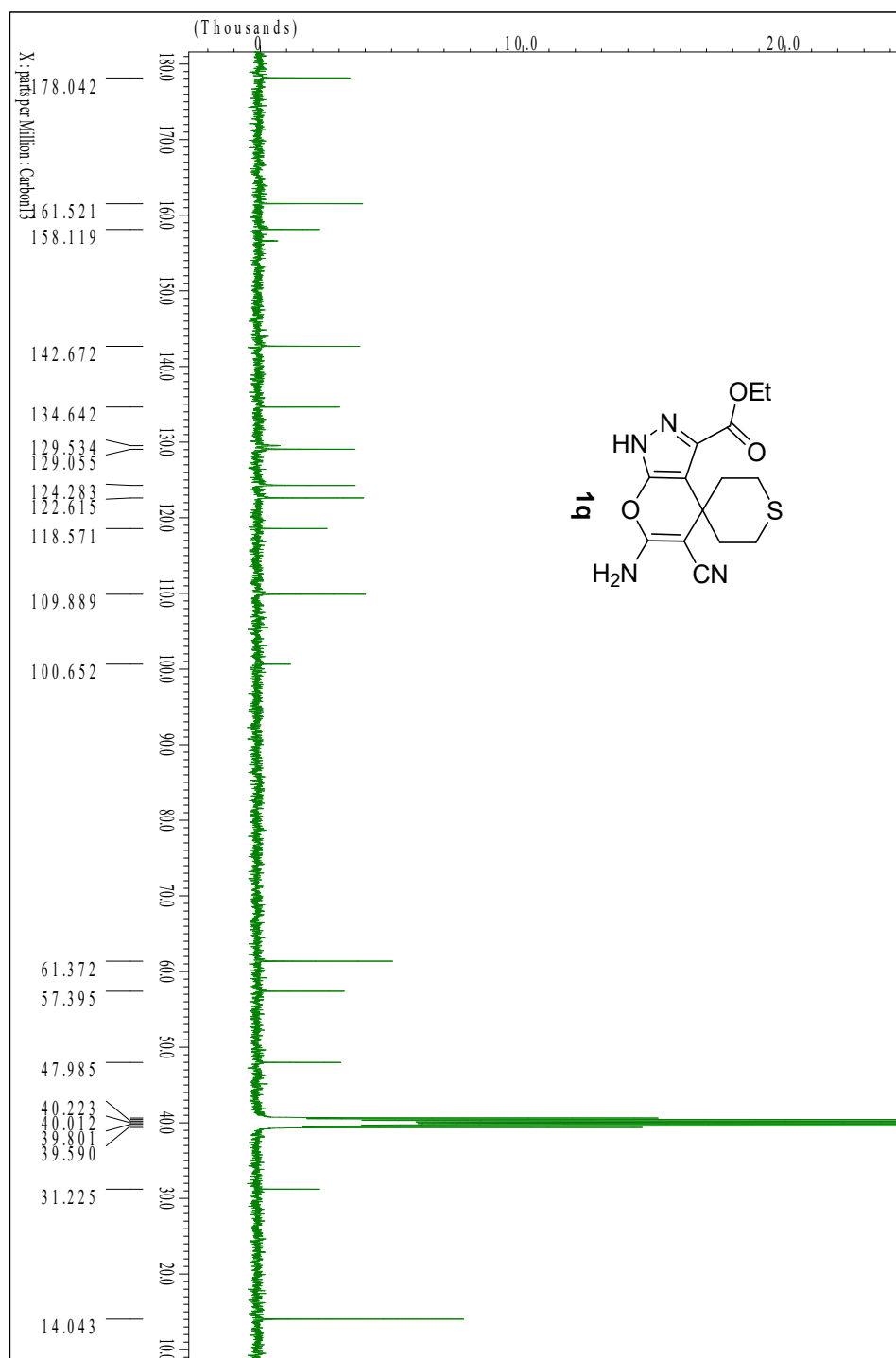
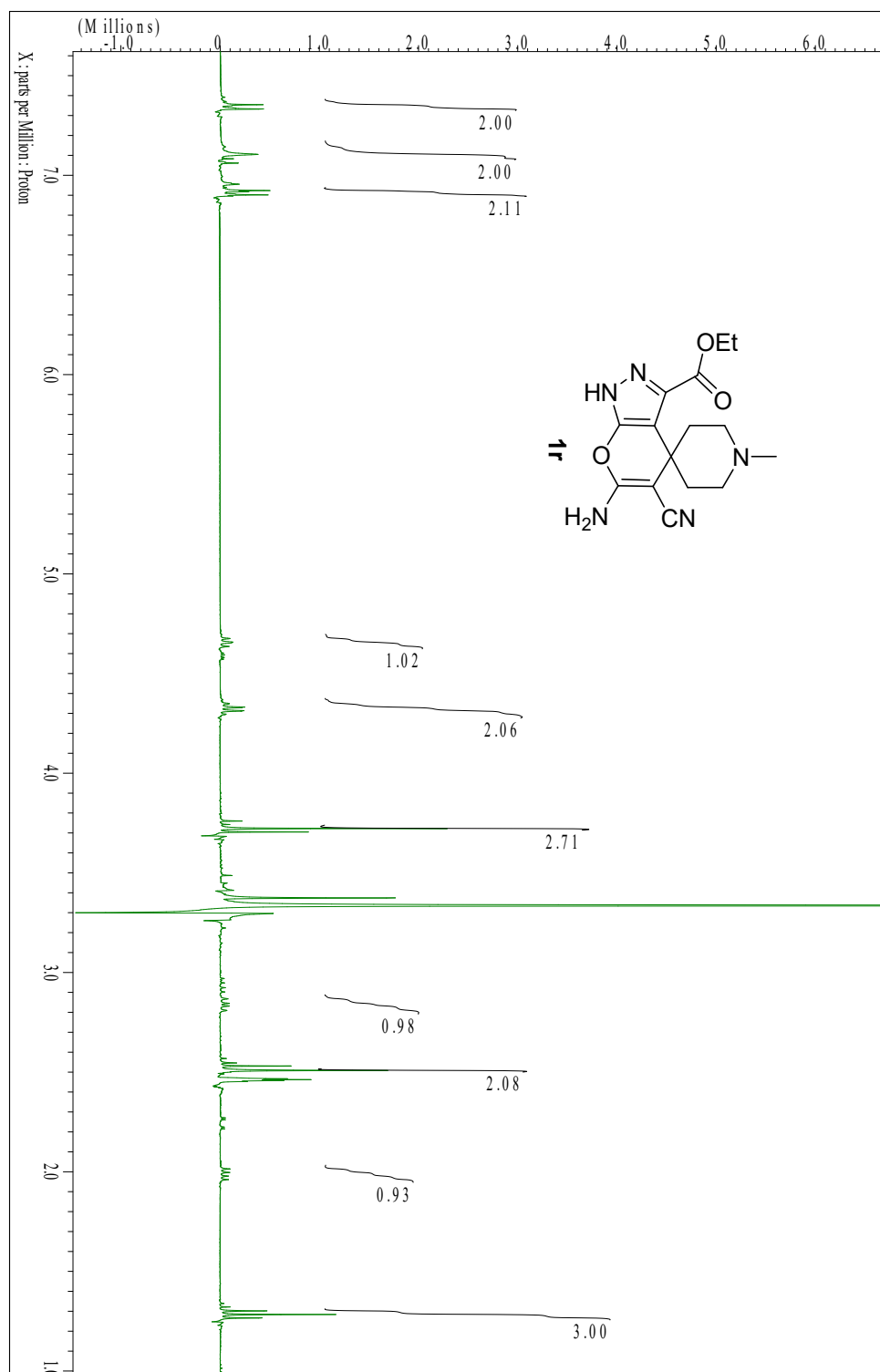


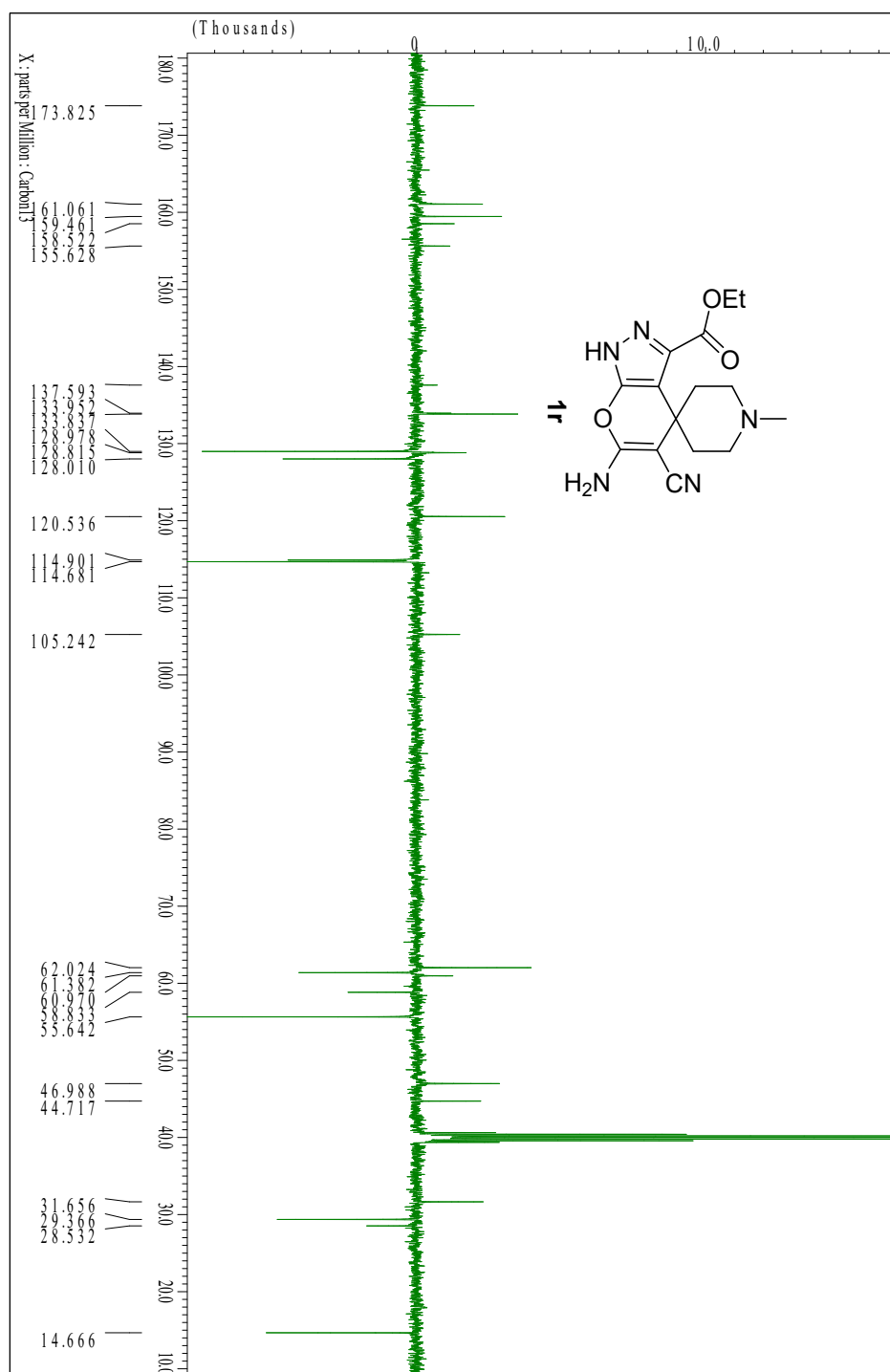
Figure S12.  $^1\text{H}$  NMR data of compound **1q**



**Figure S13.** <sup>13</sup>C NMR data of compound **1q**

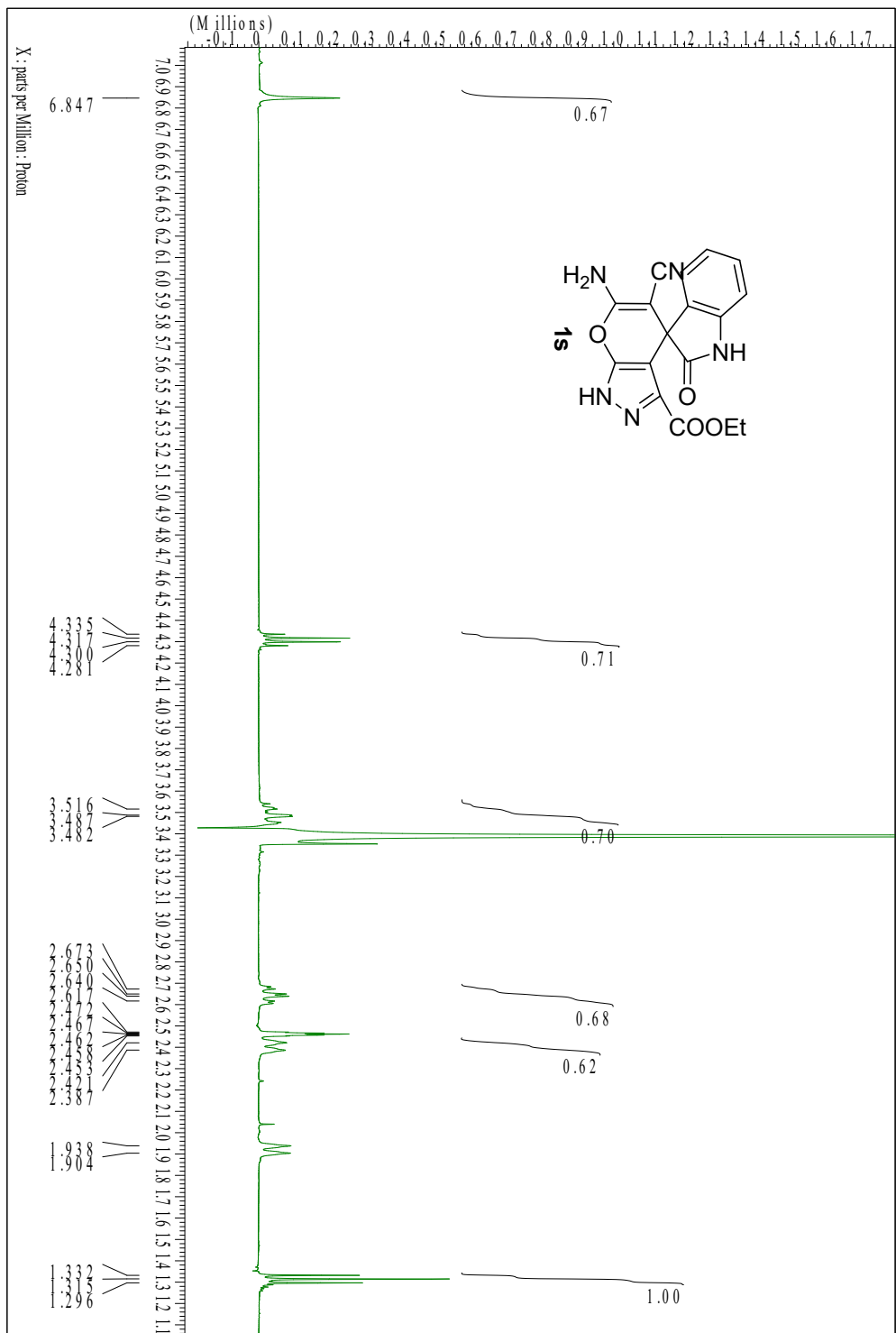


**Figure S14.**  $^1\text{H}$  NMR data of compound **1r**

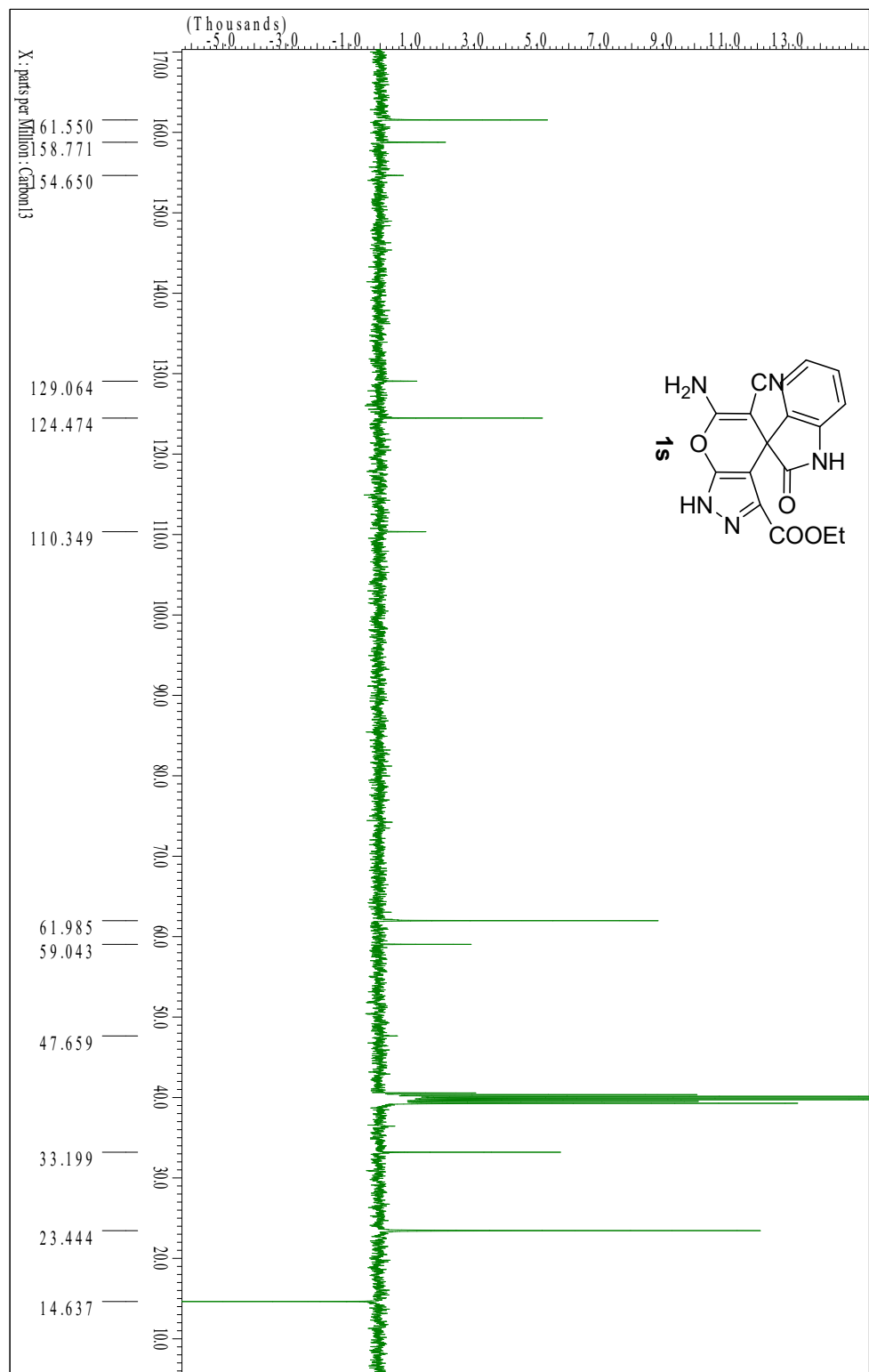


**Figure S15.**  $^{13}\text{C}$  NMR data of compound **1r**





**Figure S16.**  $^1\text{H}$  NMR data of compound **1s**



**Figure S17.**  $^{13}\text{C}$  NMR data of compound **1s**