Supporting Information

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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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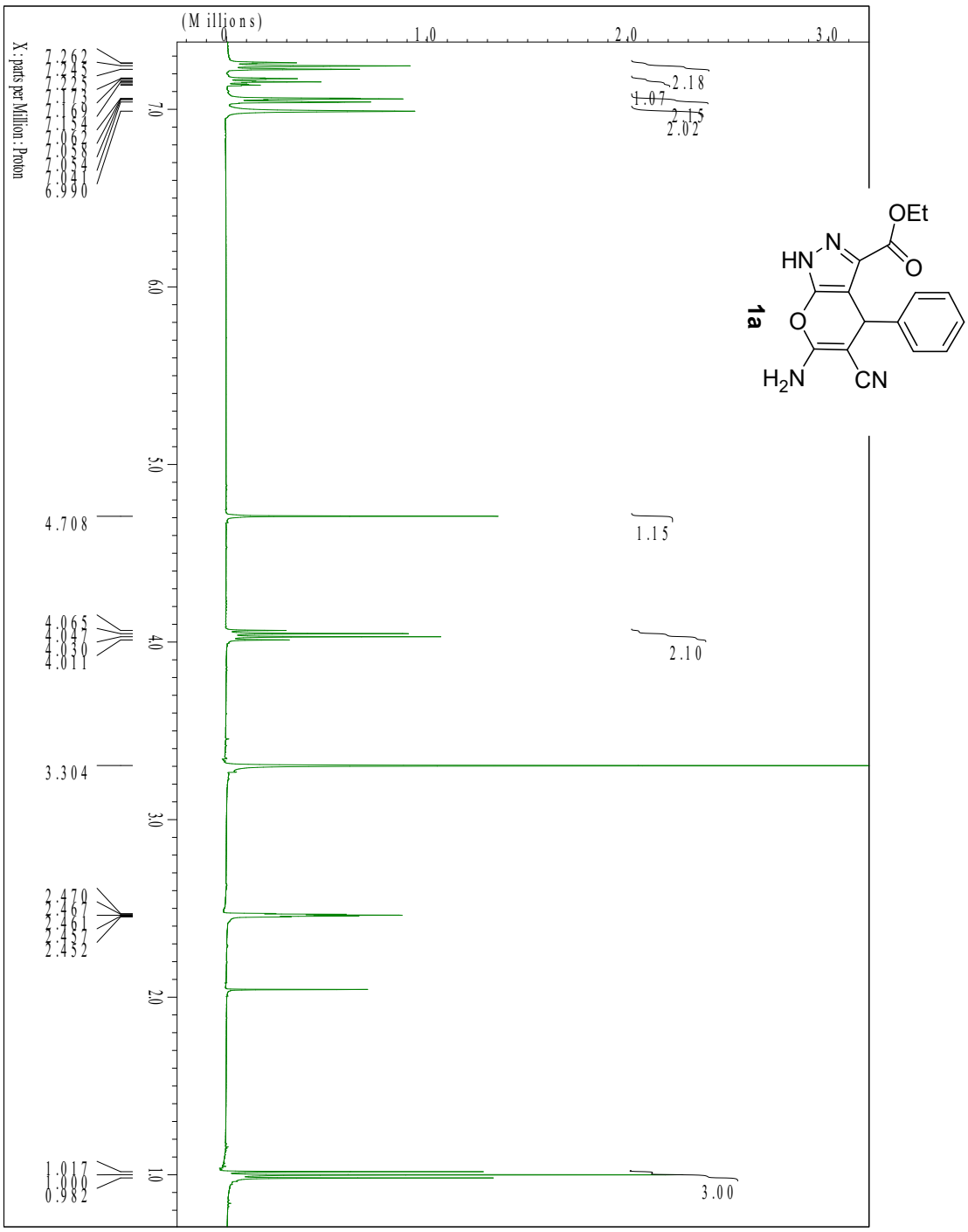

Figure S1. ^{1}H NMR data of compound **1a,**

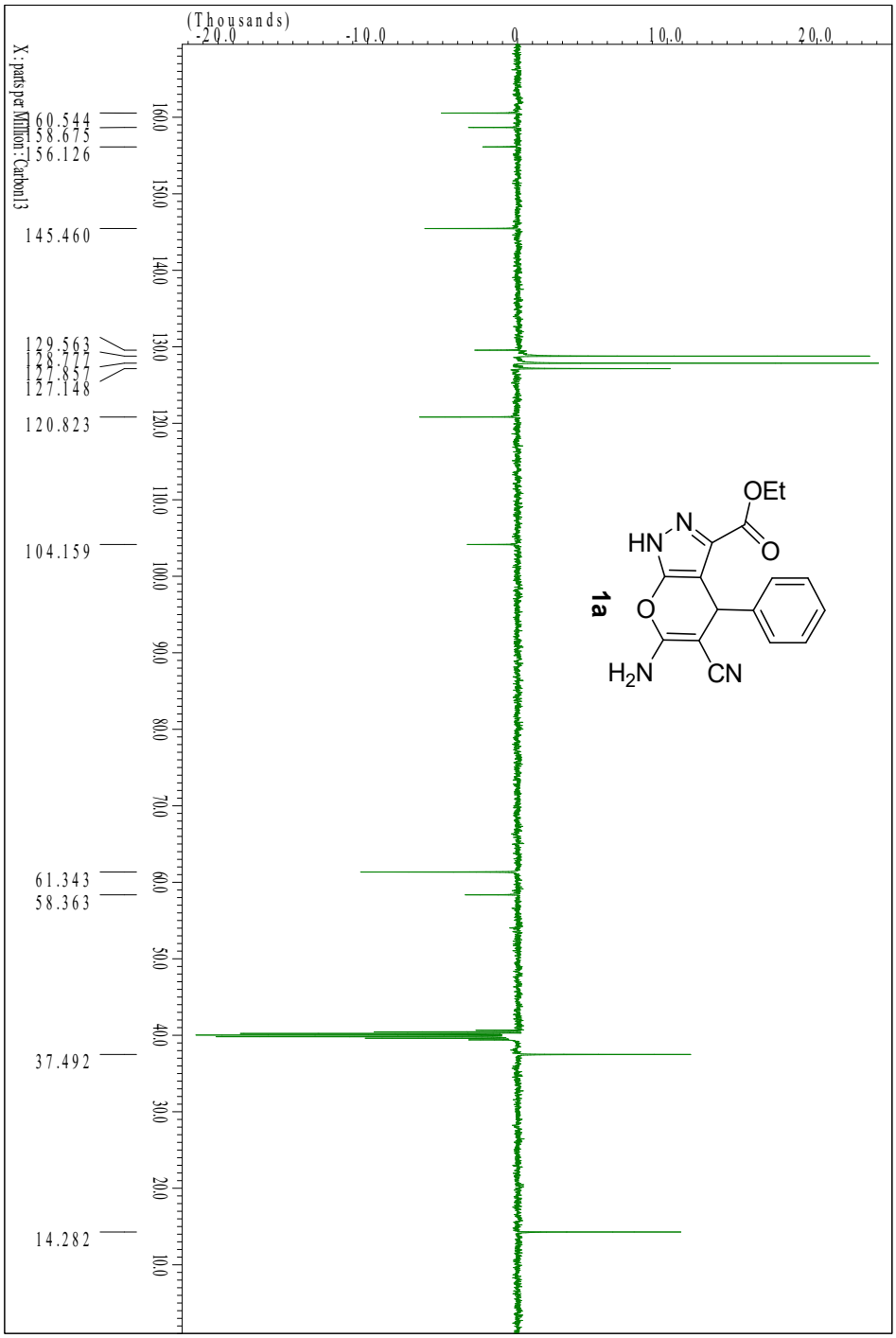

Figure S2. ^{13}C NMR data of compound **1a**

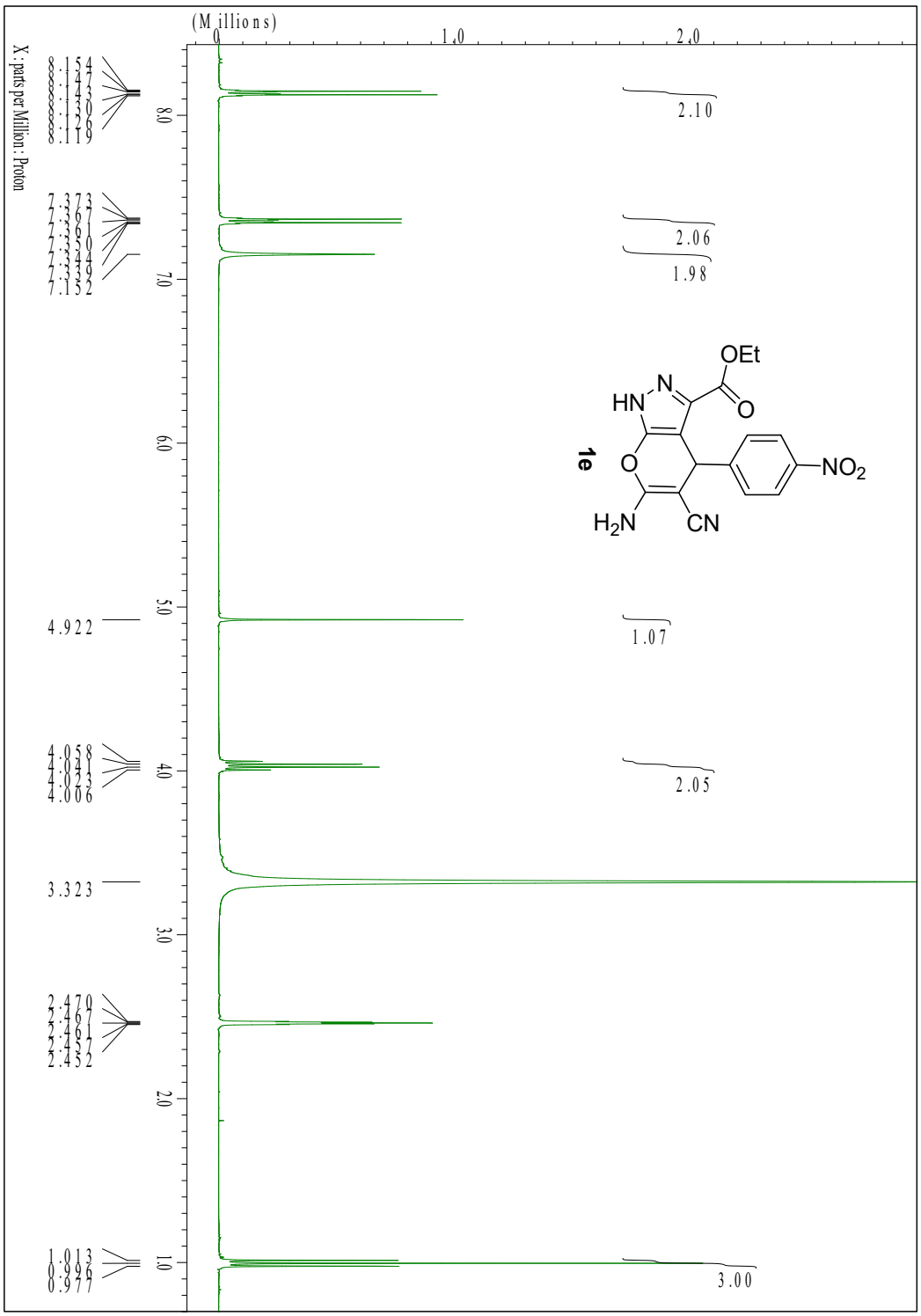

Figure S3. ^{1}H NMR data of compound **1e**

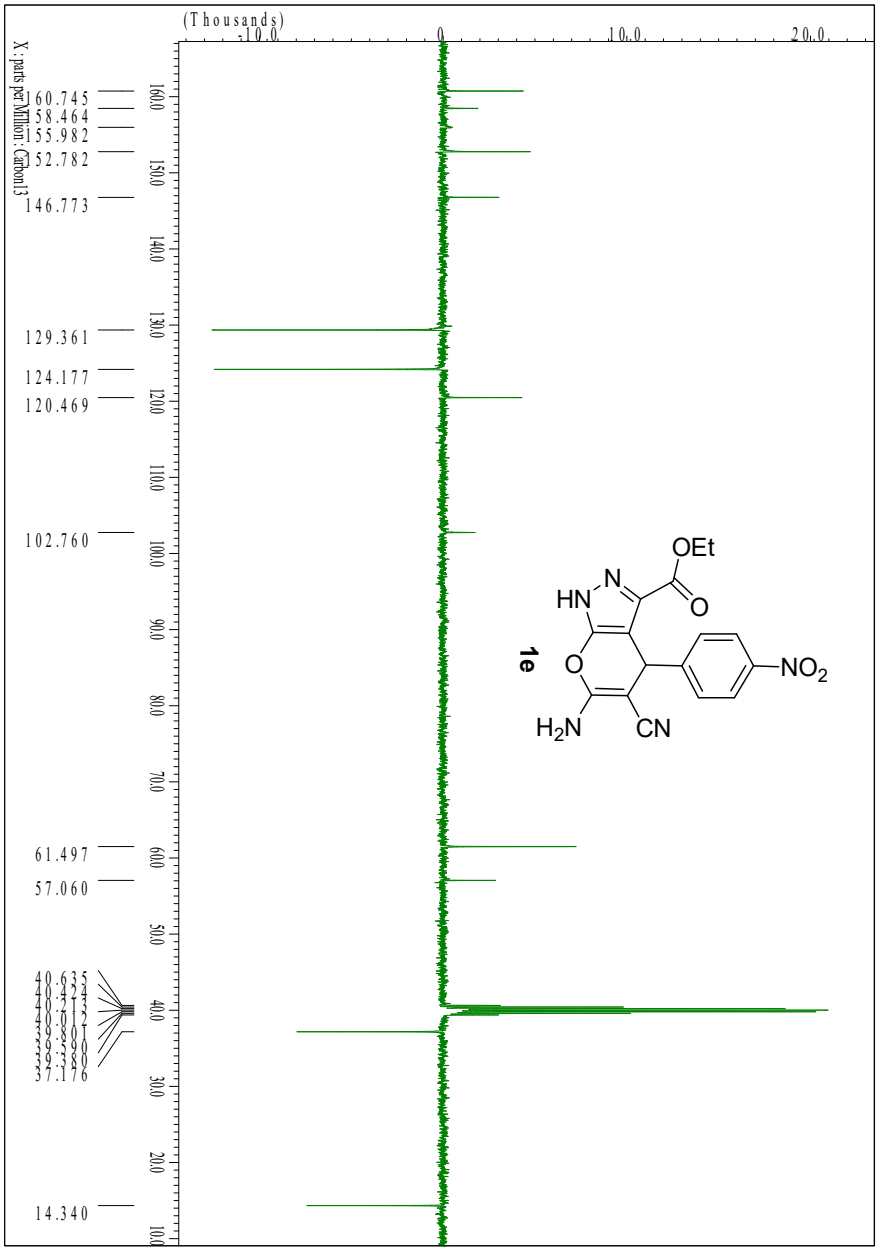

Figure S4. ^{13}C NMR data of compound **1e**

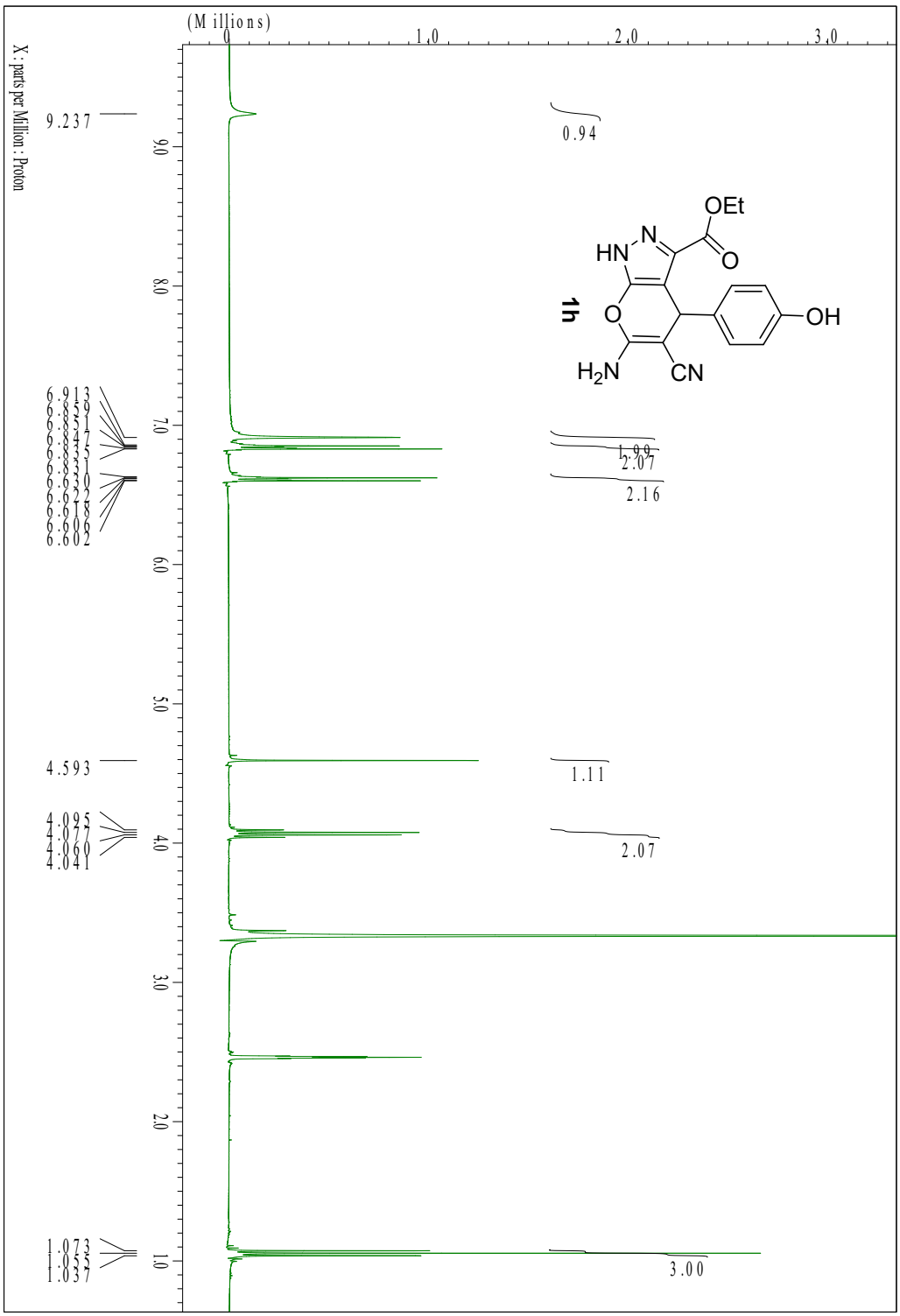

Figure S5. ^{1}H NMR data of compound **1h**

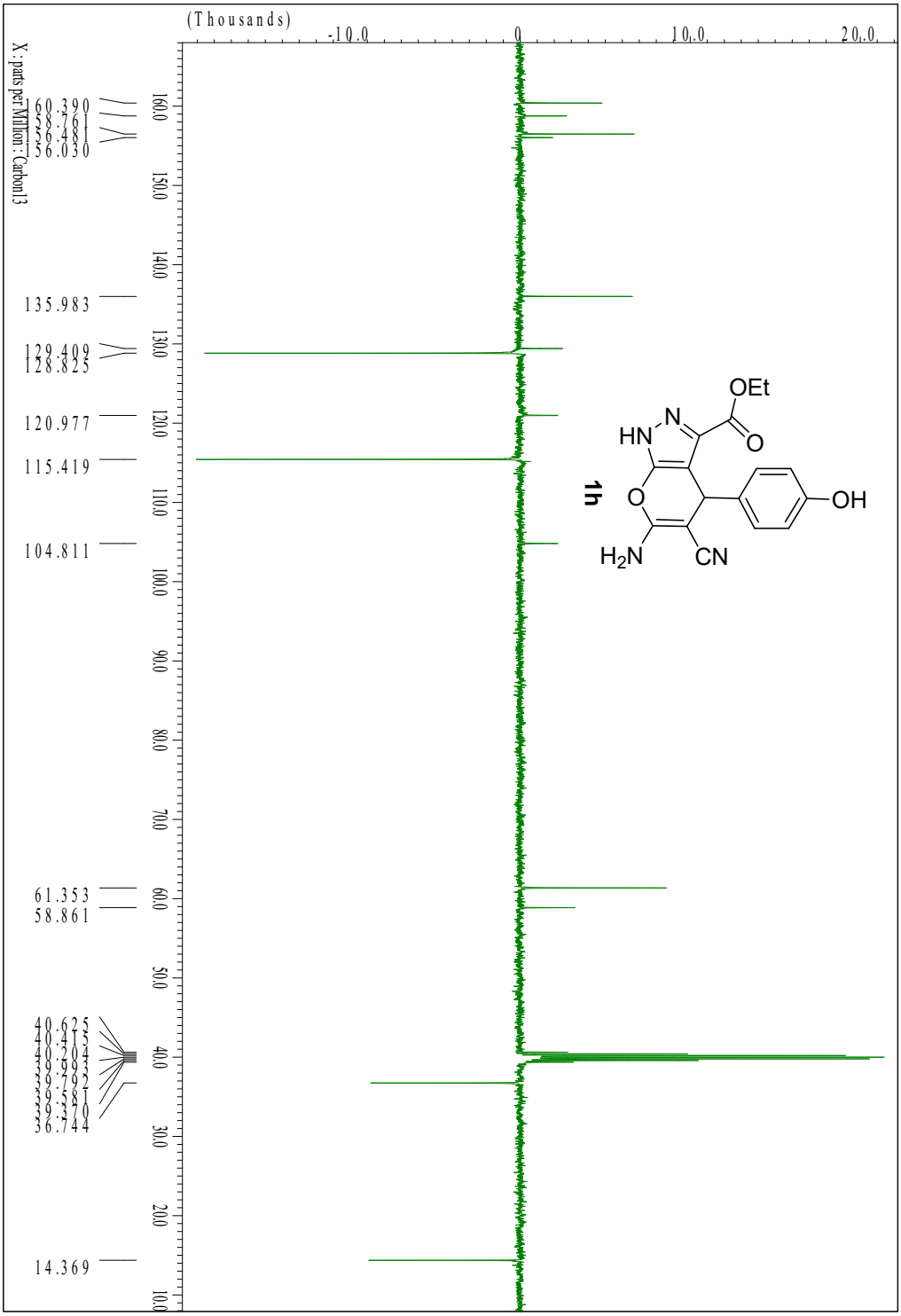

Figure S6. ^{13}C NMR data of compound **1h**

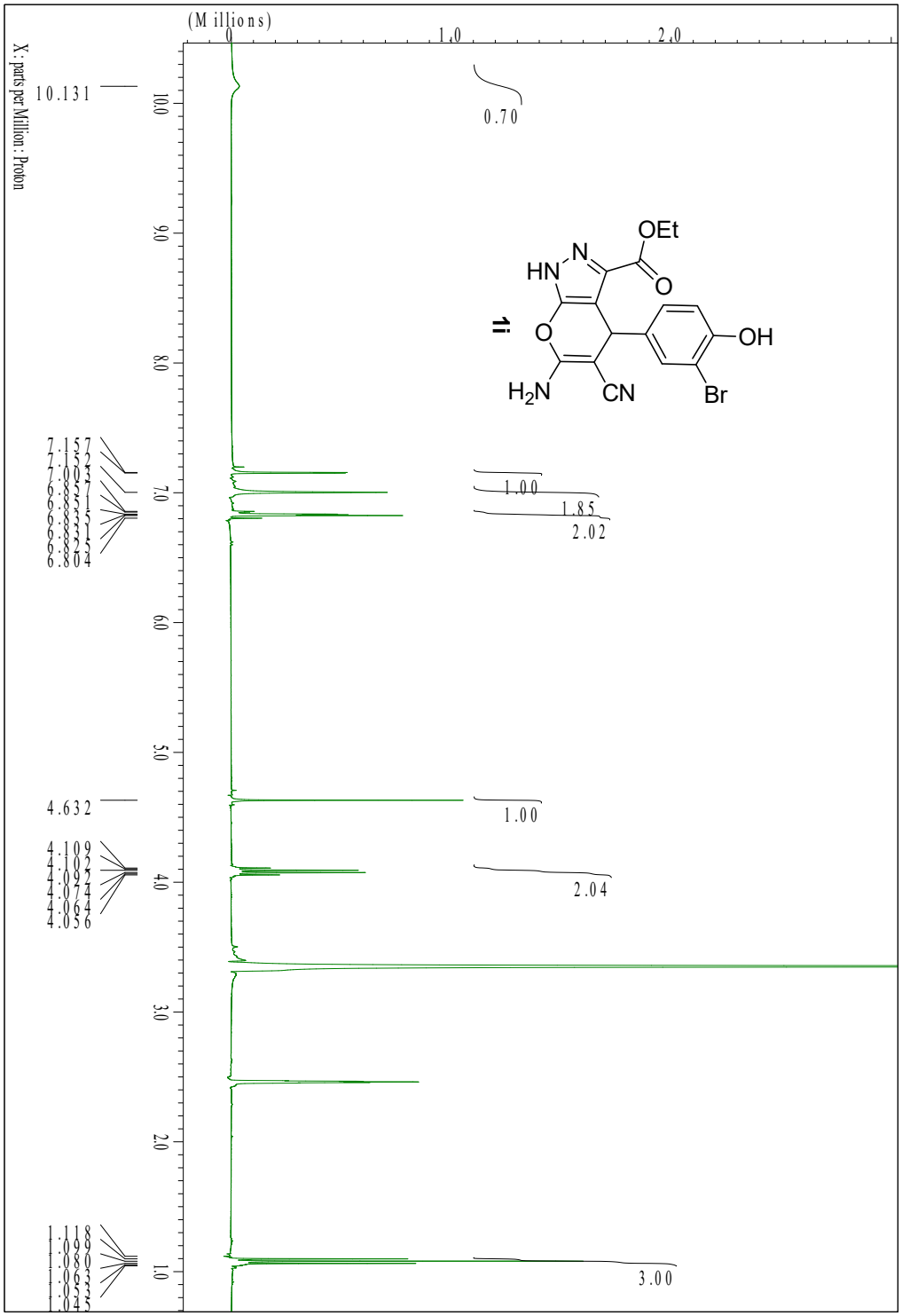

Figure S7. ^{1}H NMR data of compound **1i**

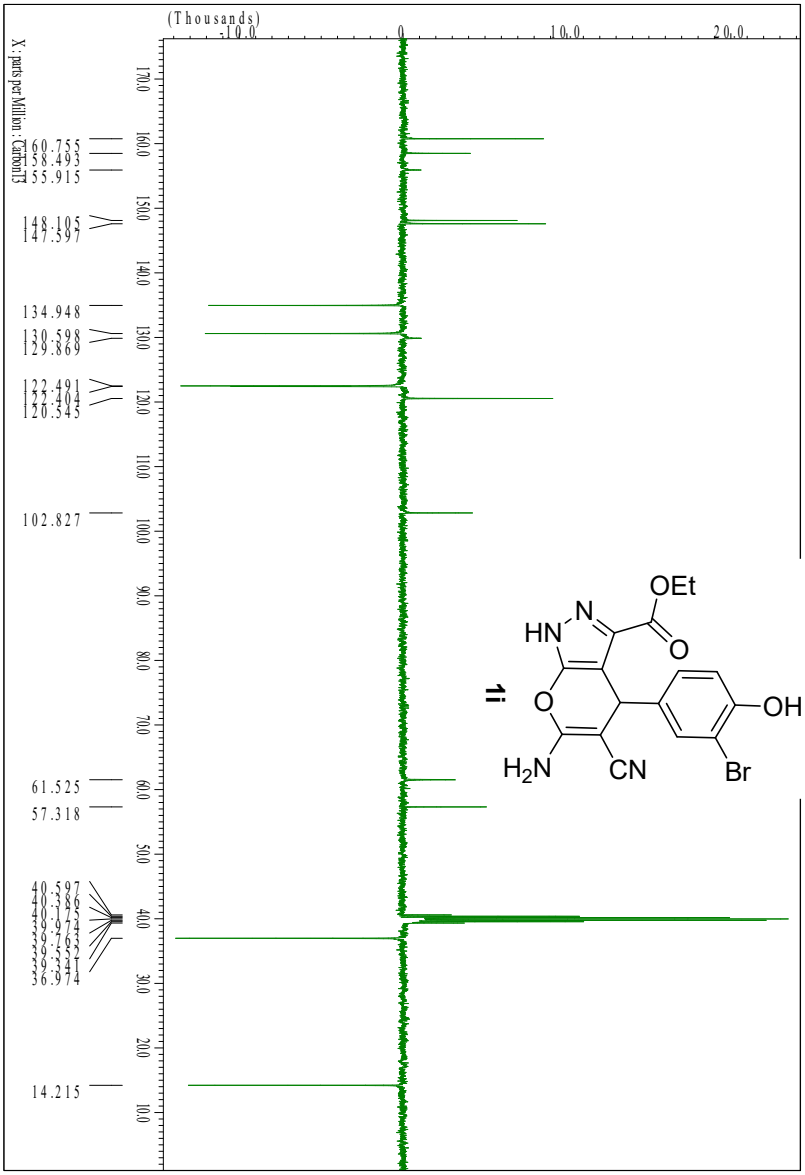

Figure S8. ^{13}C NMR data of compound **1i**

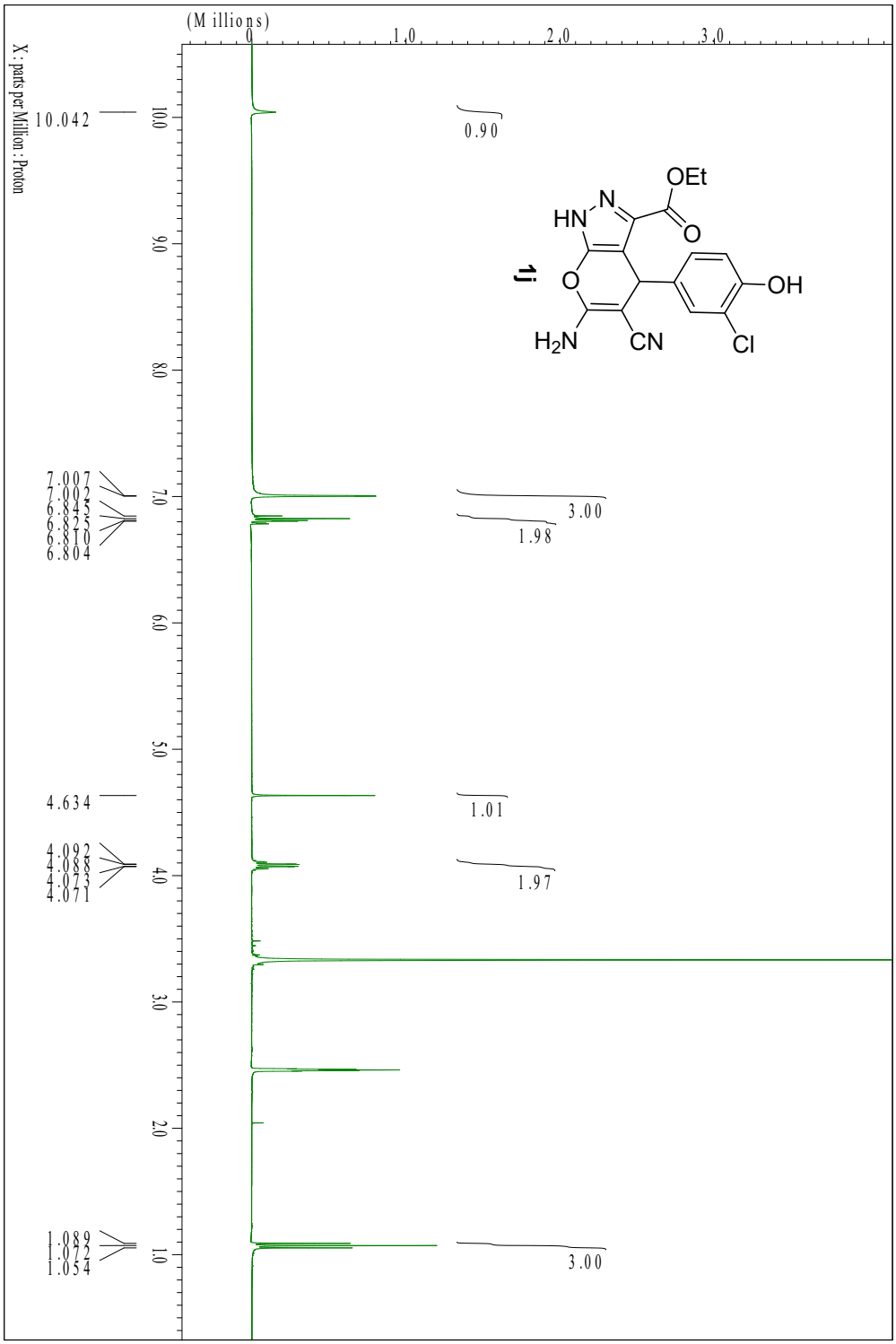

Figure S9. ^{1}H NMR data of compound **1j**

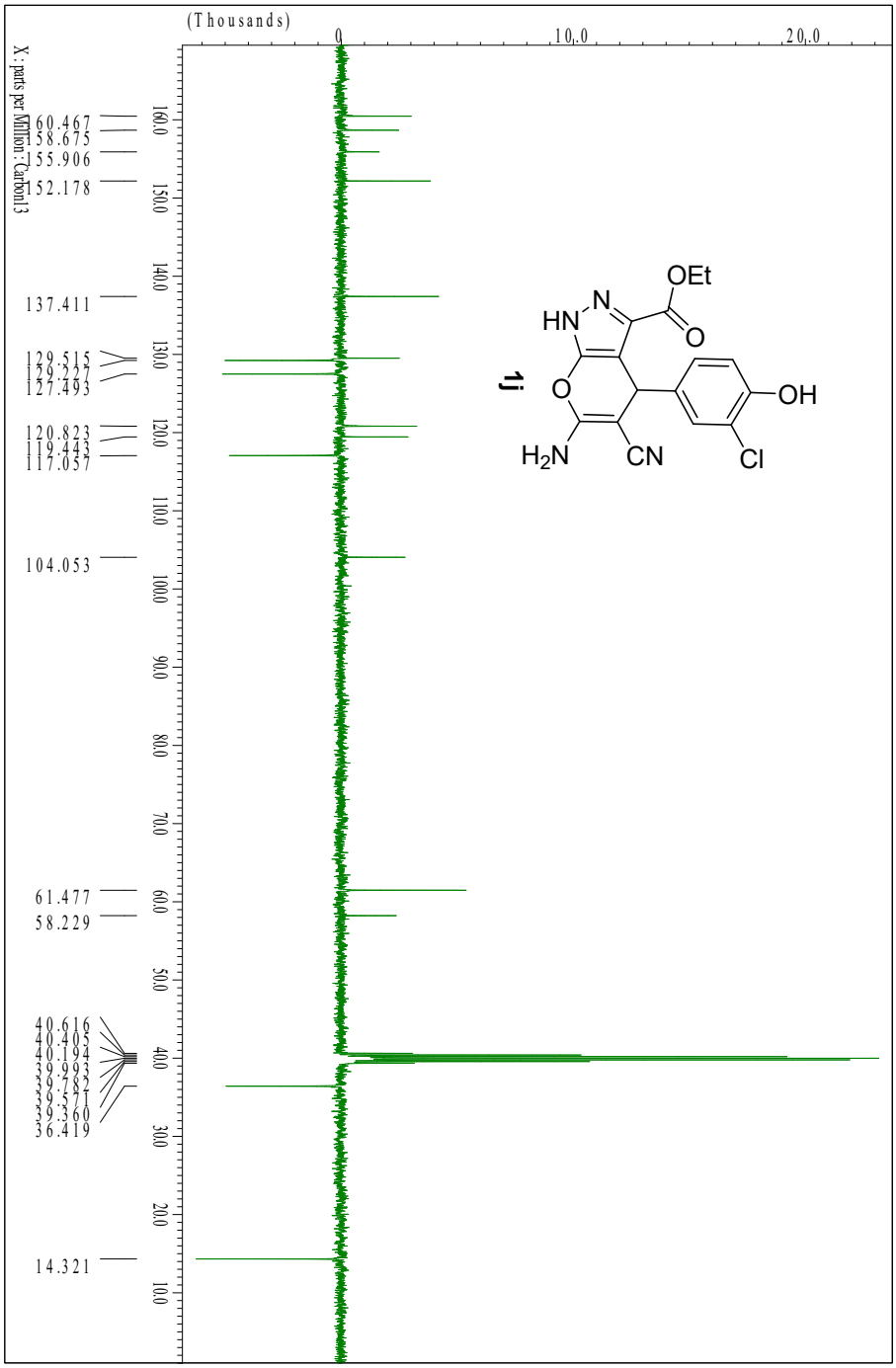

Figure S10. ^{13}C NMR data of compound **1j**

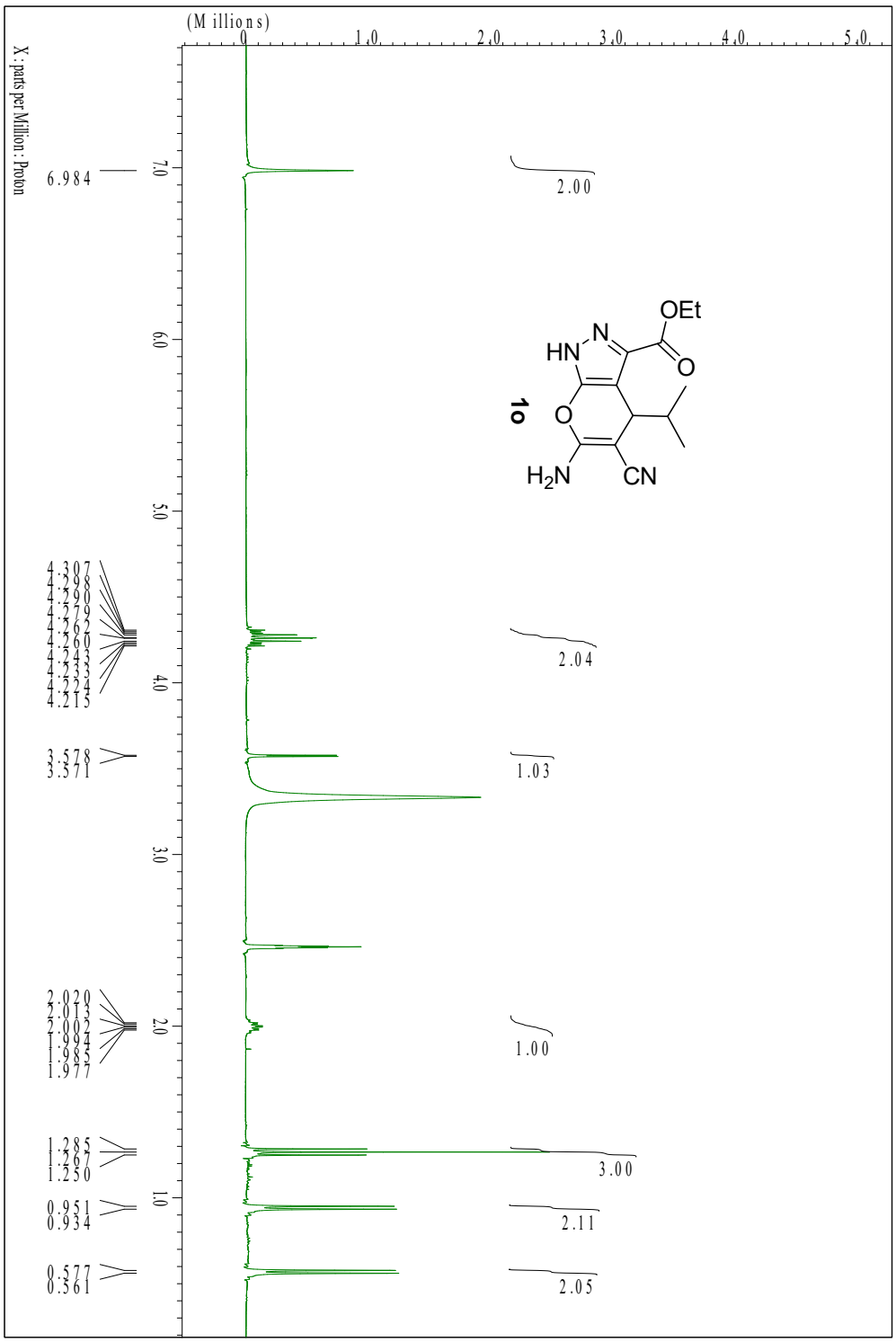

Figure S11. ^{1}H NMR data of compound **1o**

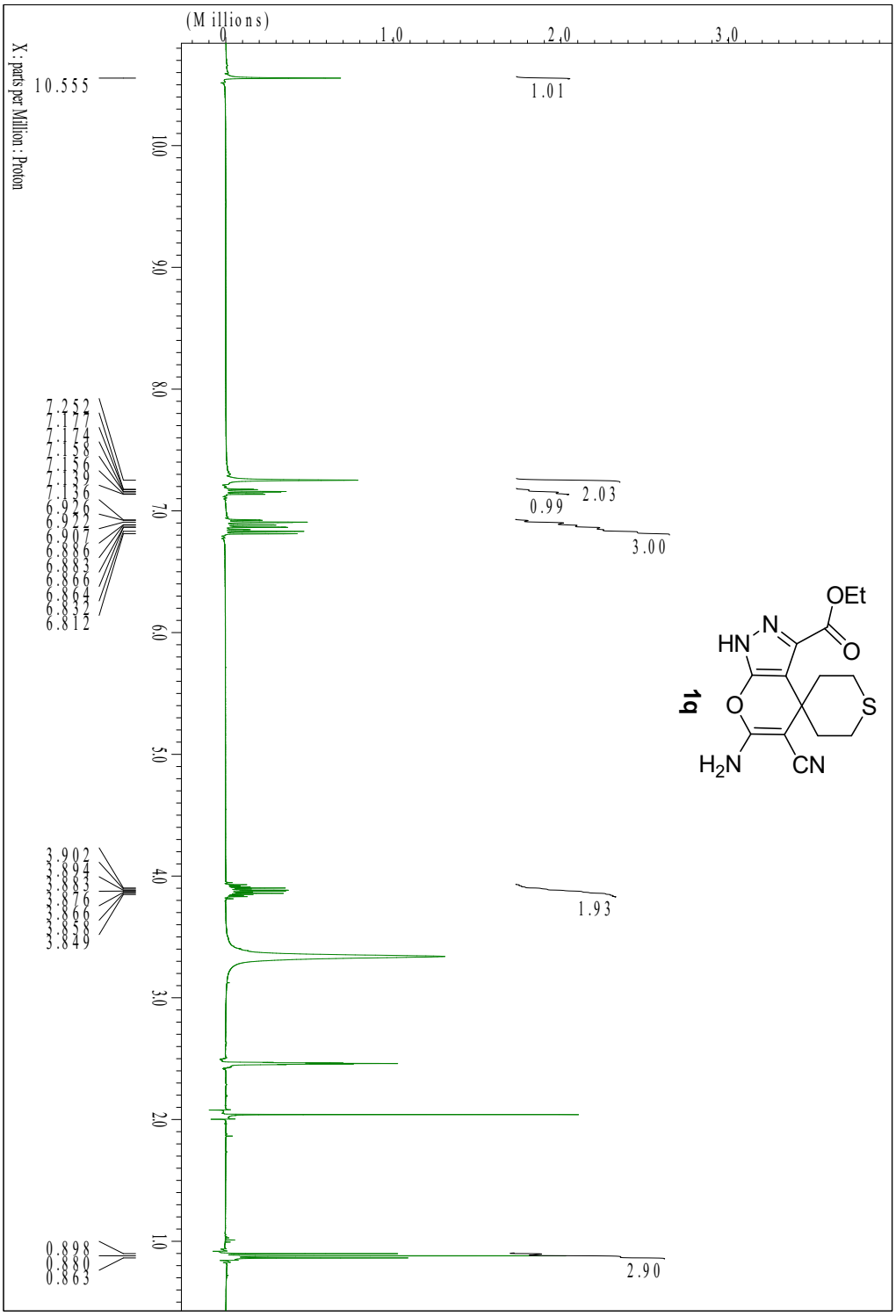

Figure S12. ^{1}H NMR data of compound **1q**

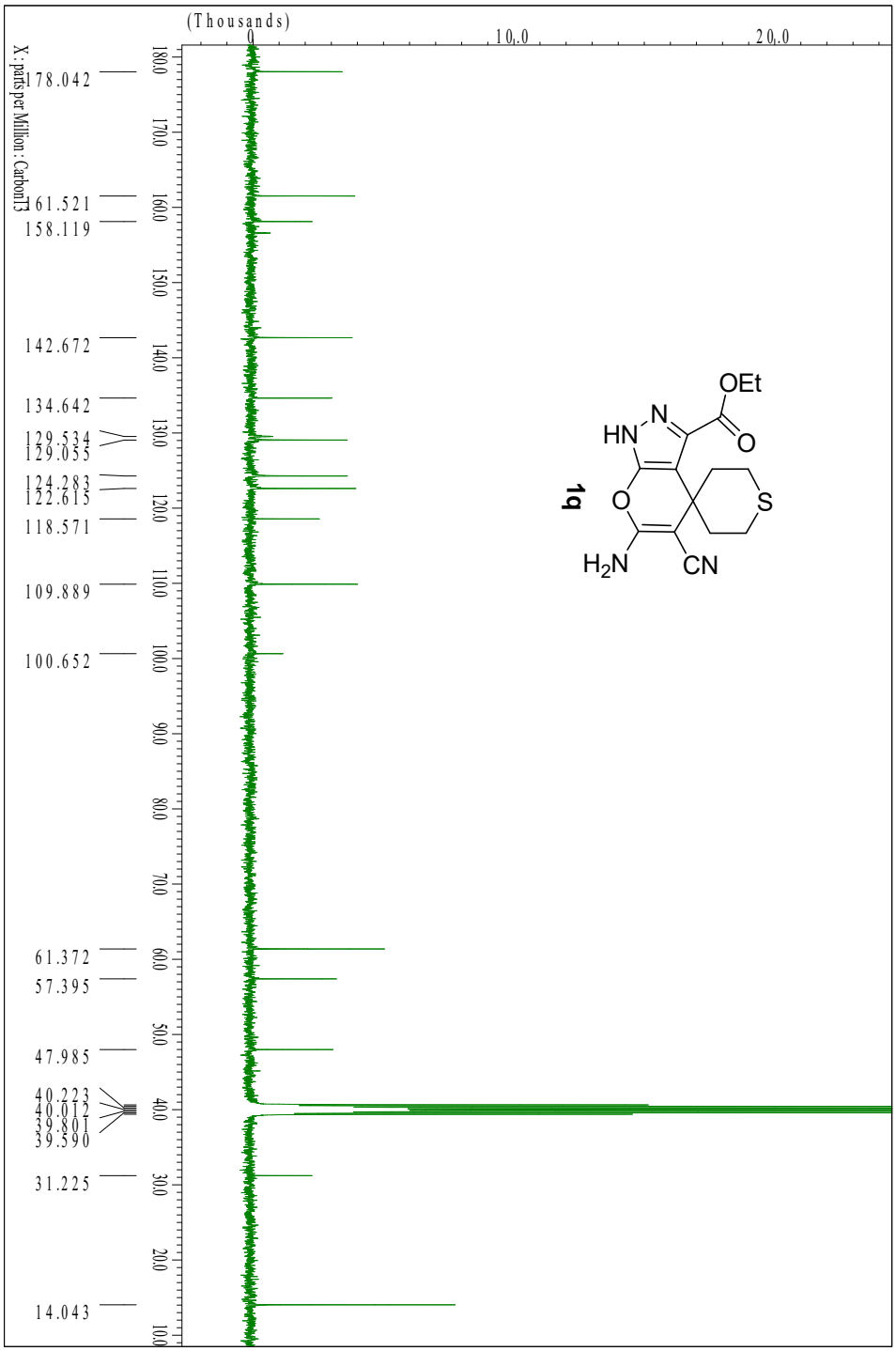

Figure S13. ^{13}C NMR data of compound **1q**

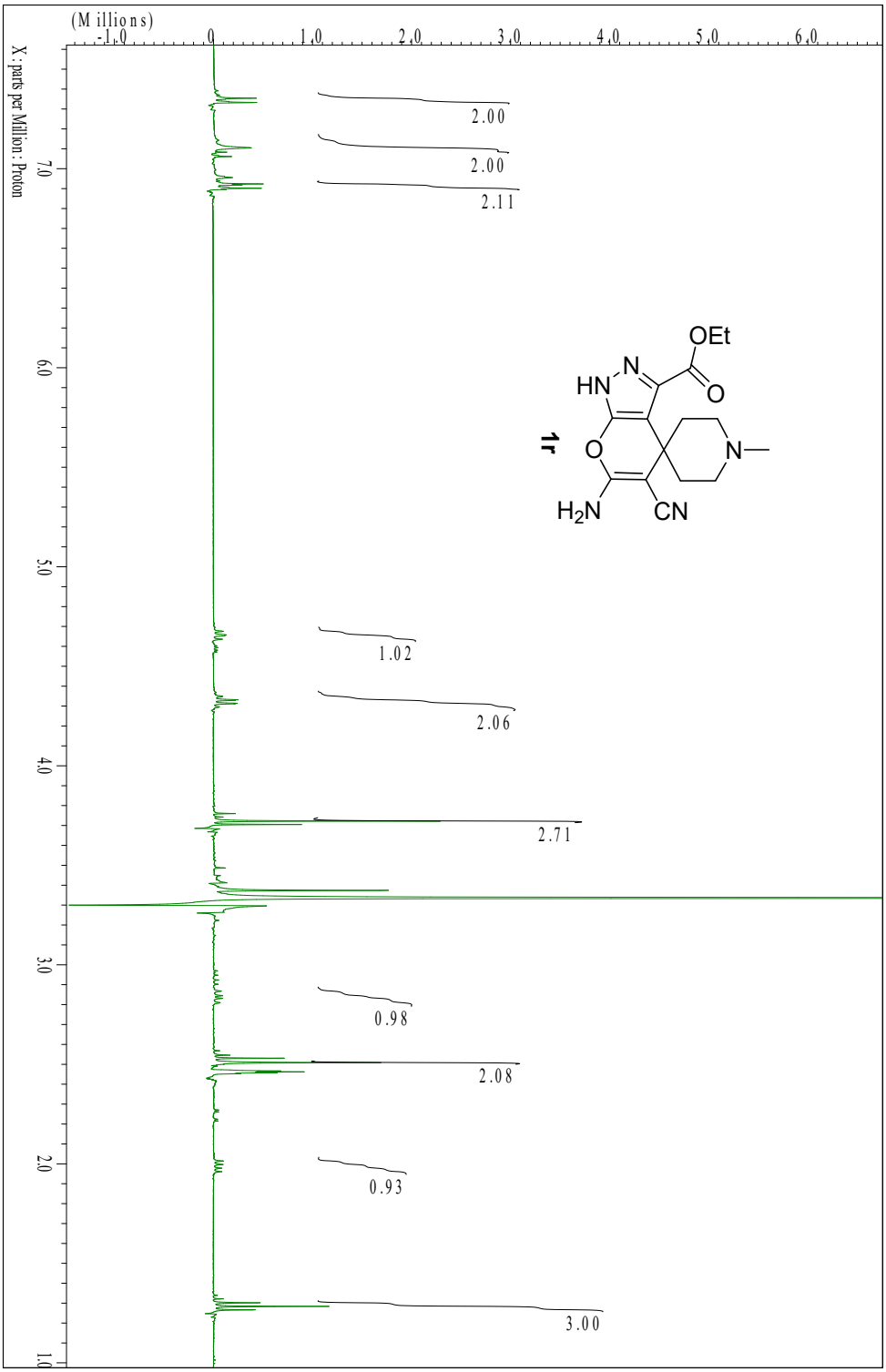

Figure S14. ^{1}H NMR data of compound **1r**

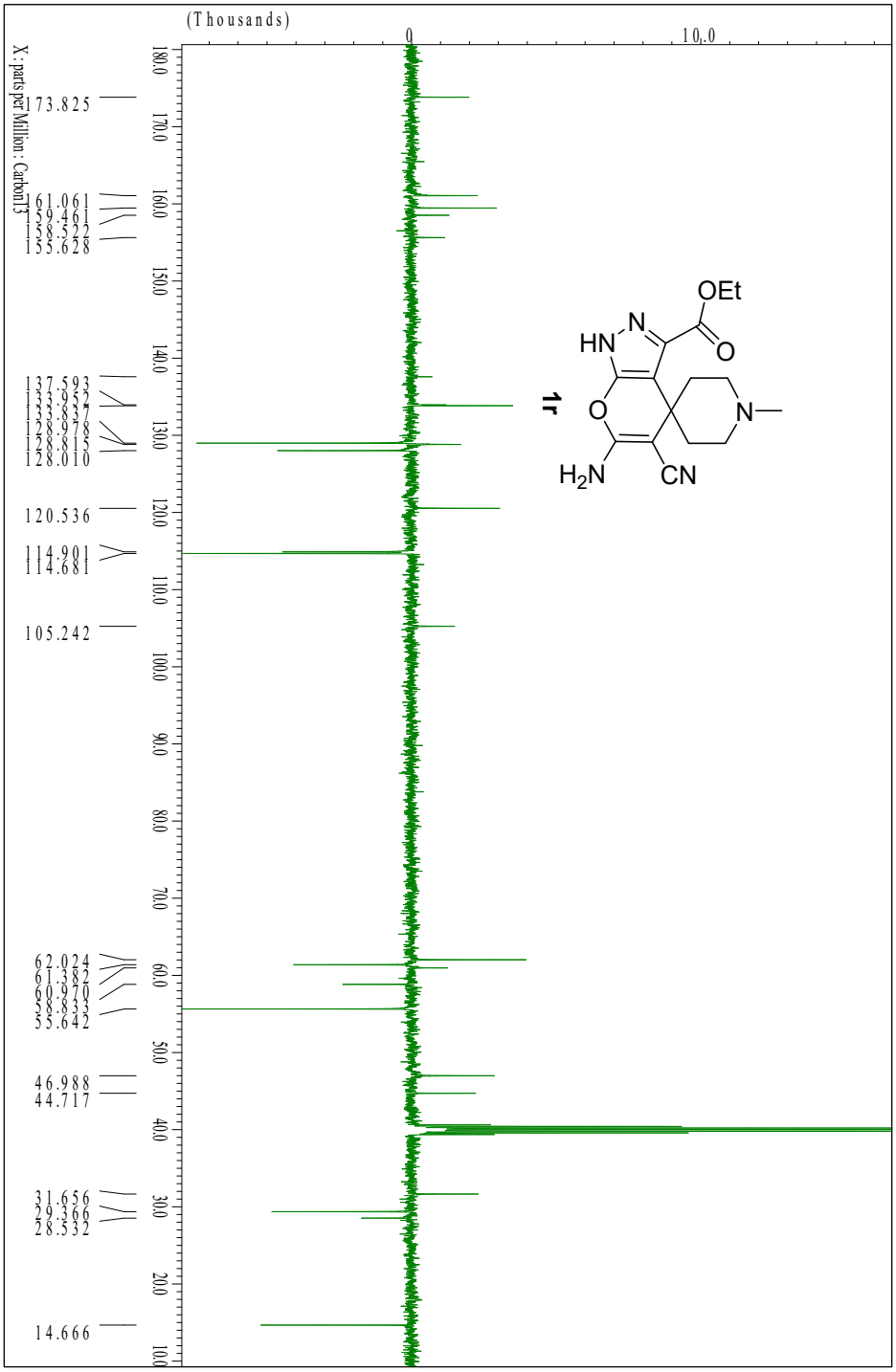

Figure S15. ^{13}C NMR data of compound **1r**

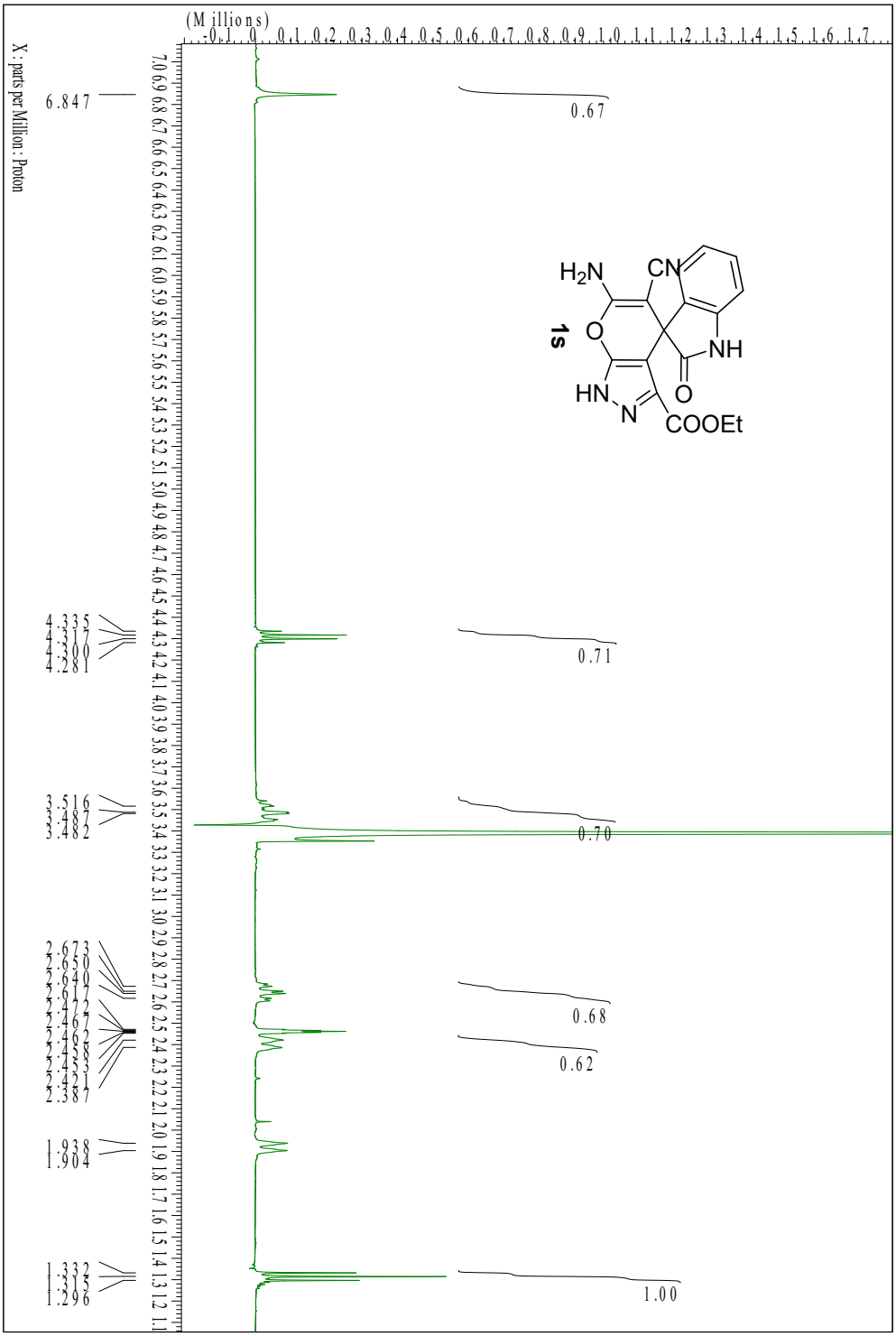

Figure S16. ^{1}H NMR data of compound **1s**

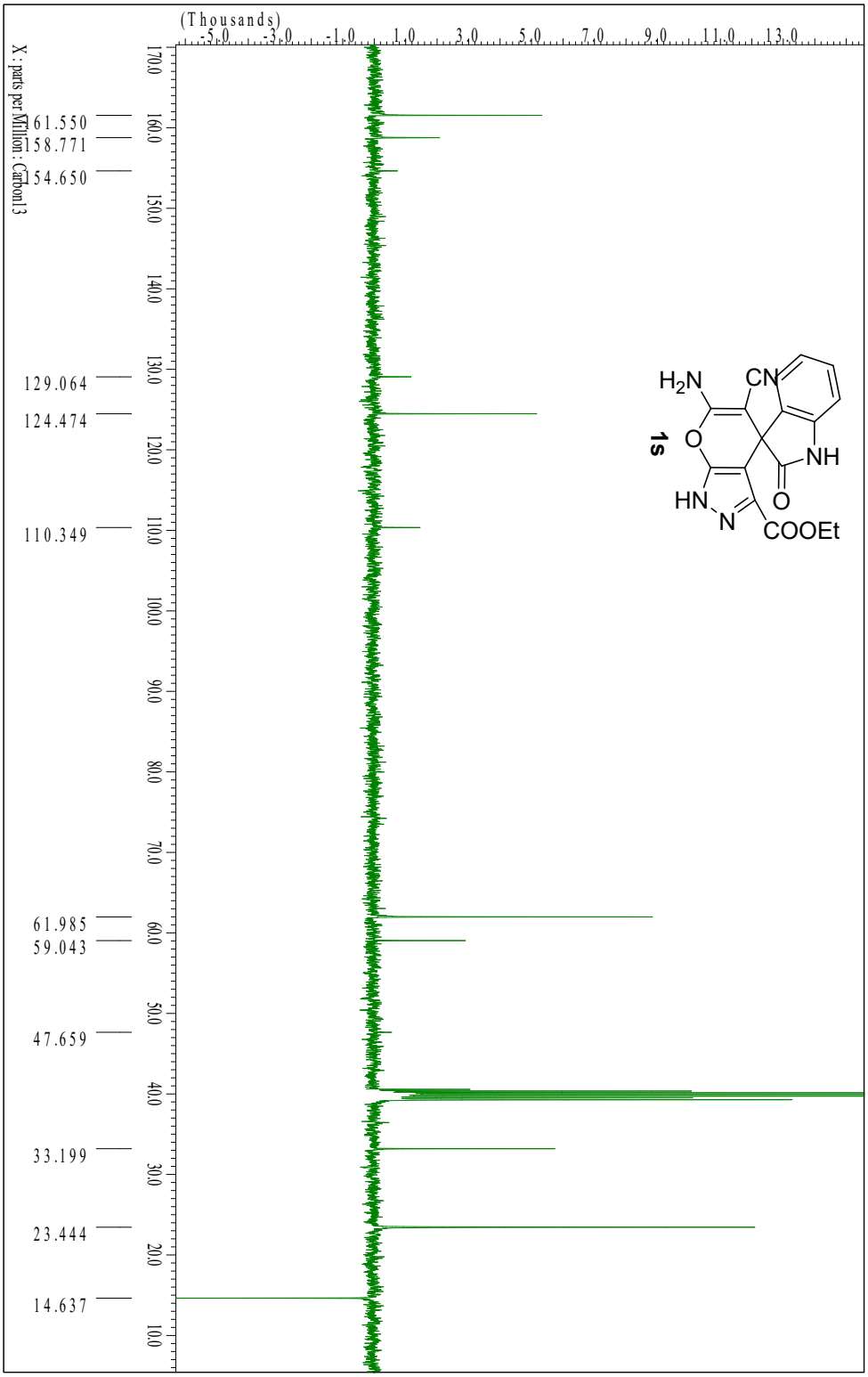

Figure S17. ^{13}C NMR data of compound **1s**