

Highly stereoselective construction of adjacent tetrasubstituted carbon stereogenic centres via organocatalytic Mukaiyama-aldol reaction of monofluorinated silyl enol ethers to isatins

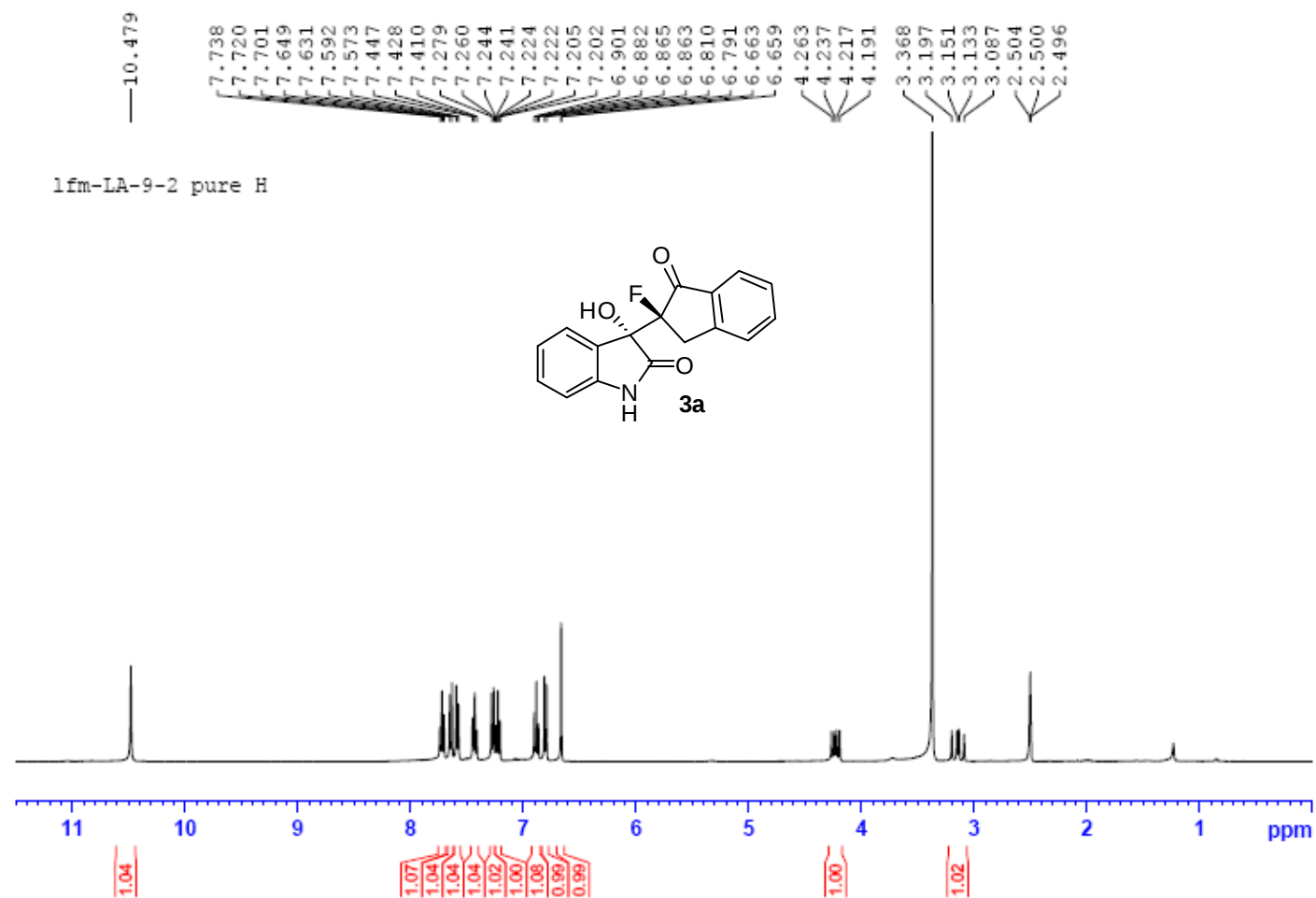
Yun-Lin Liu, Fu-Min Liao, Yan-Fei Niu, Xiao-Li Zhao and Jian Zhou*

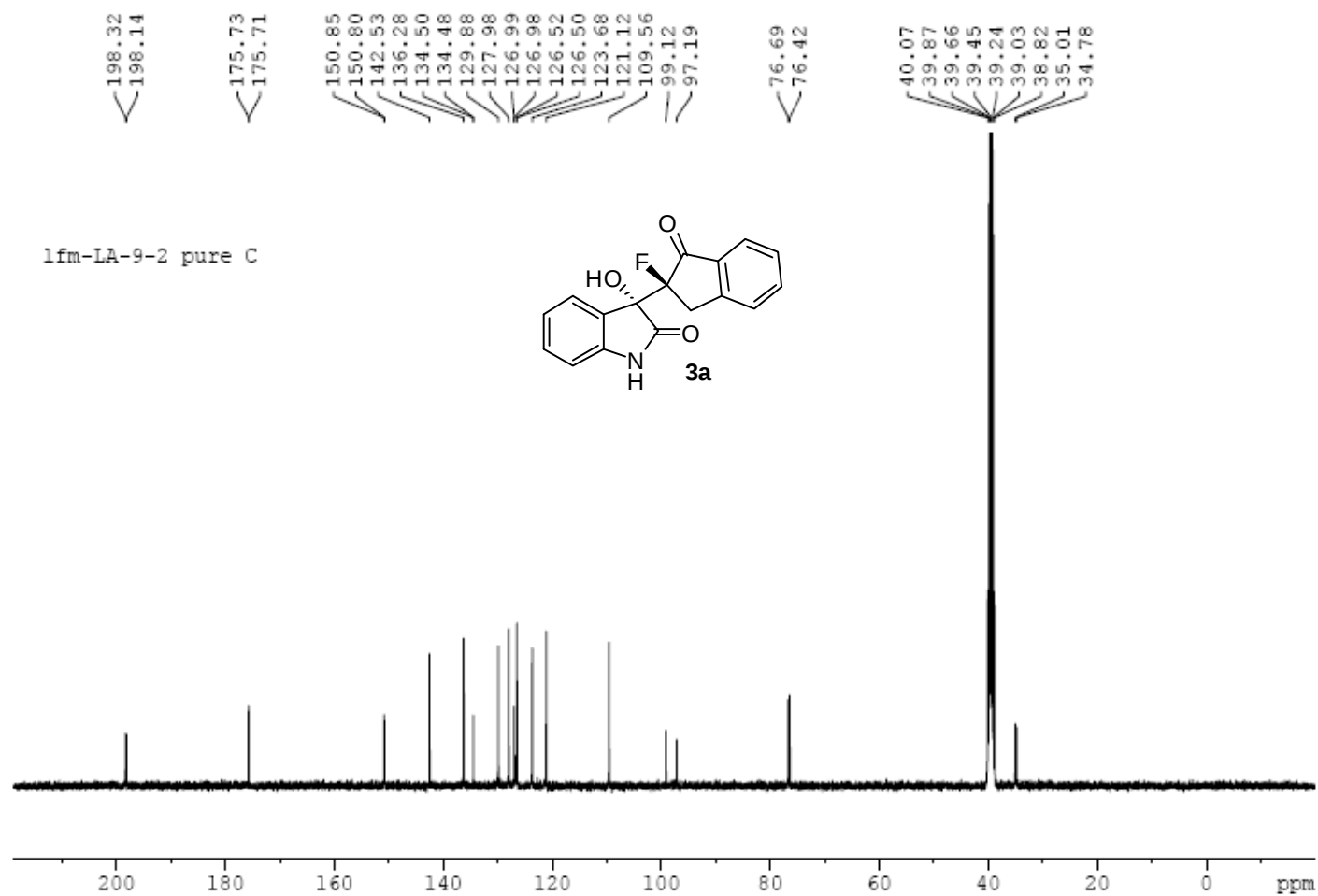
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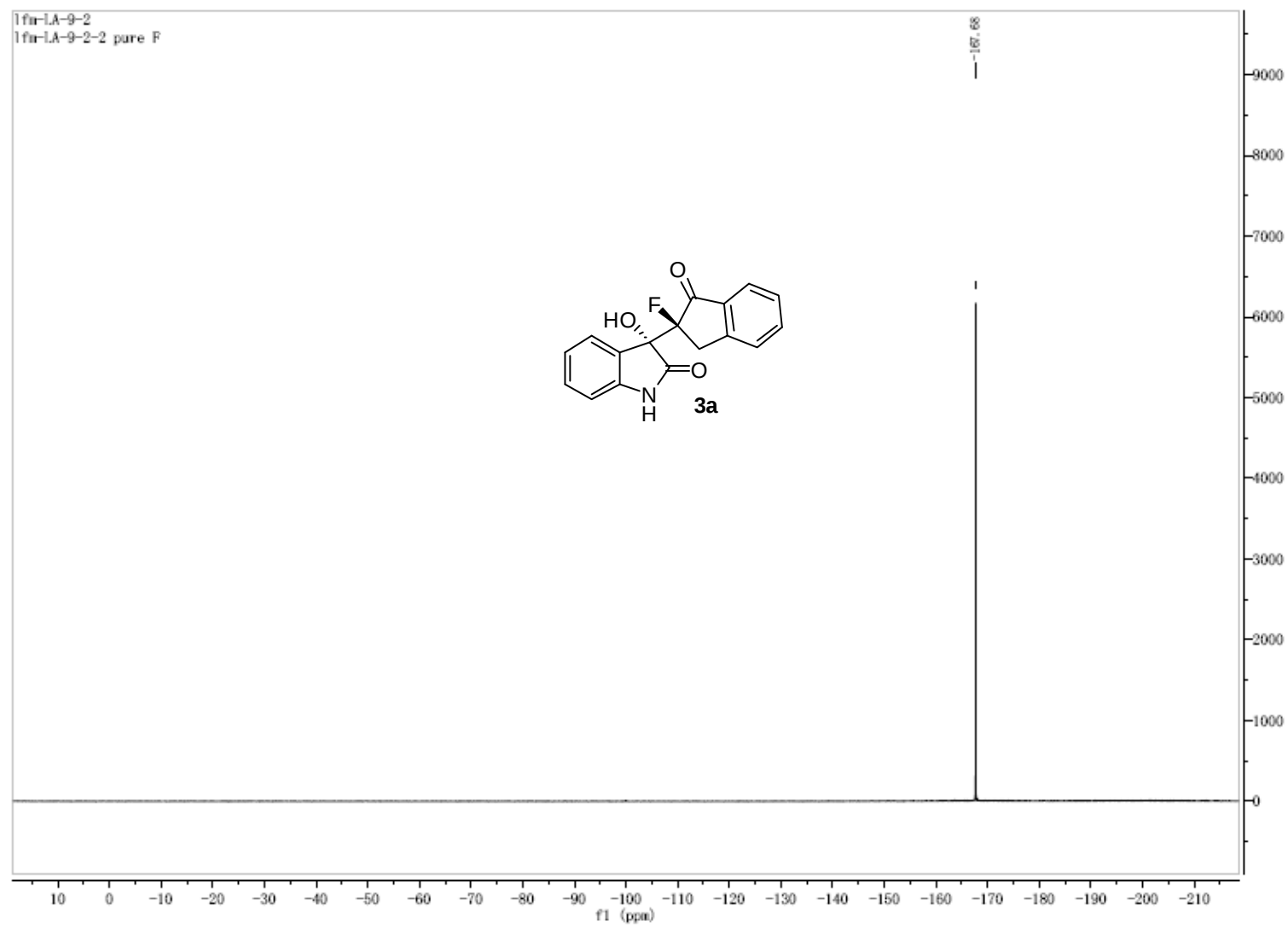
Supporting Information (Part II)

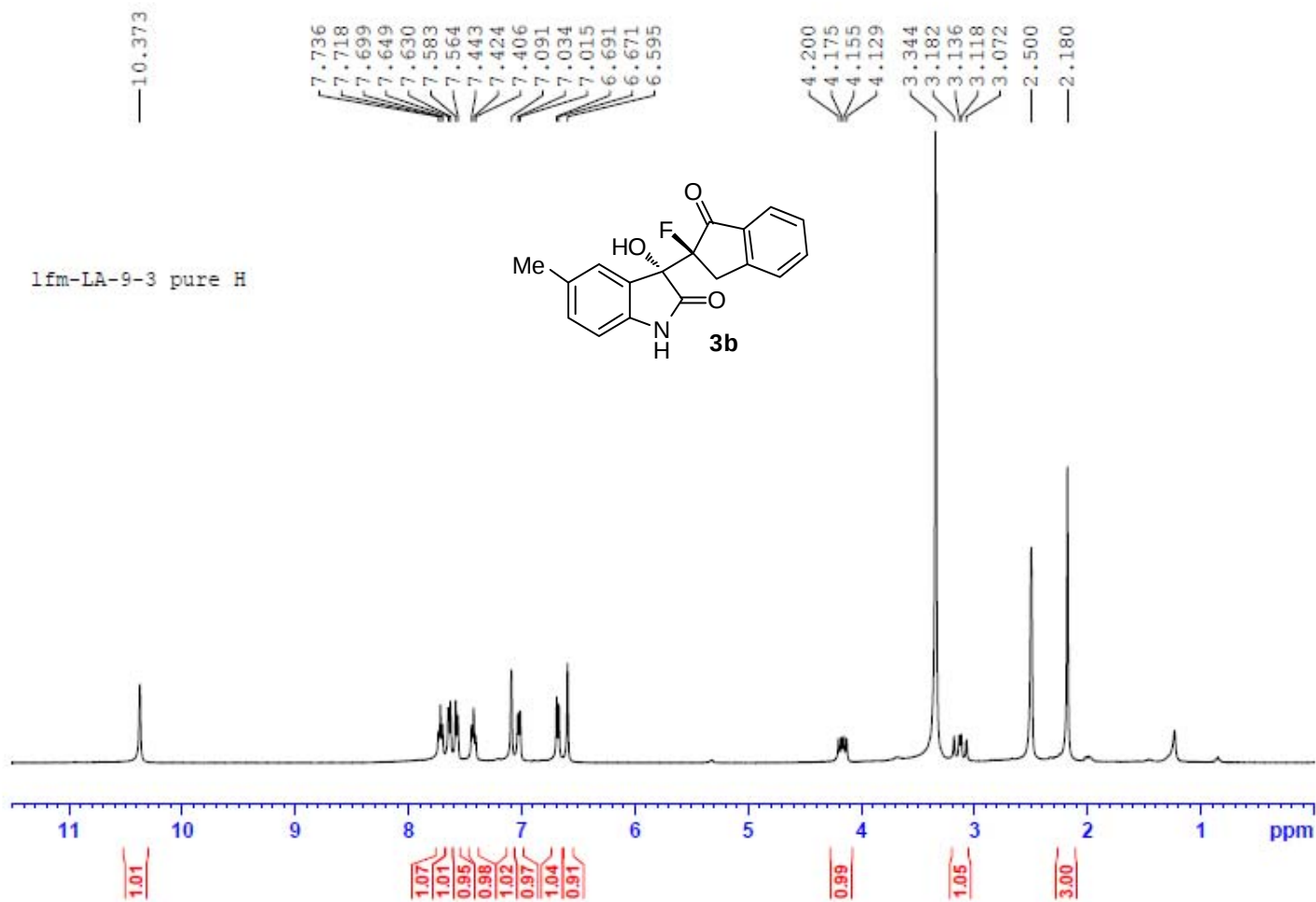
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¹H, ¹³C NMR and ¹⁹F NMR spectra of products 3a-o, 9, C3 and 12	2-56

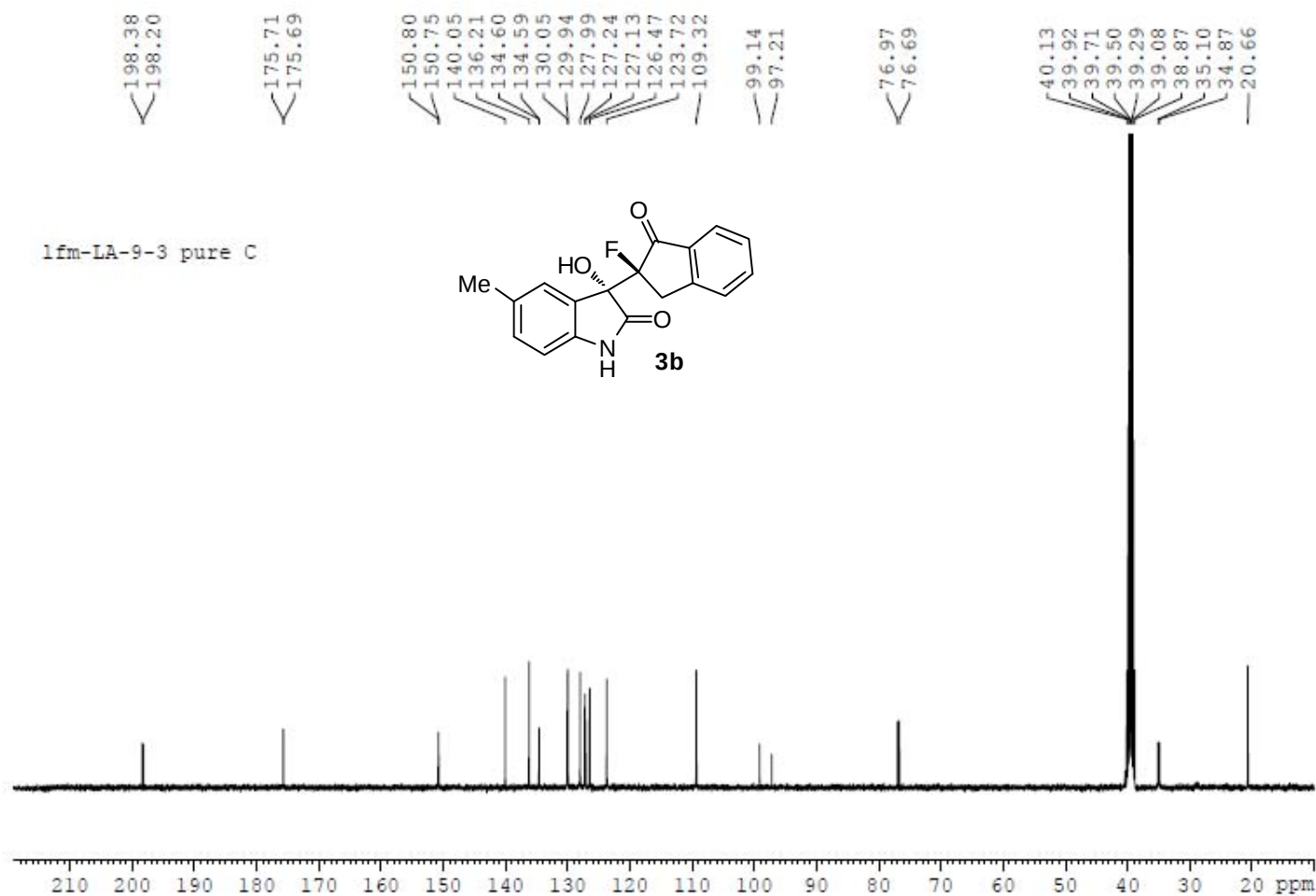
¹H, ¹³C NMR and ¹⁹F NMR spectra were recorded on 400 MHz. Chemical shifts are reported in ppm from CDCl₃, (CD₃)₂SO with the solvent resonance as the internal standard. The following abbreviations were used to designate chemical shift multiplicities: s = singlet, d = doublet, t = triplet, q = quartet, h = heptet, m = multiplet, br = broad. Coupling constants, *J*, are reported in Hertz.

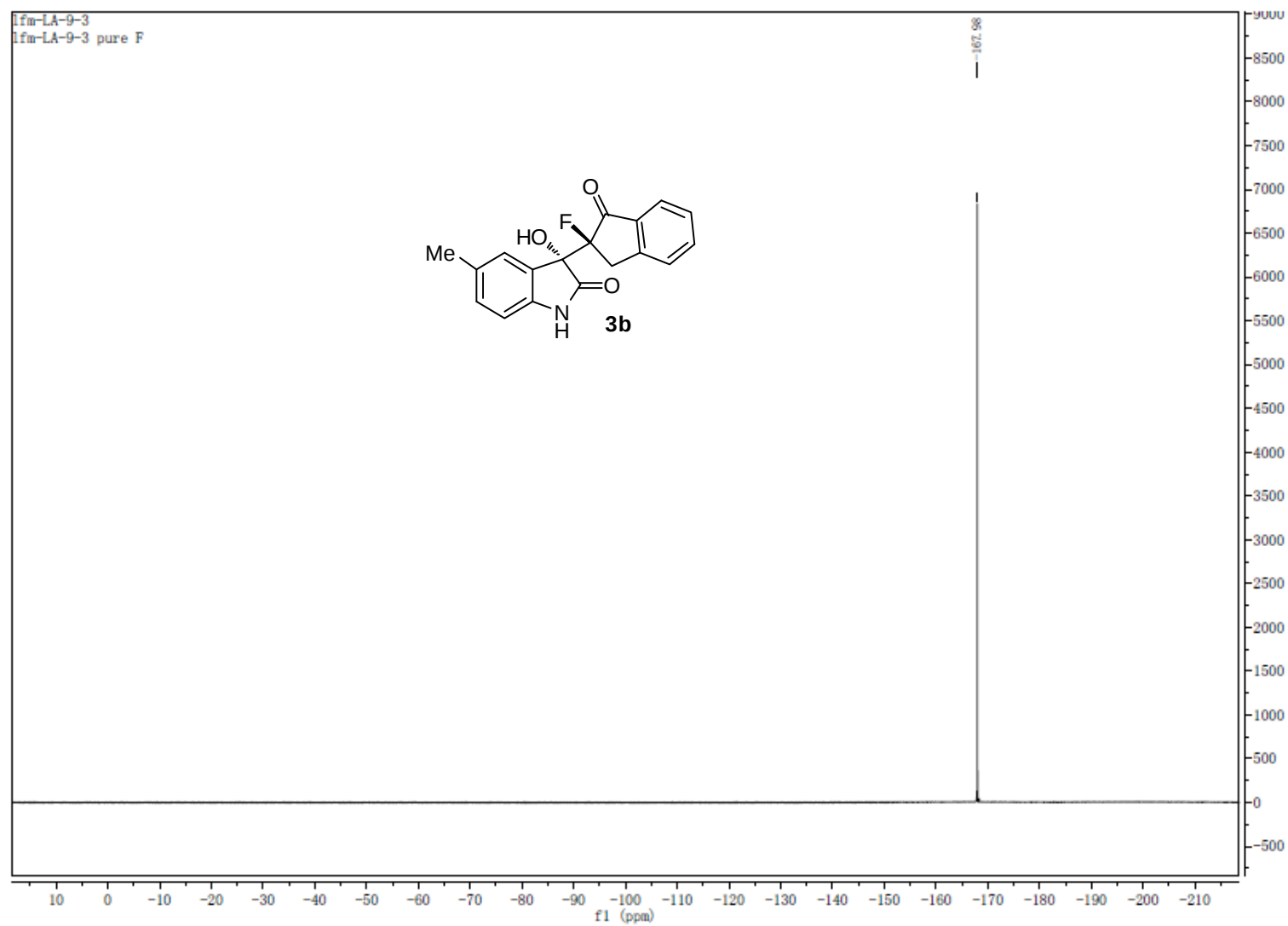


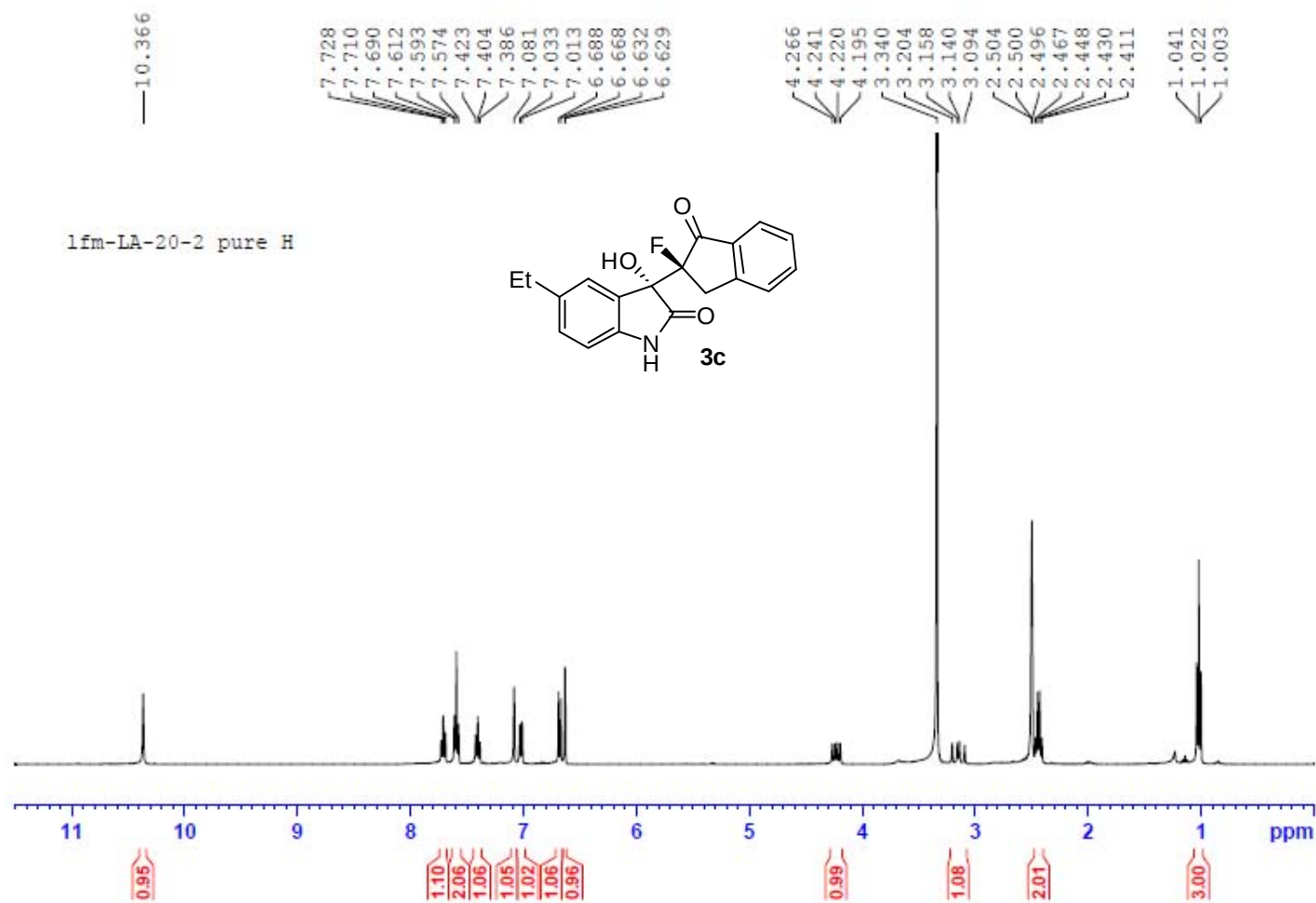


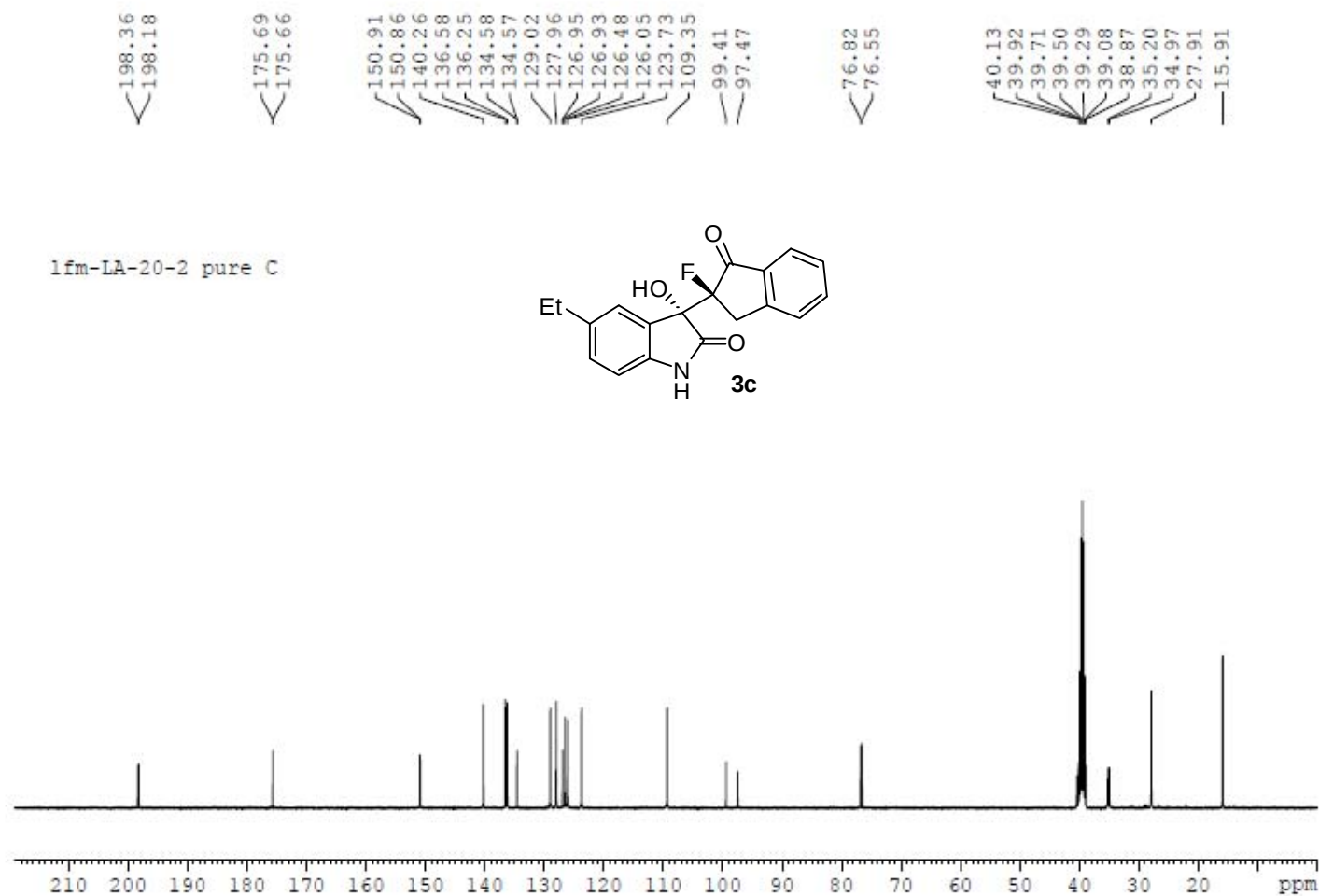


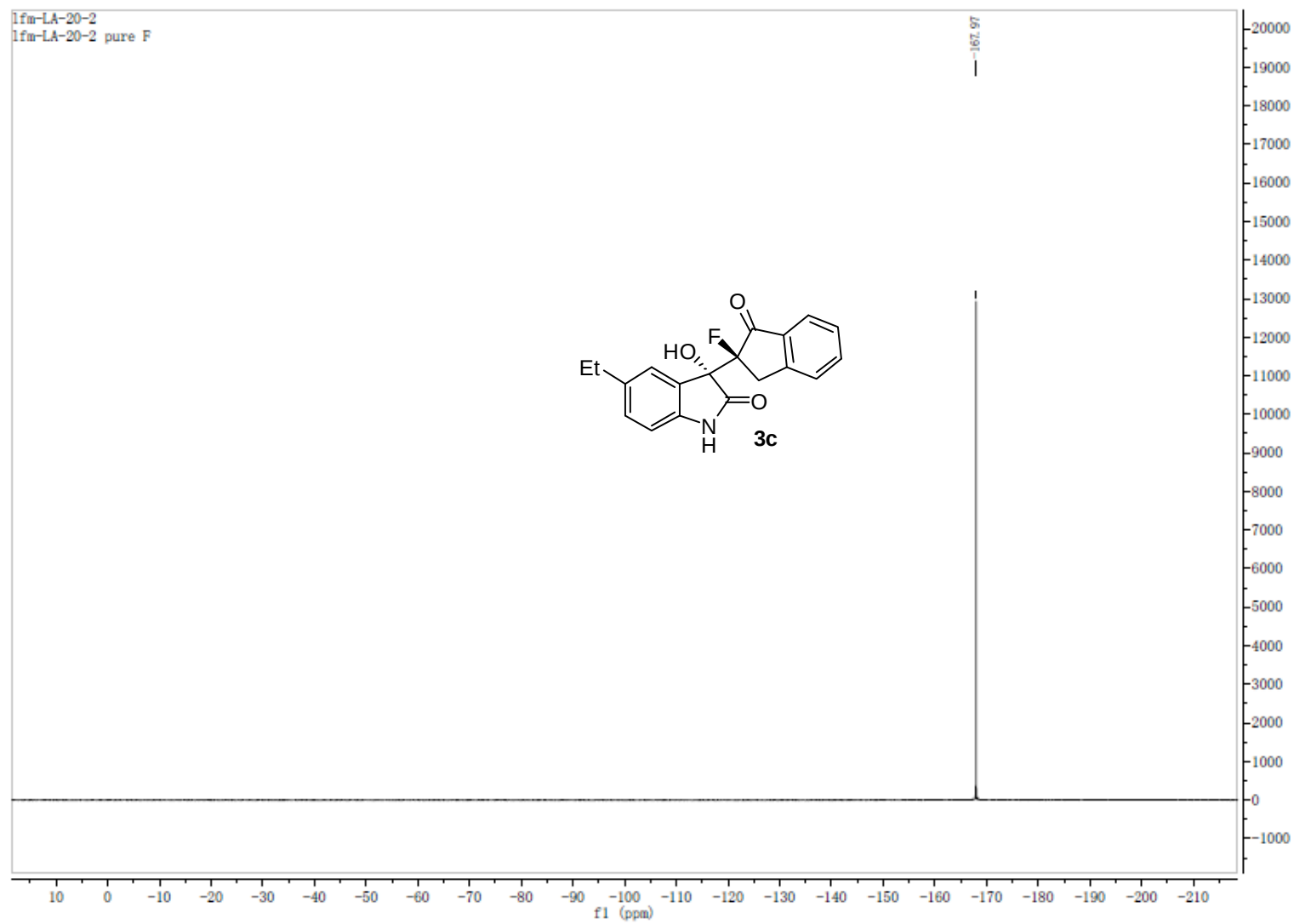


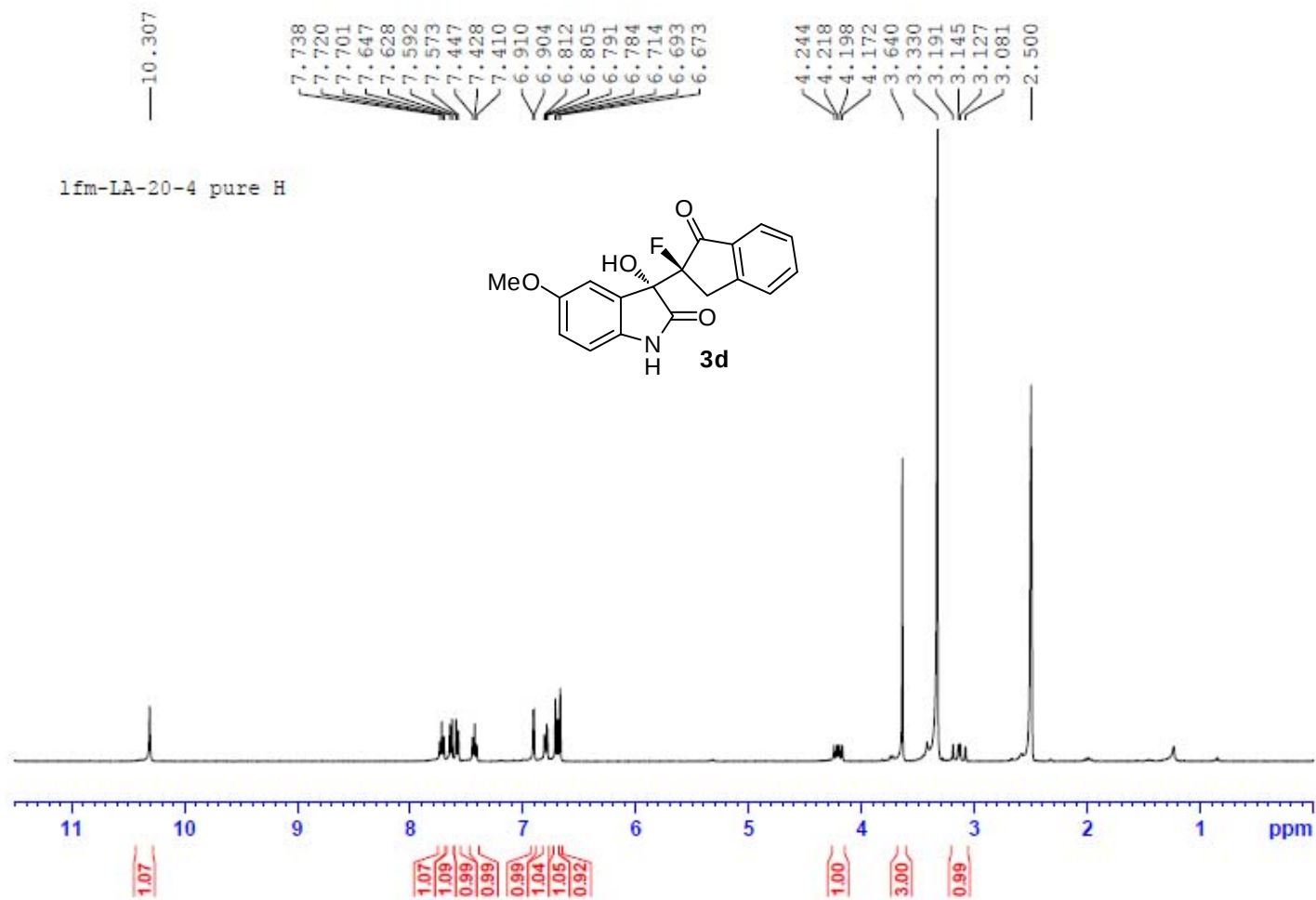


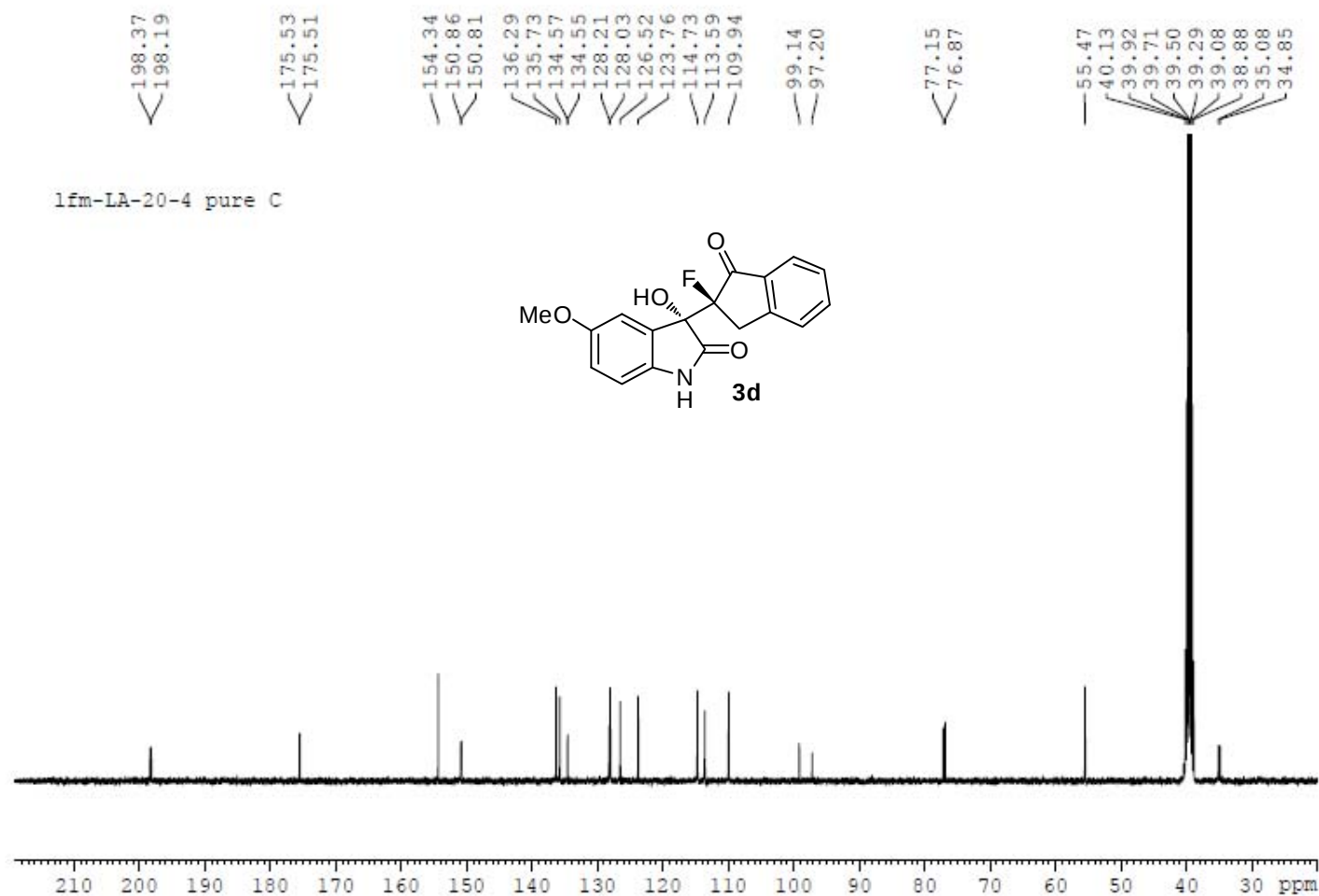




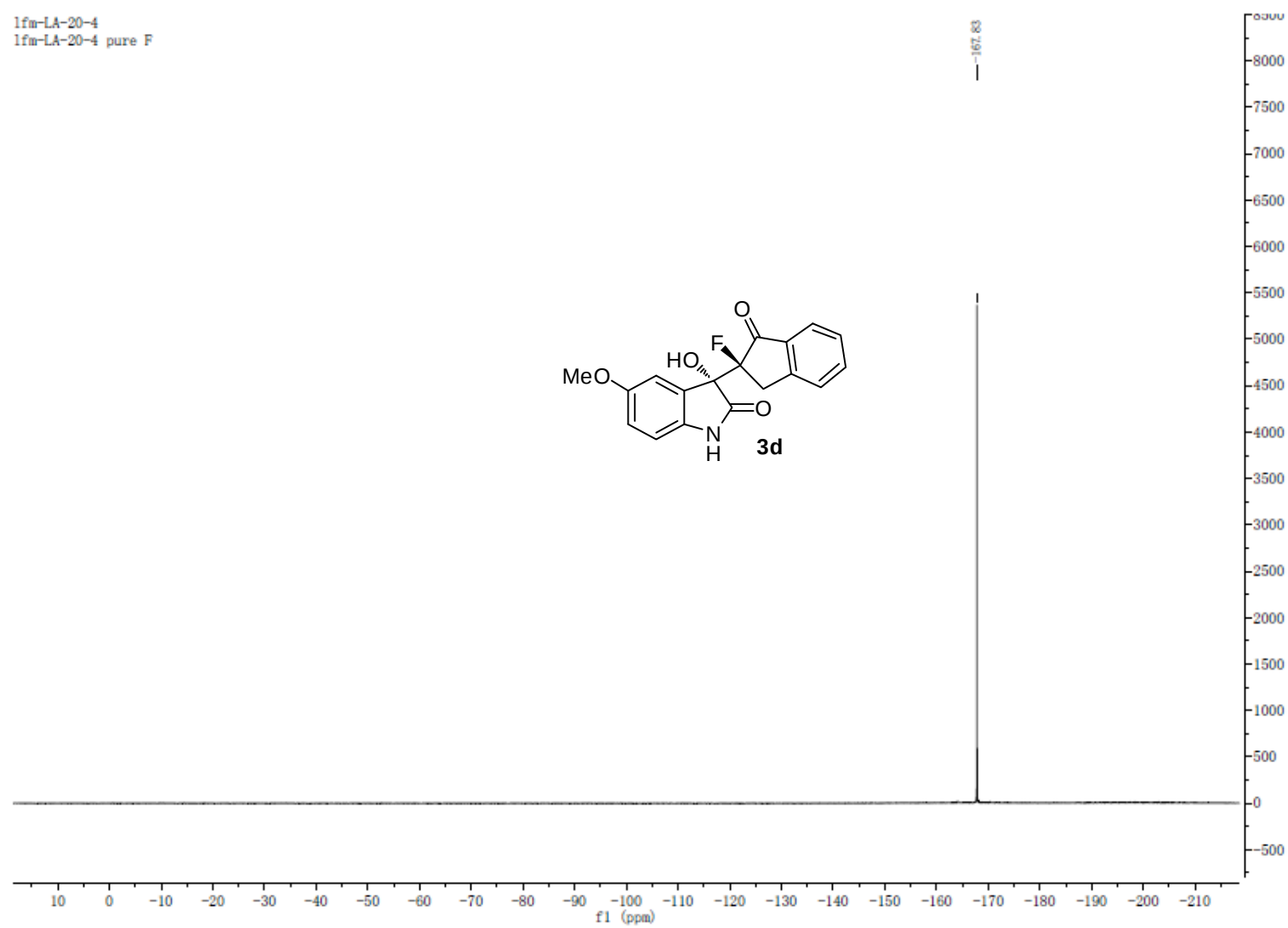


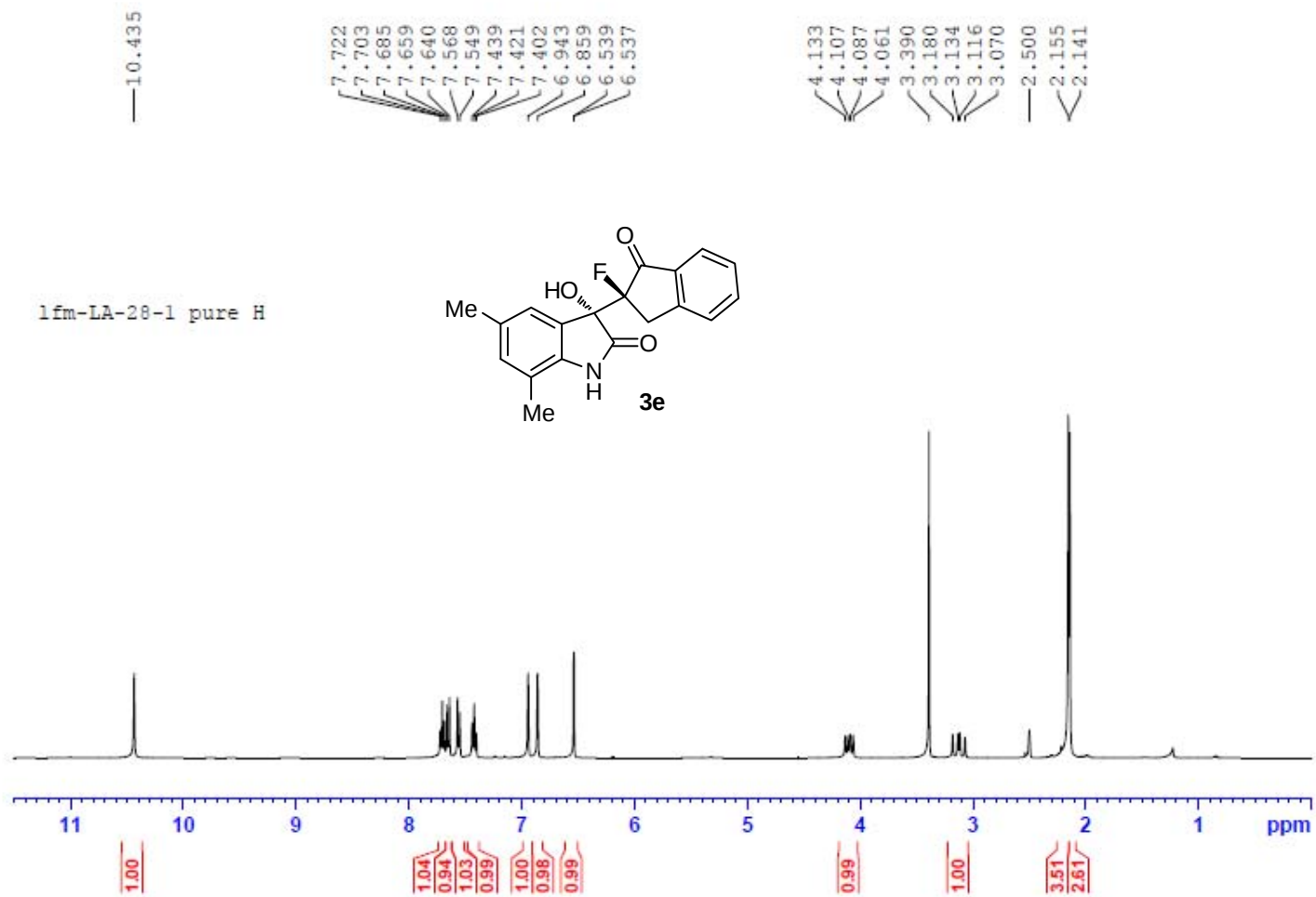


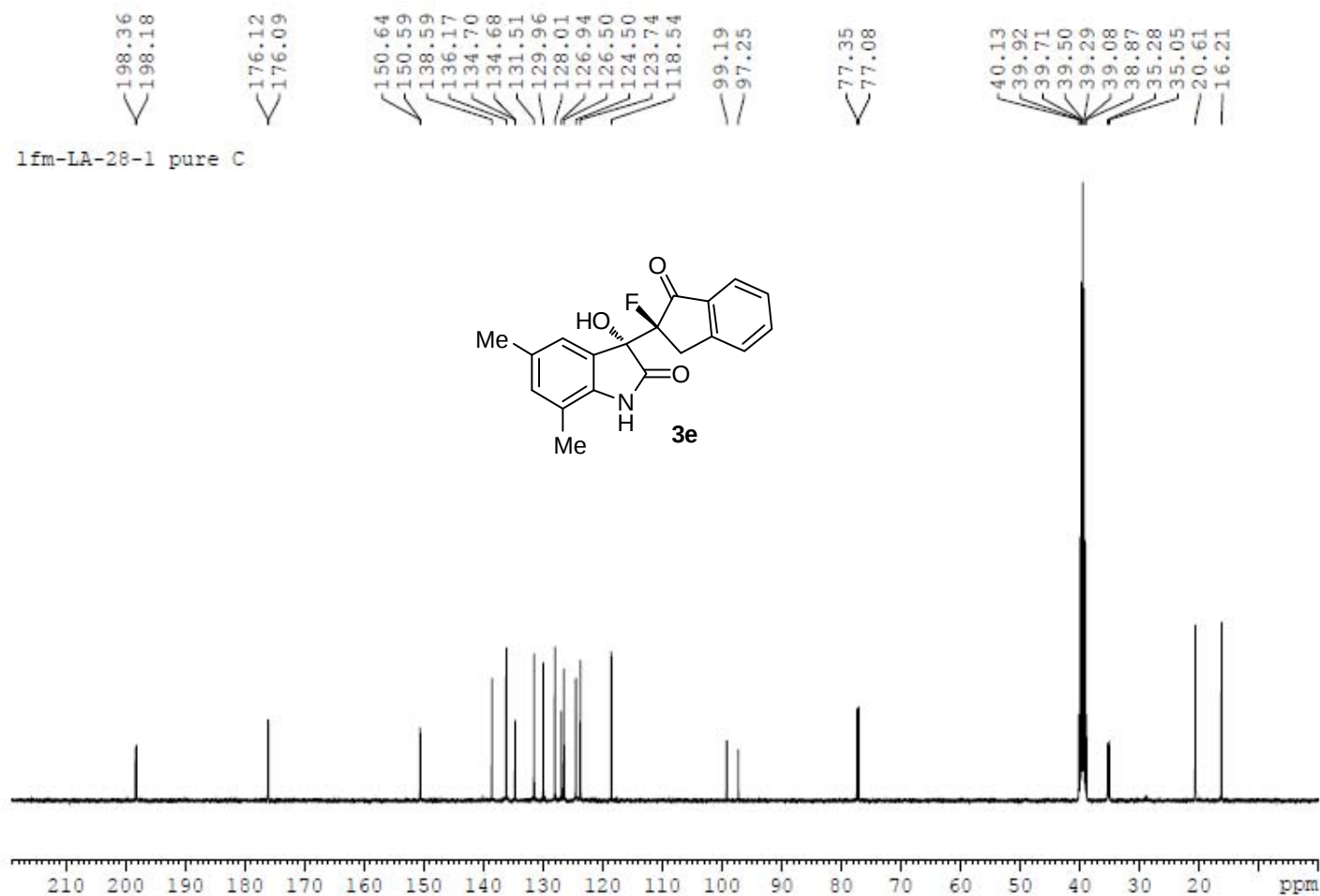


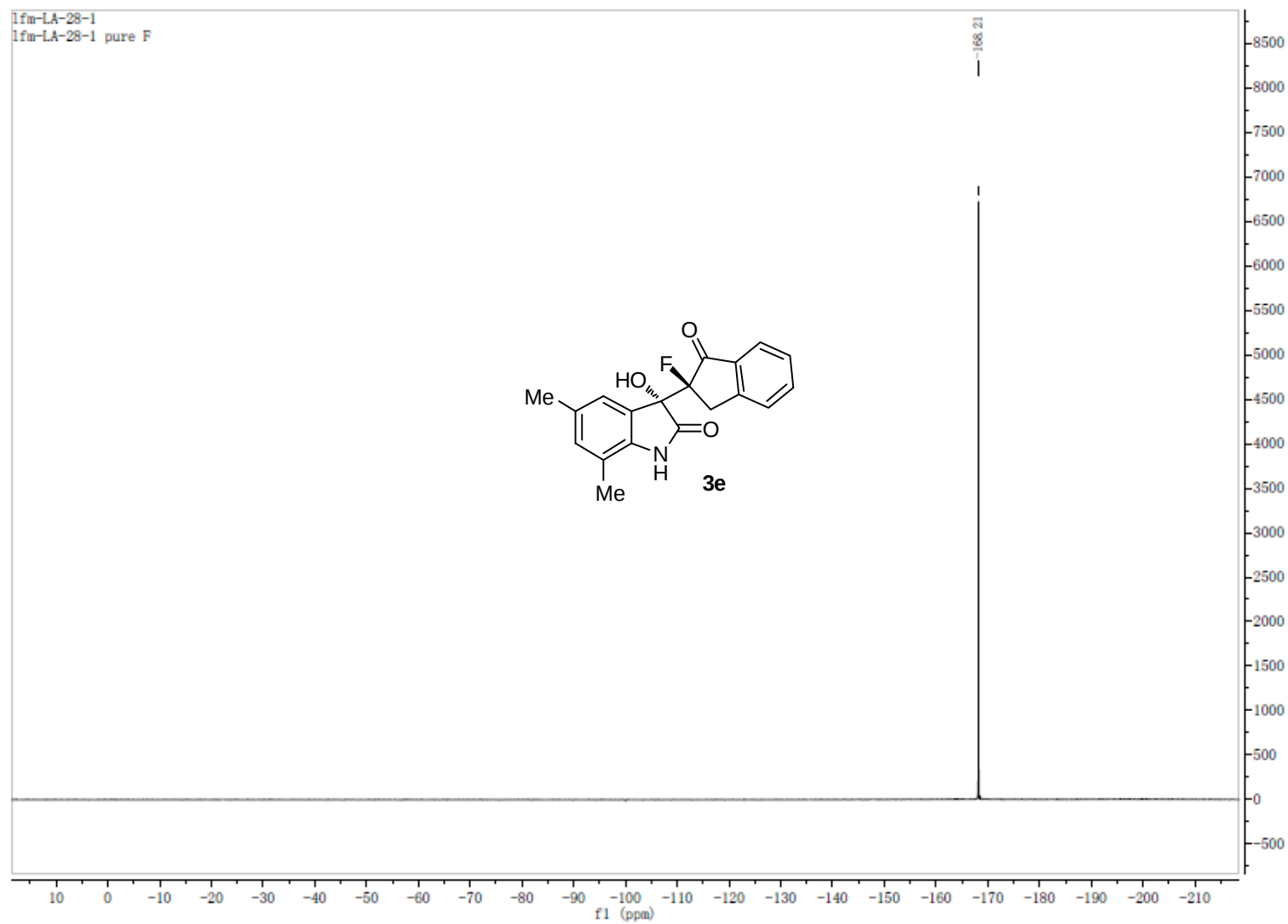


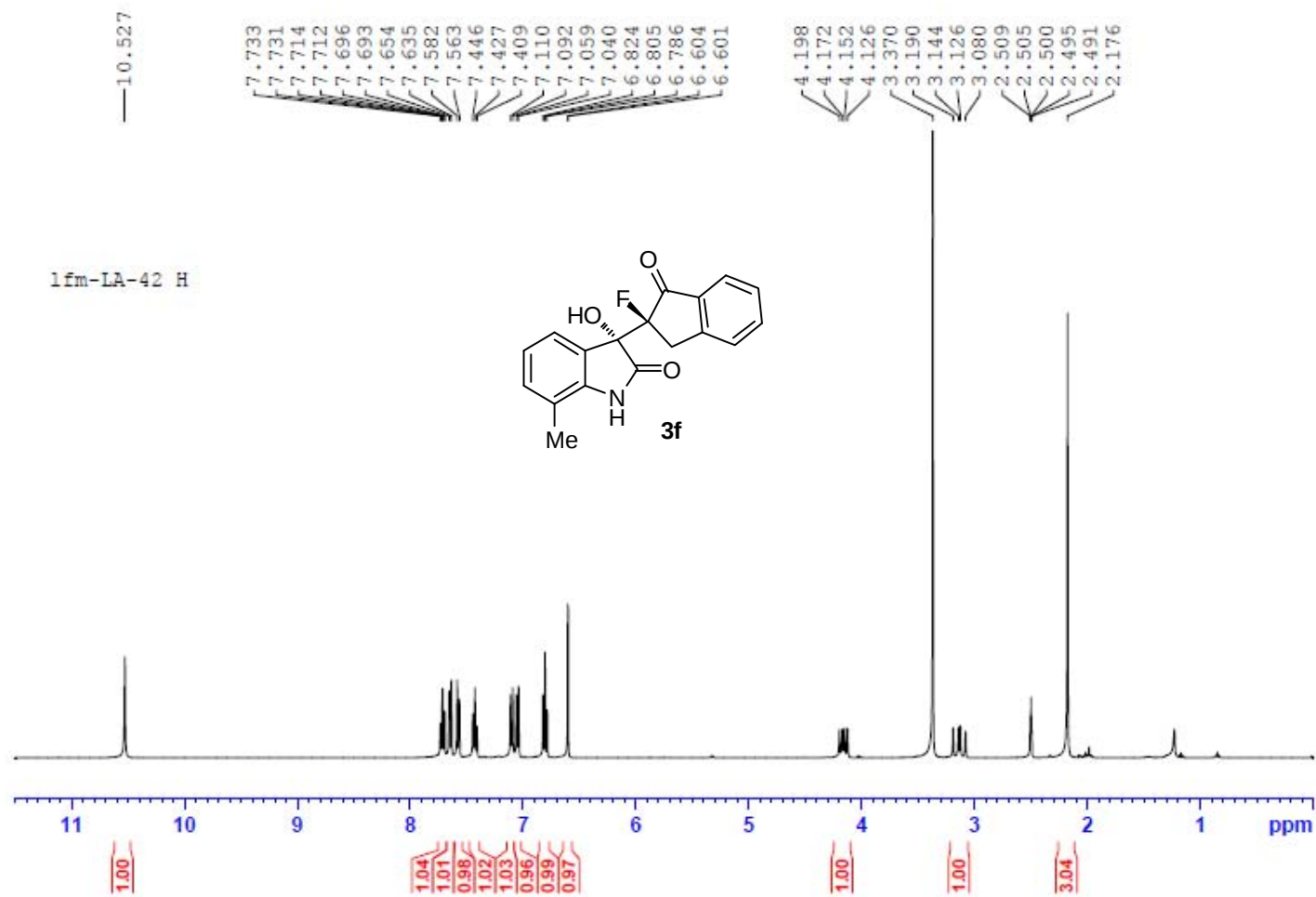
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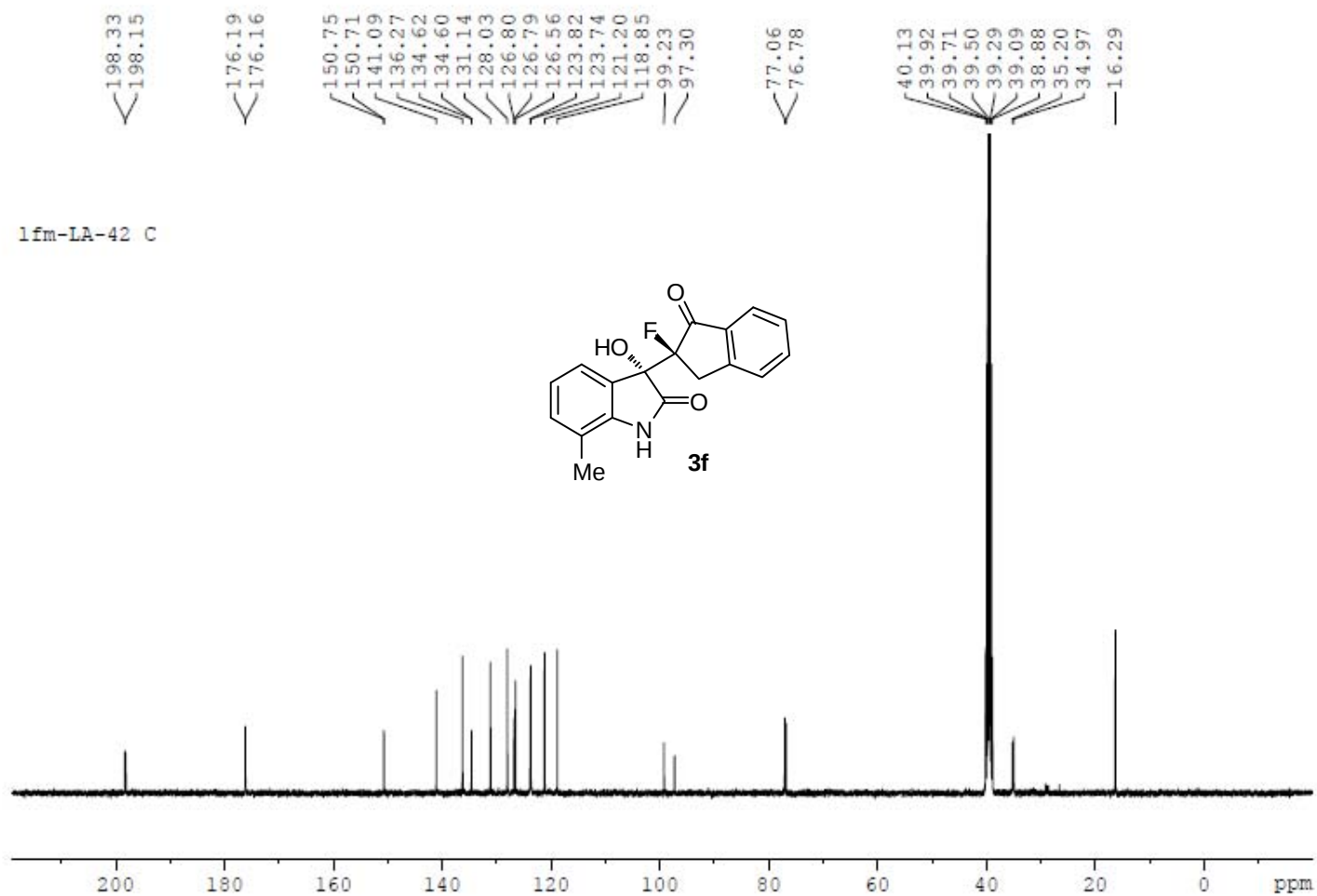


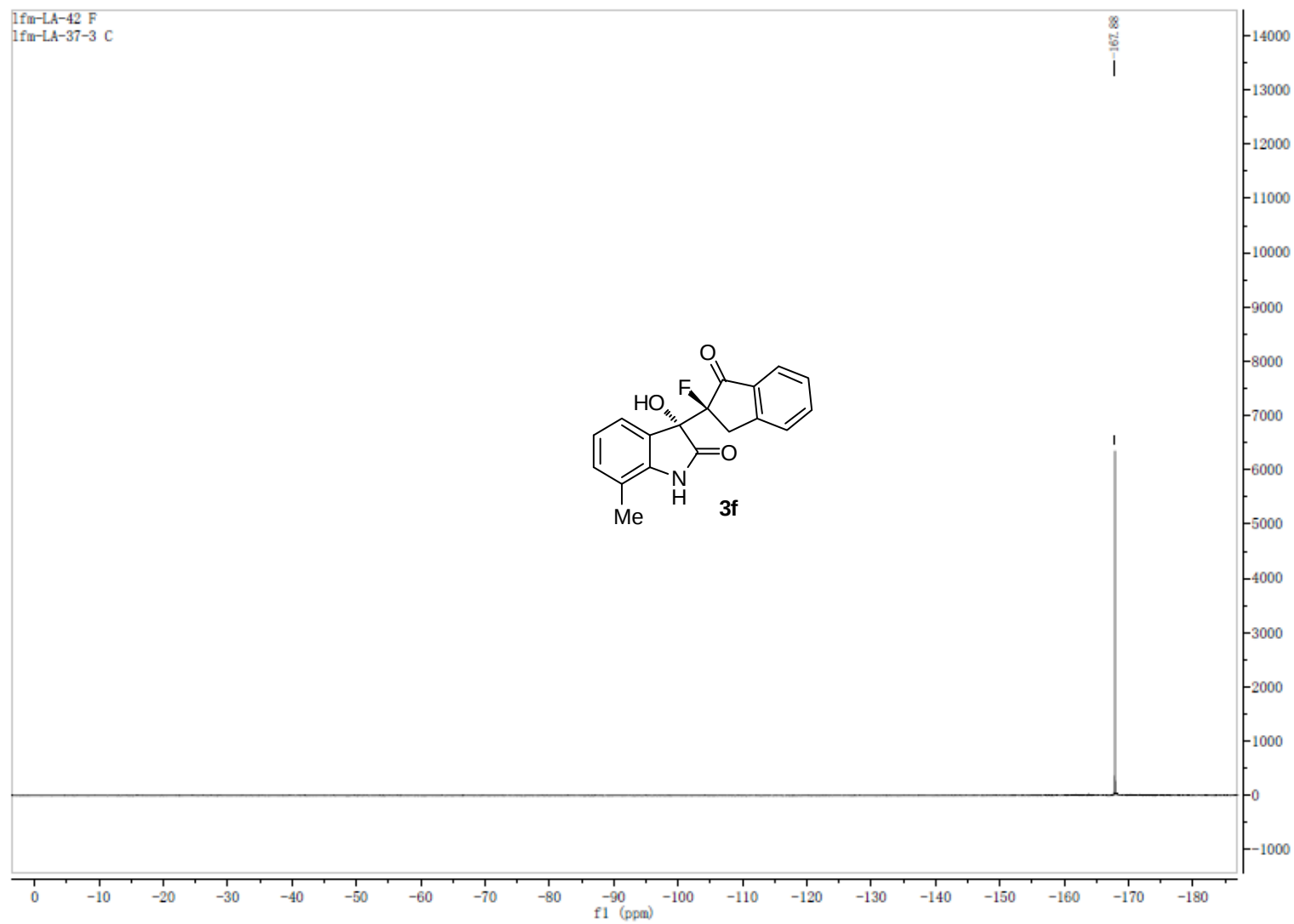


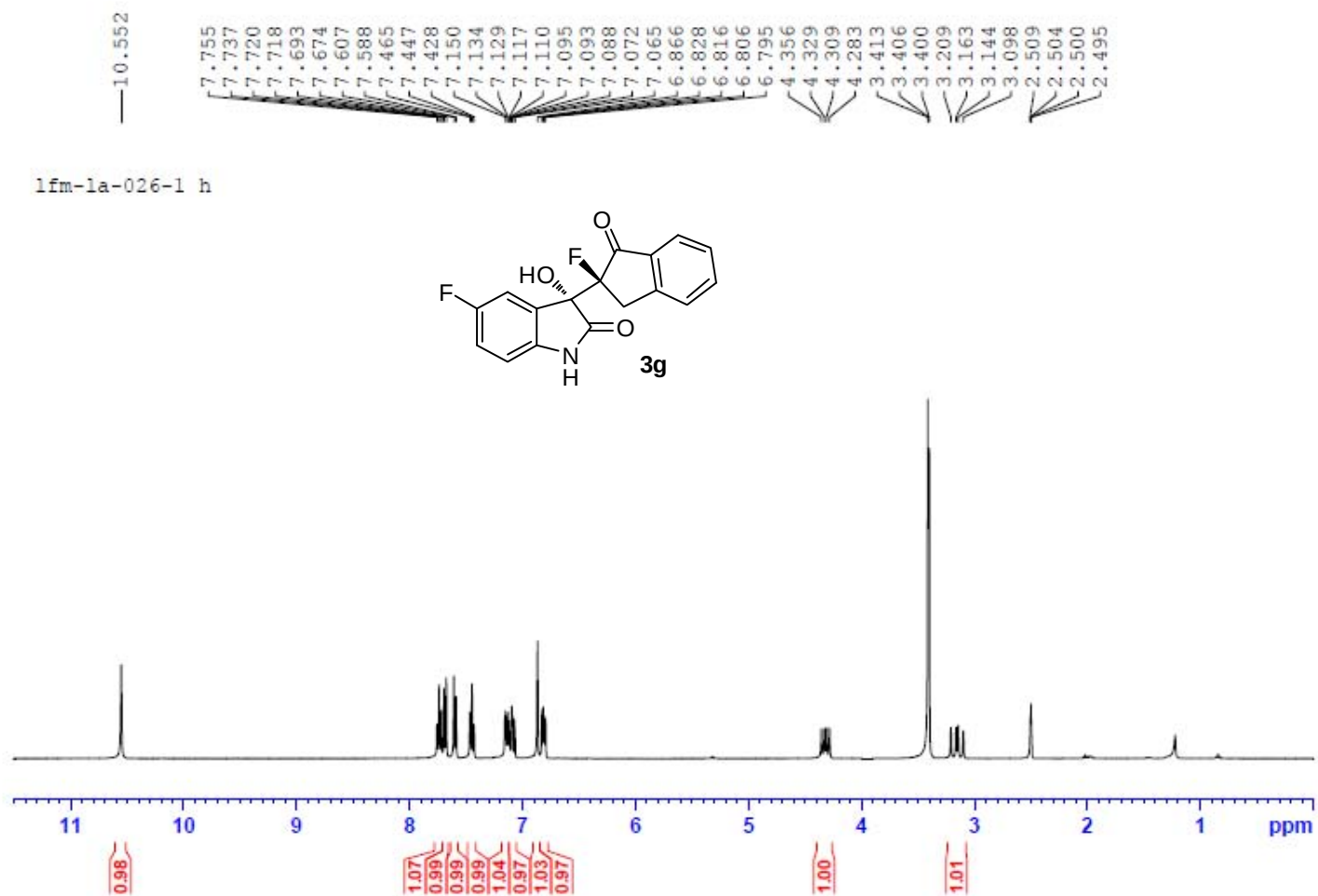


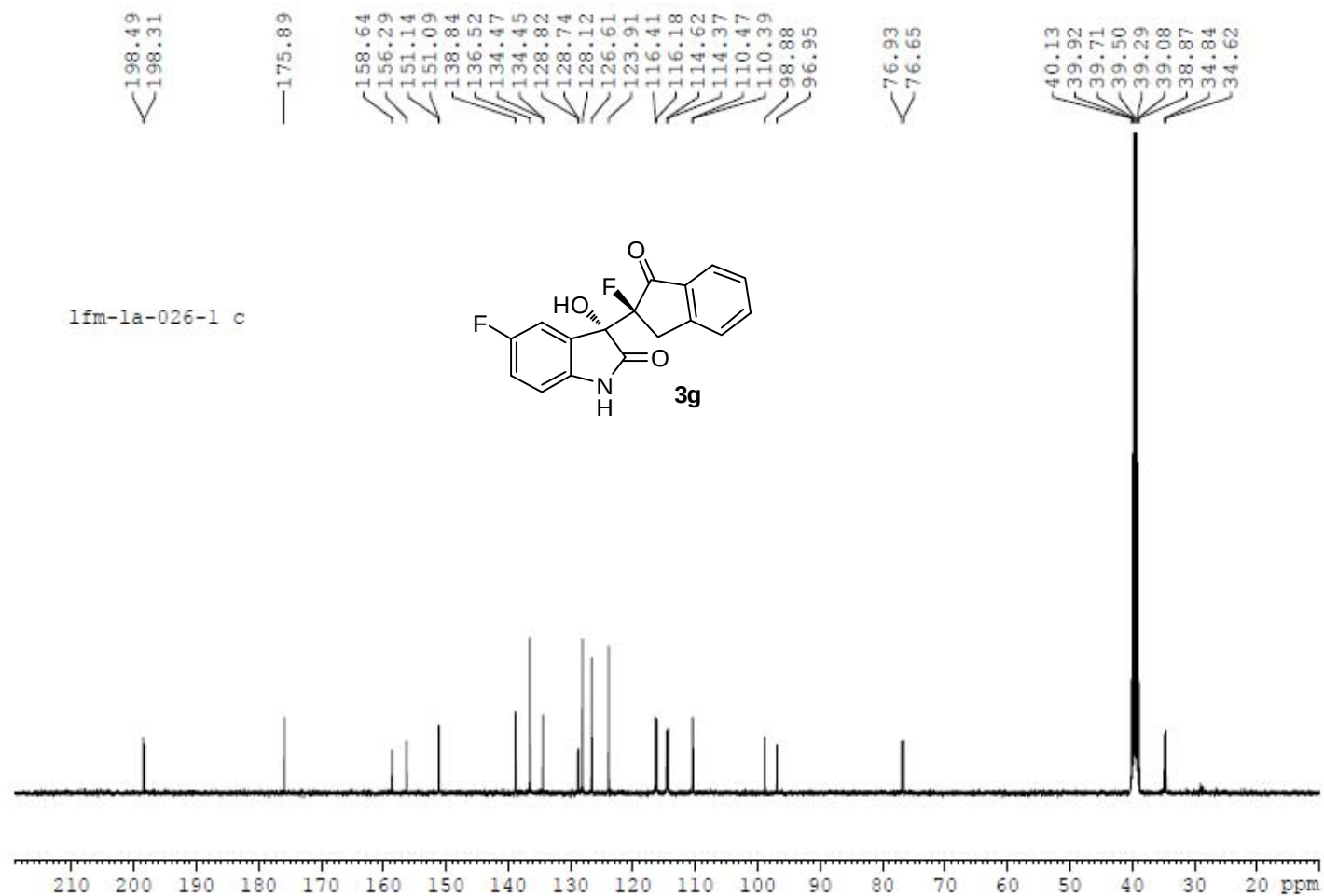




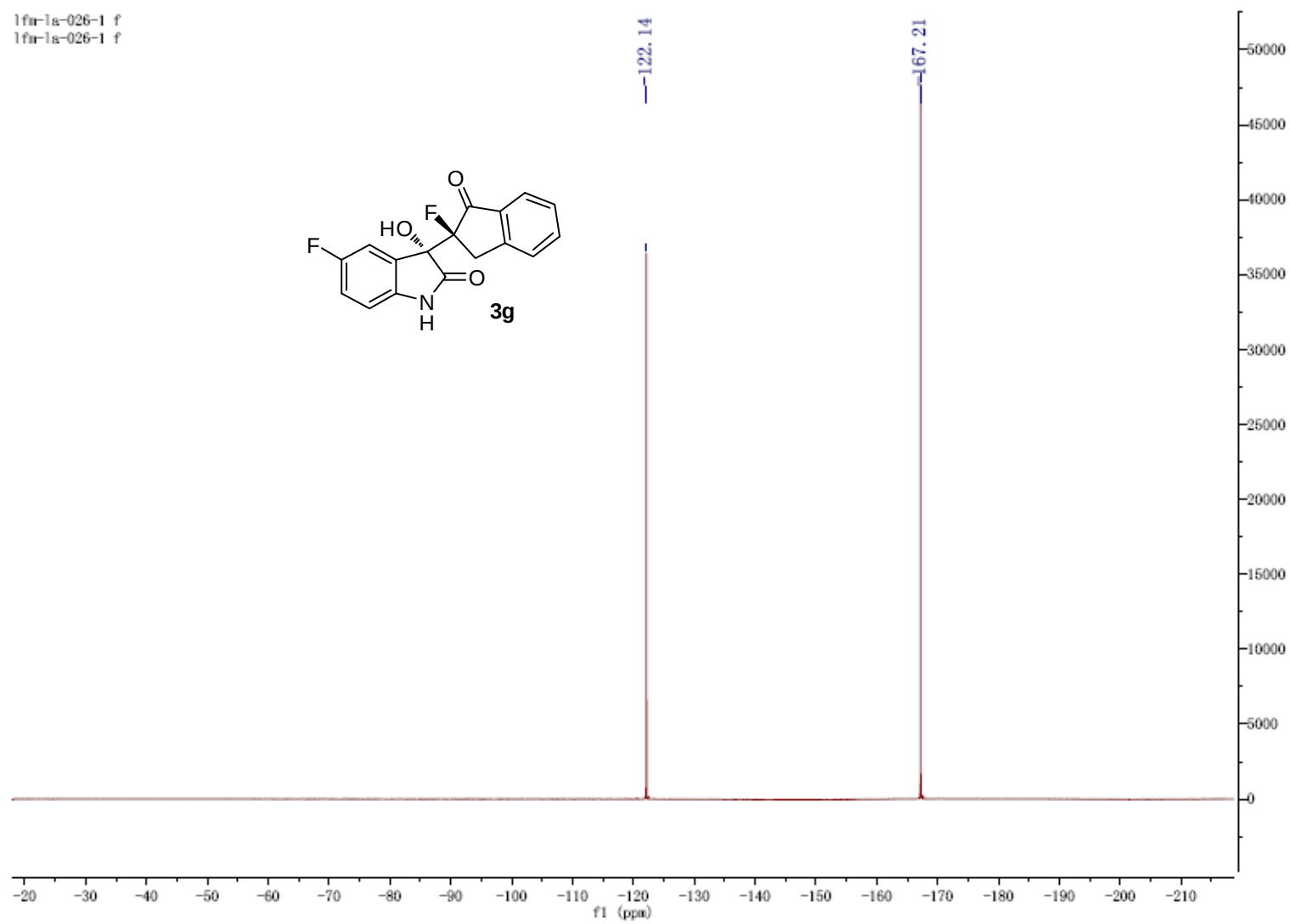


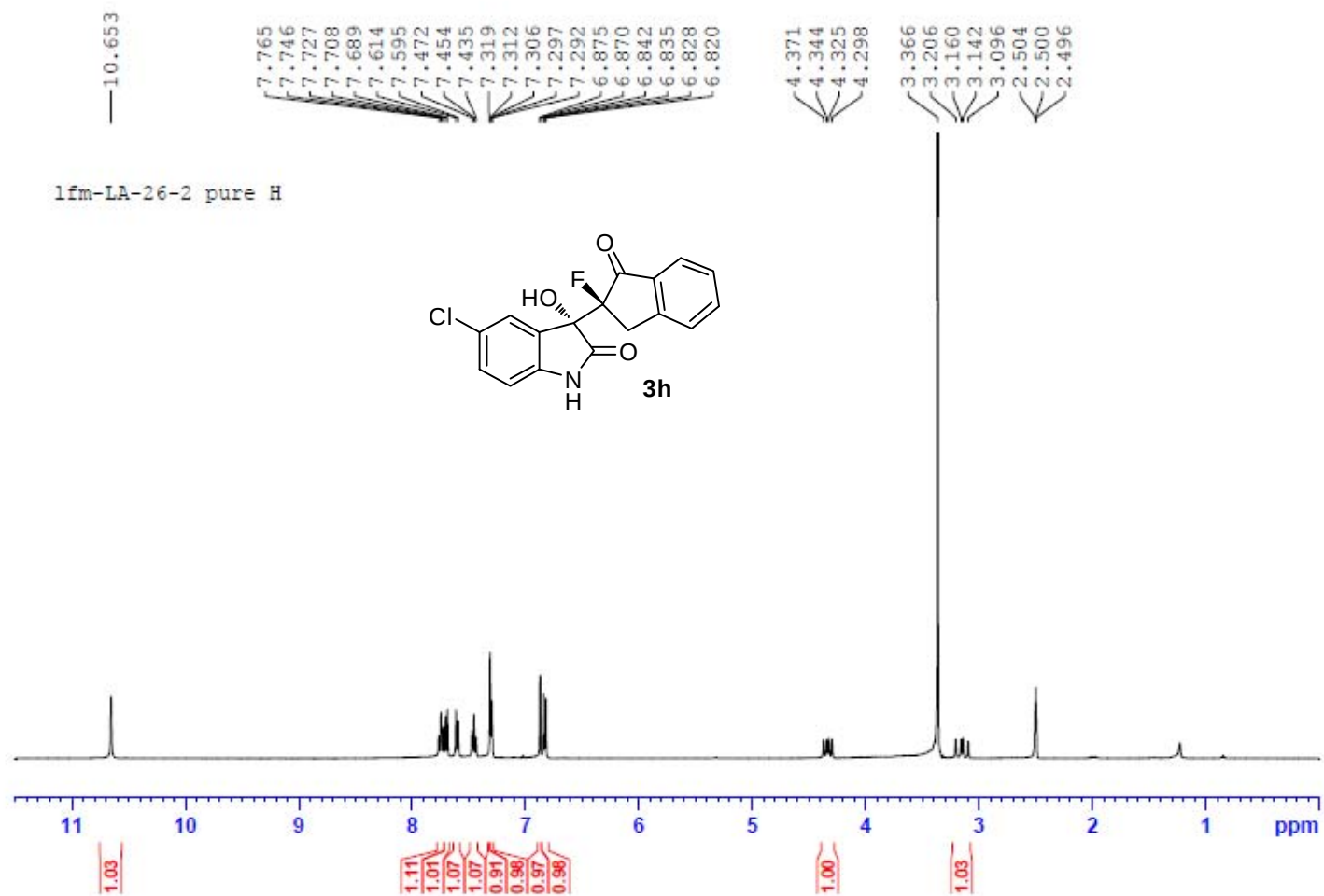


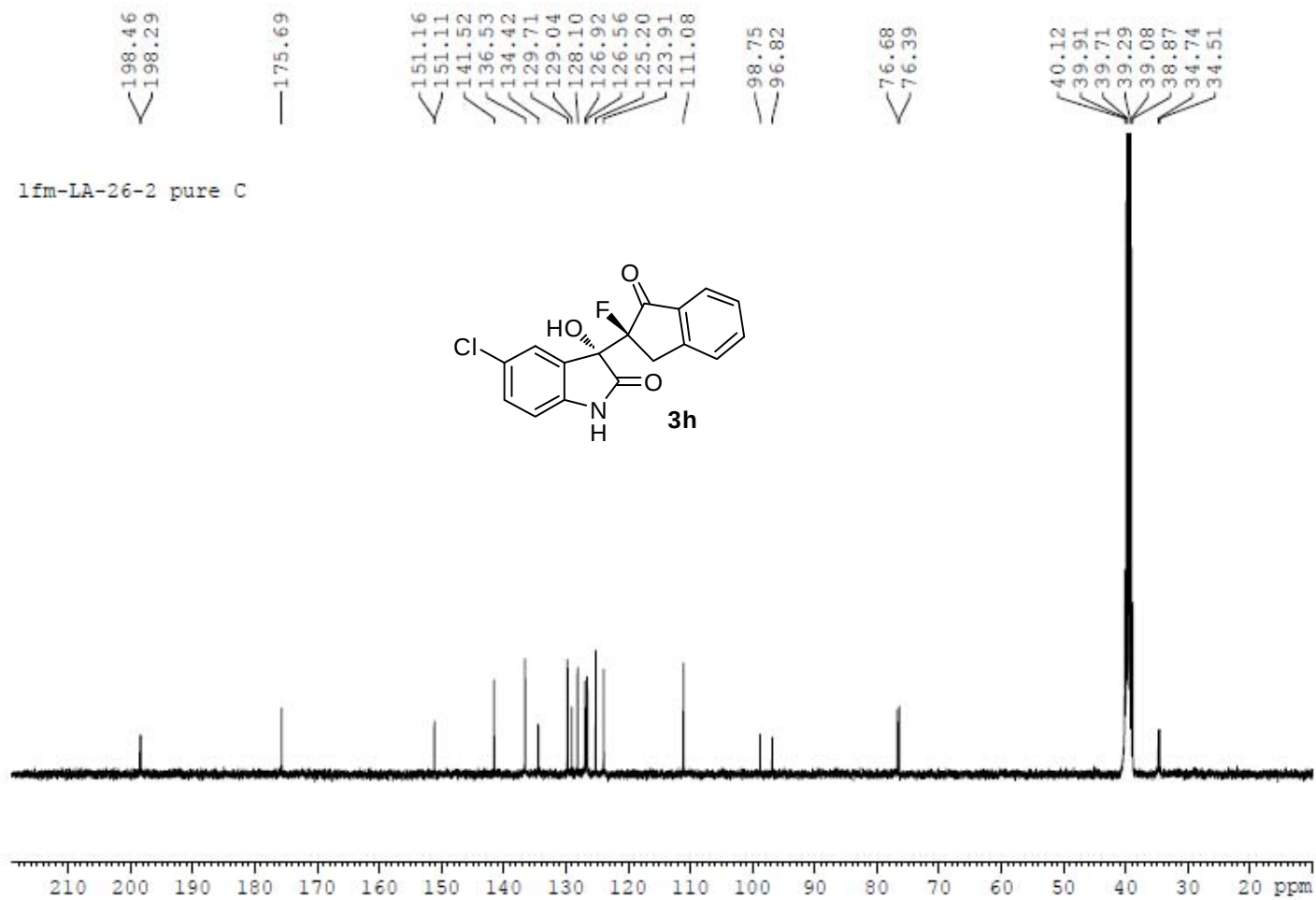


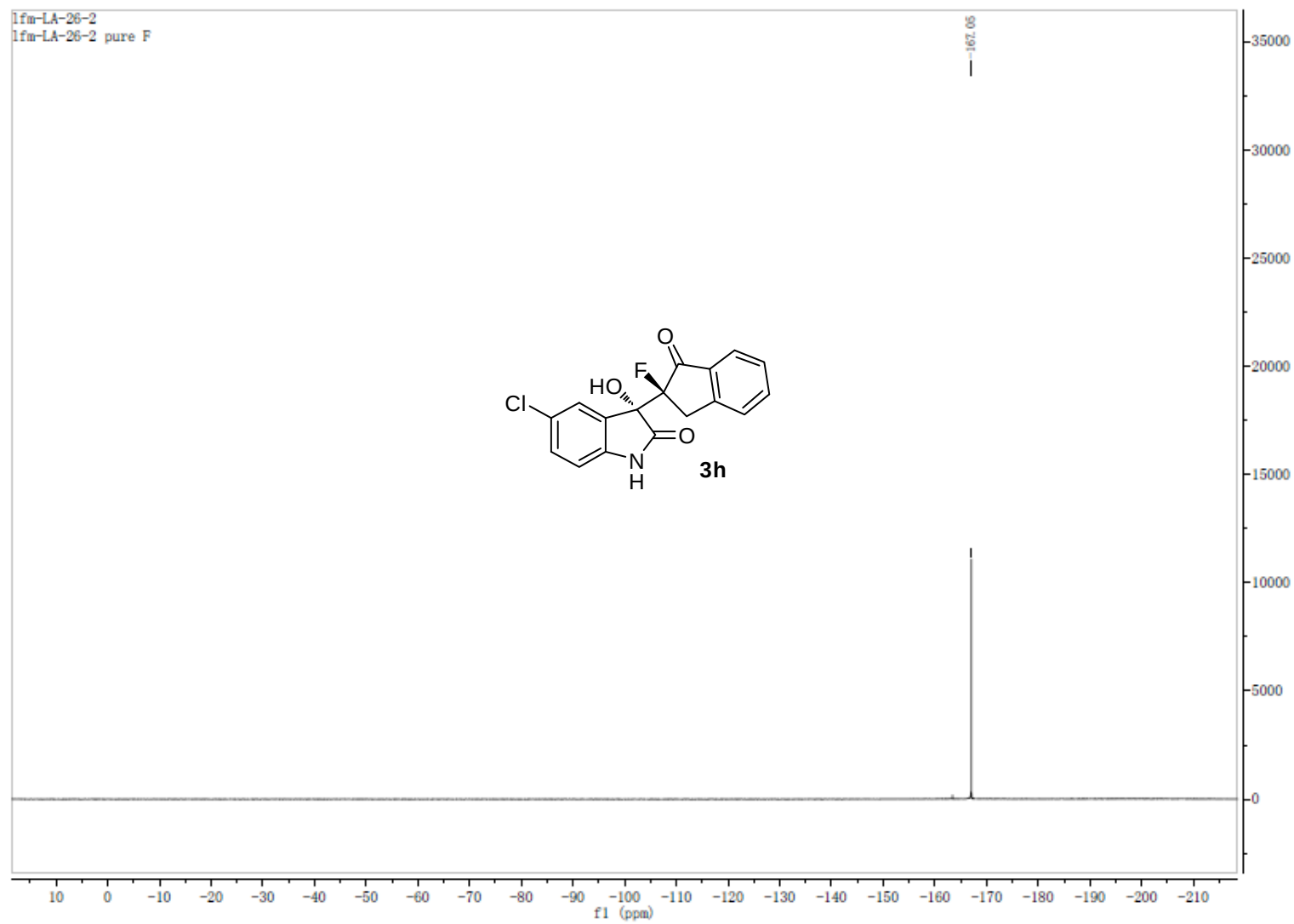


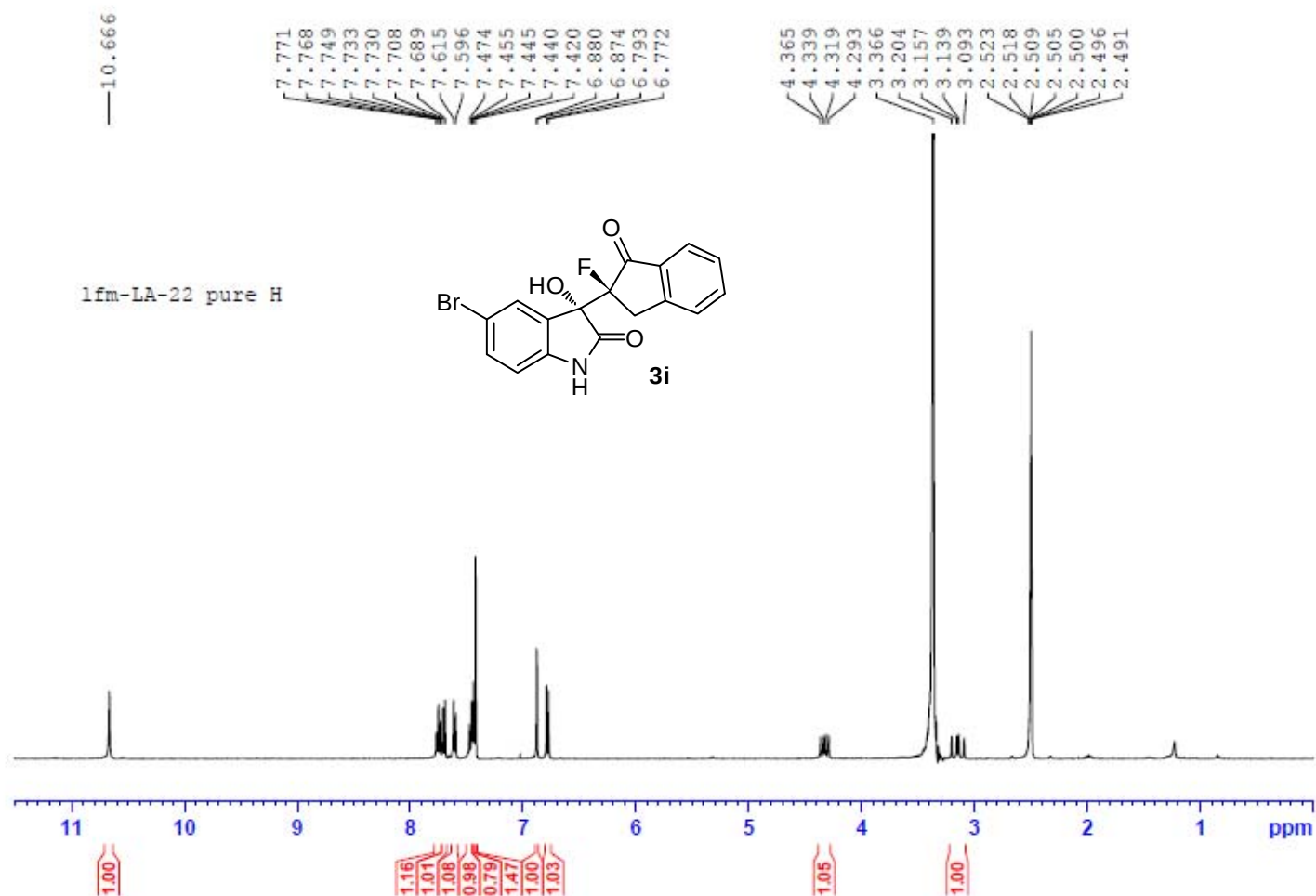
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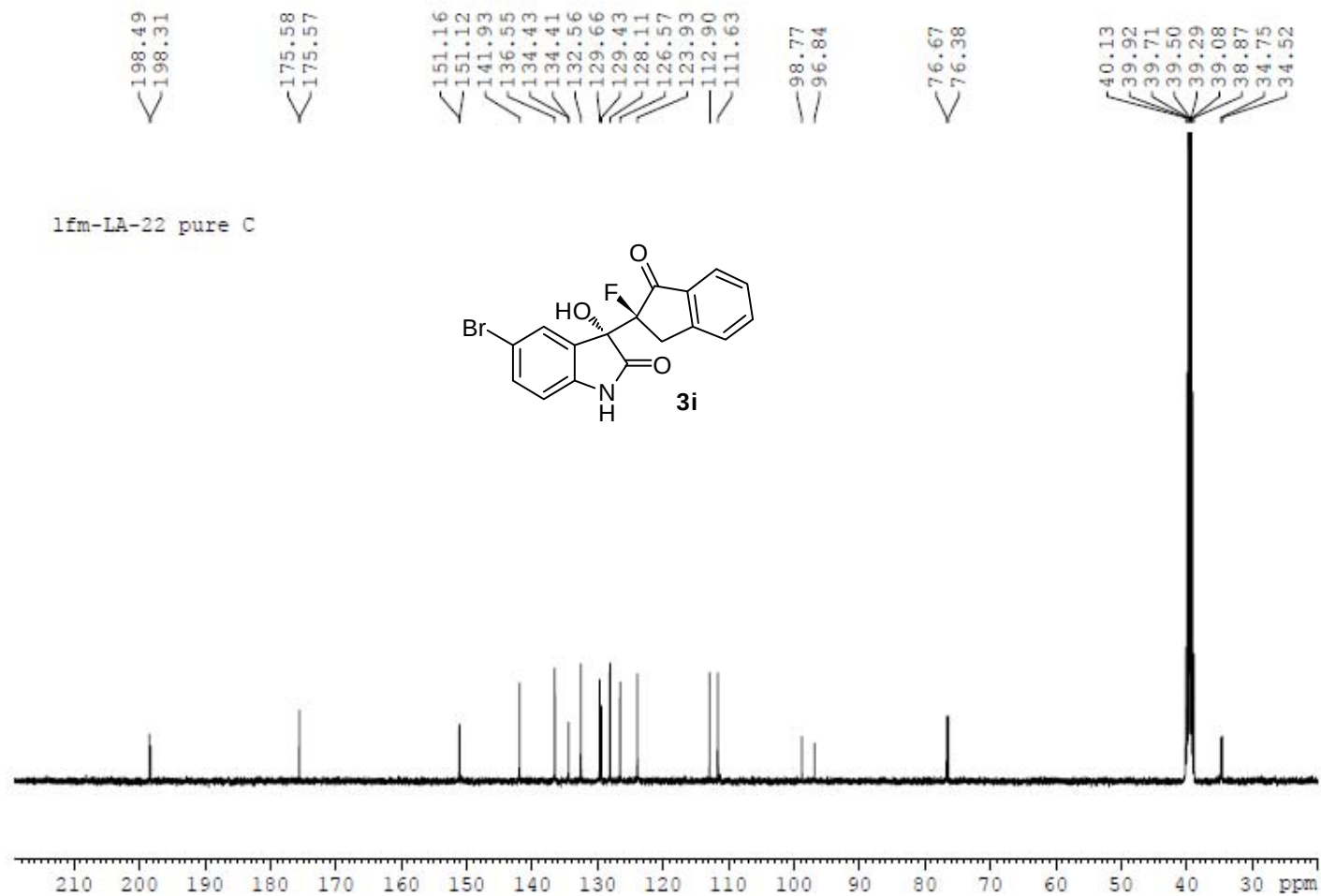


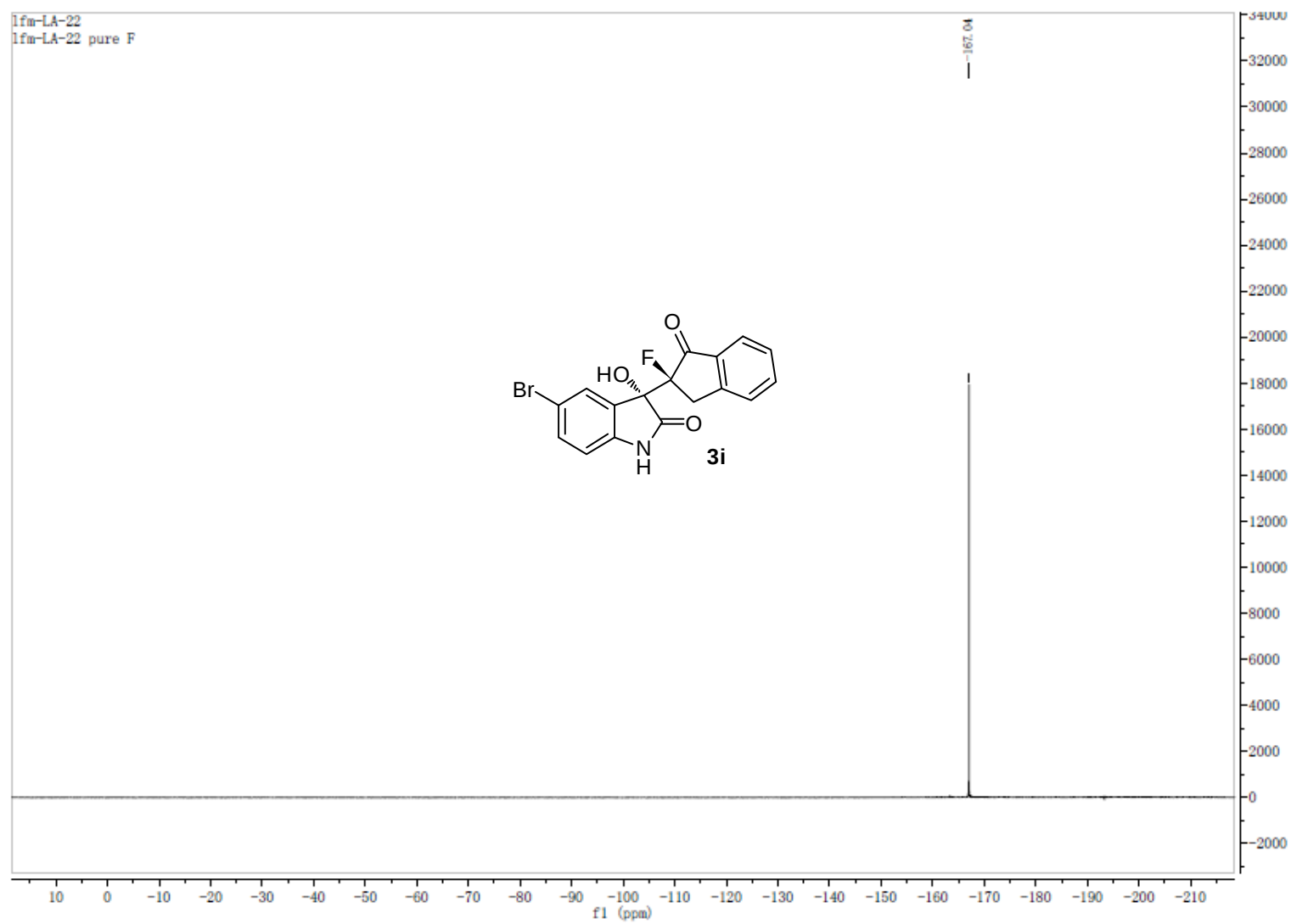


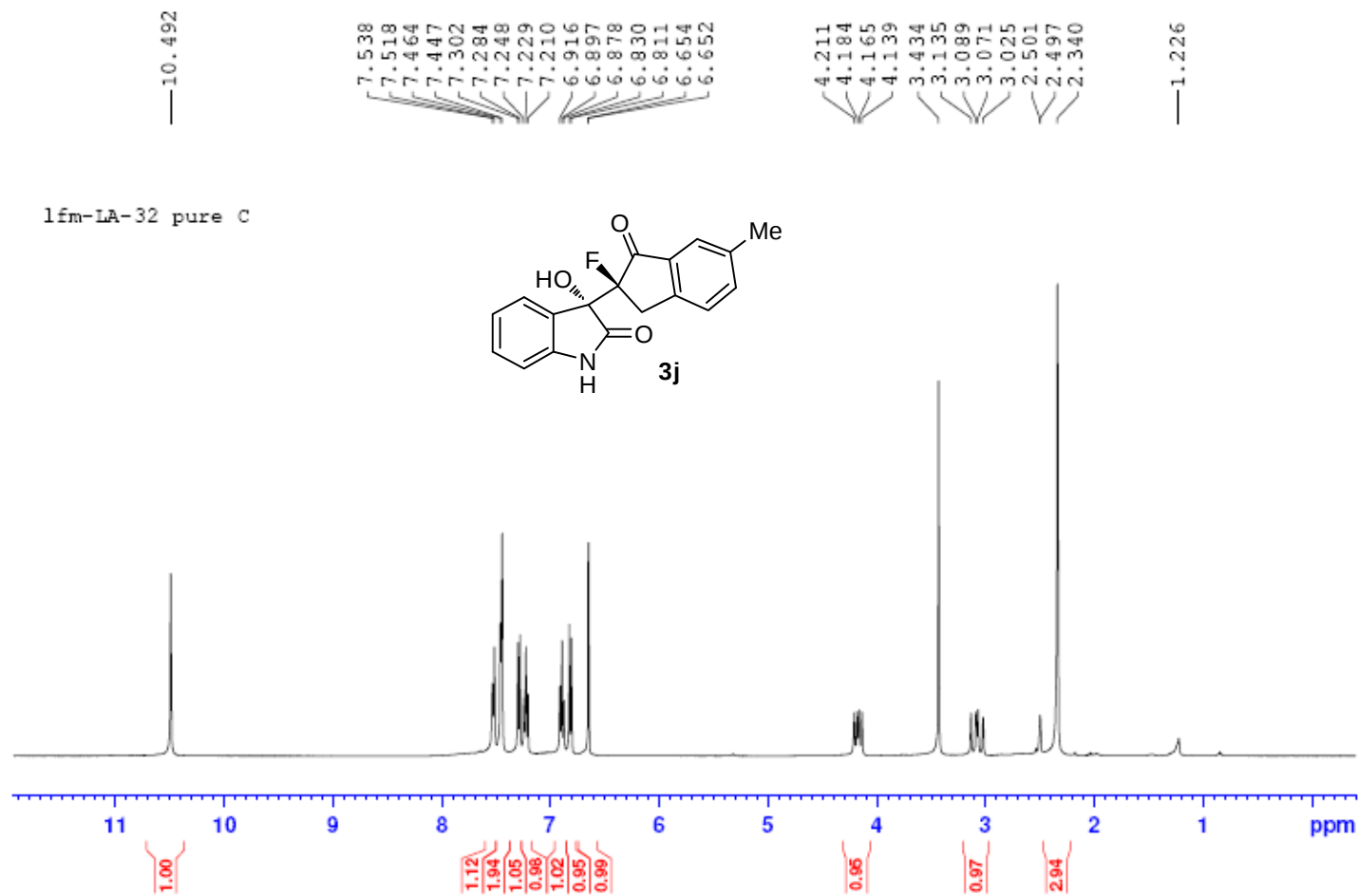


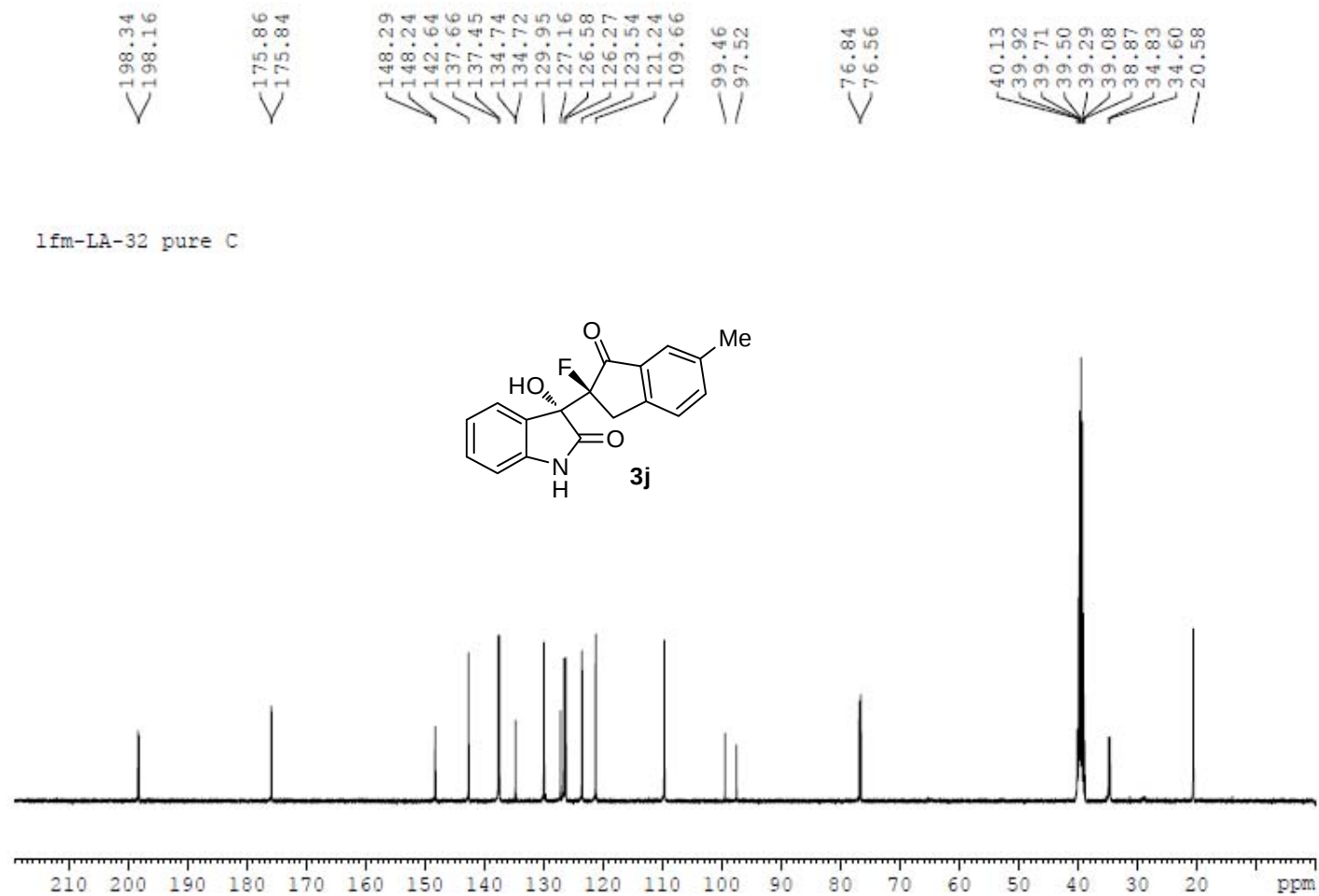


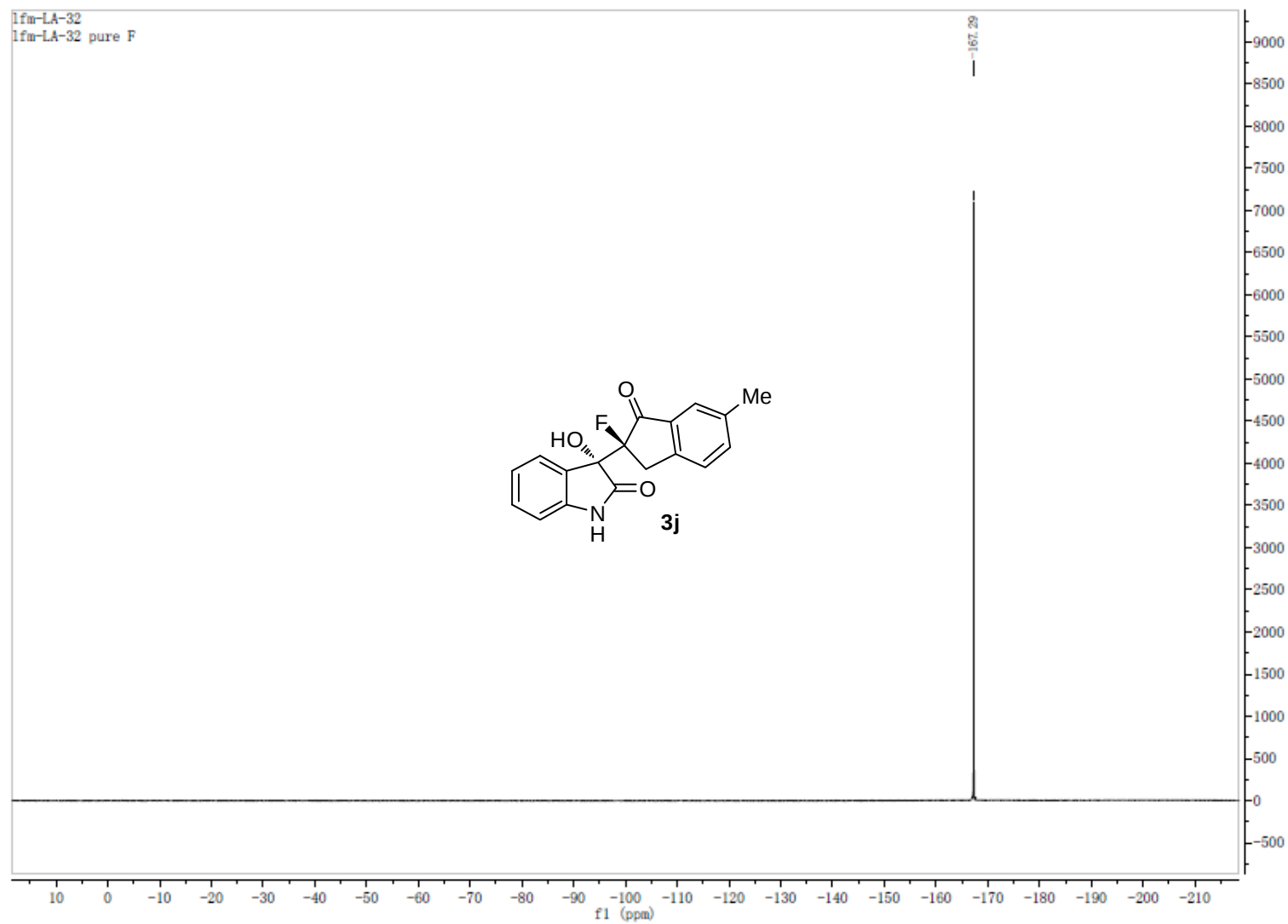


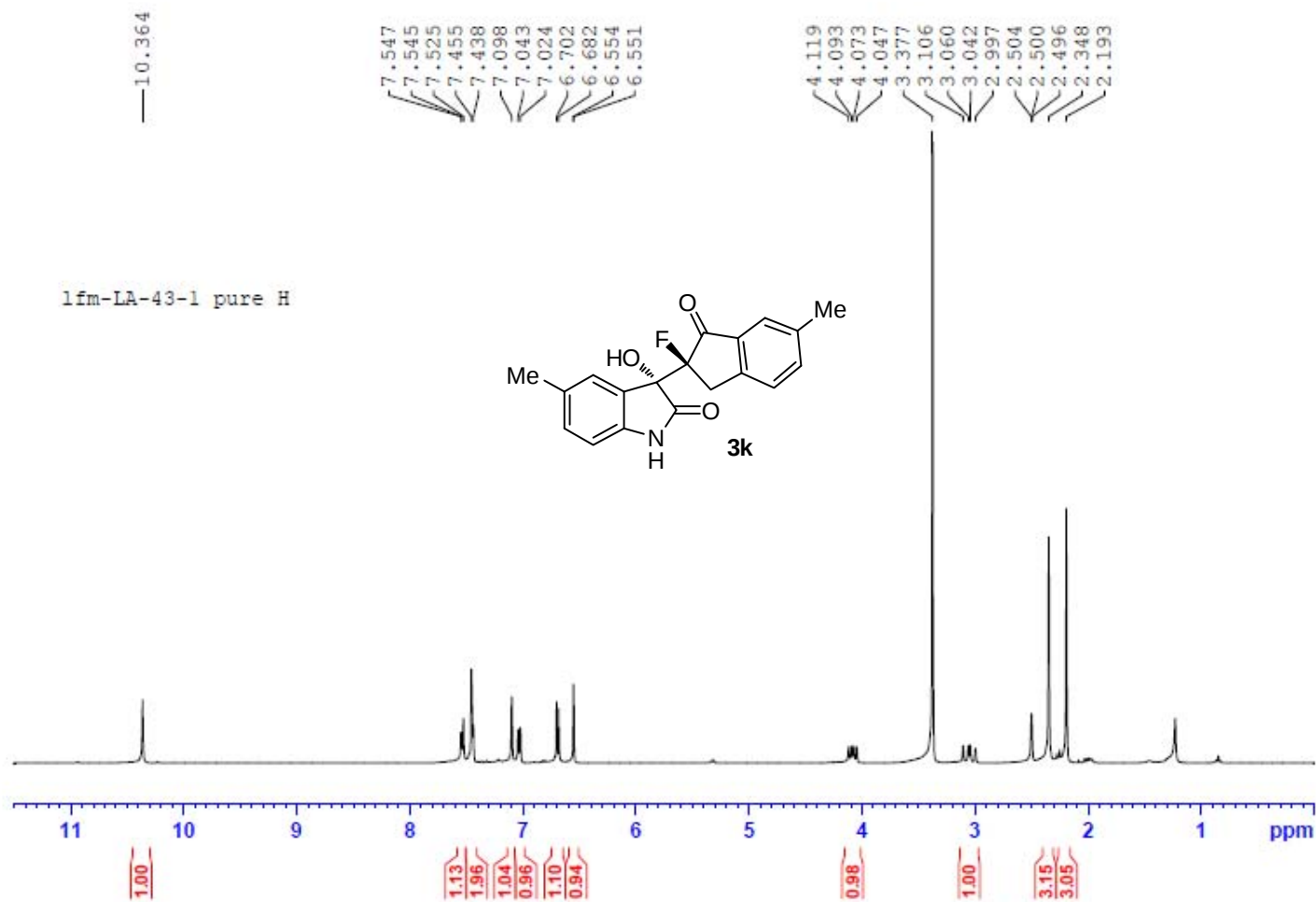


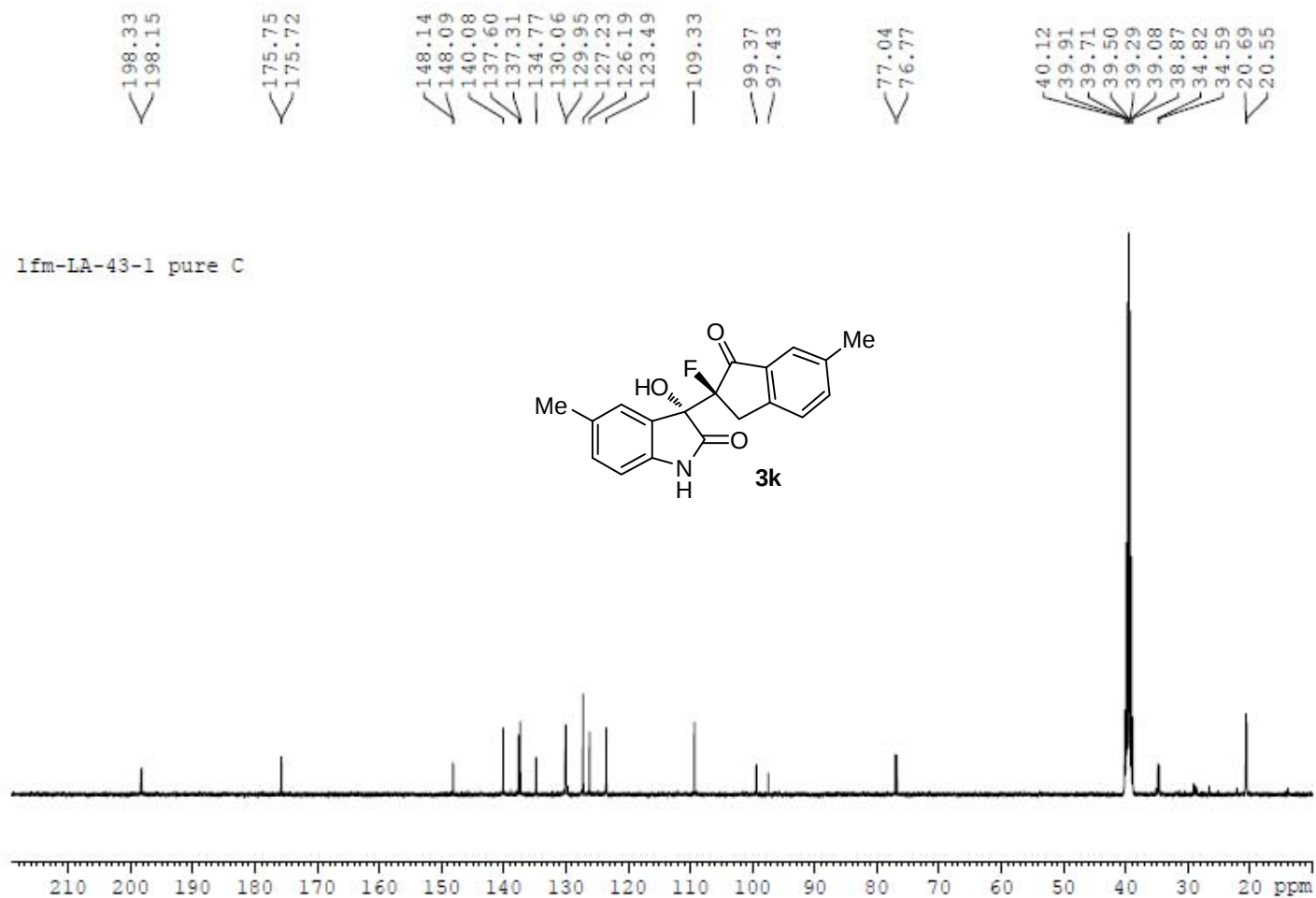


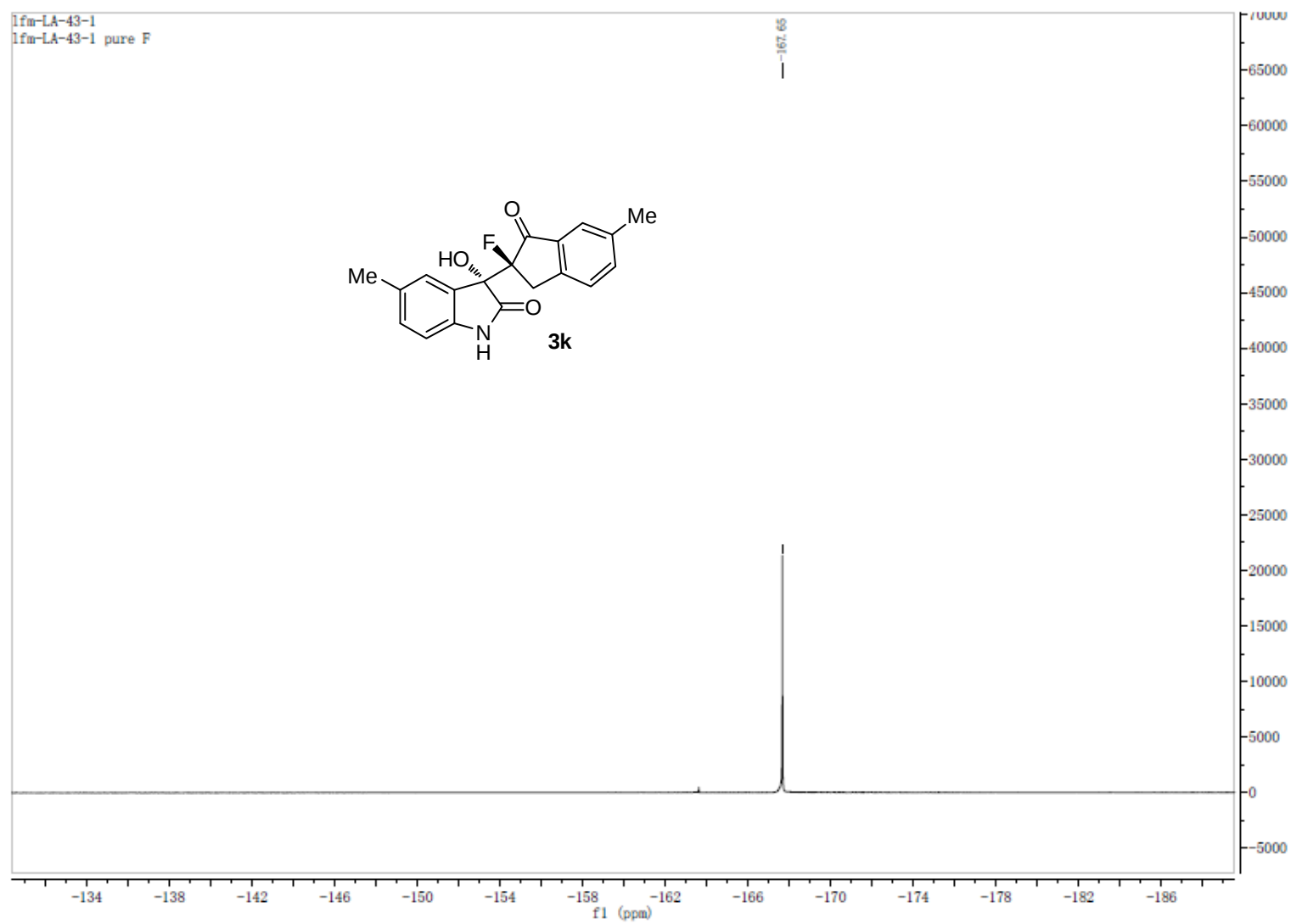


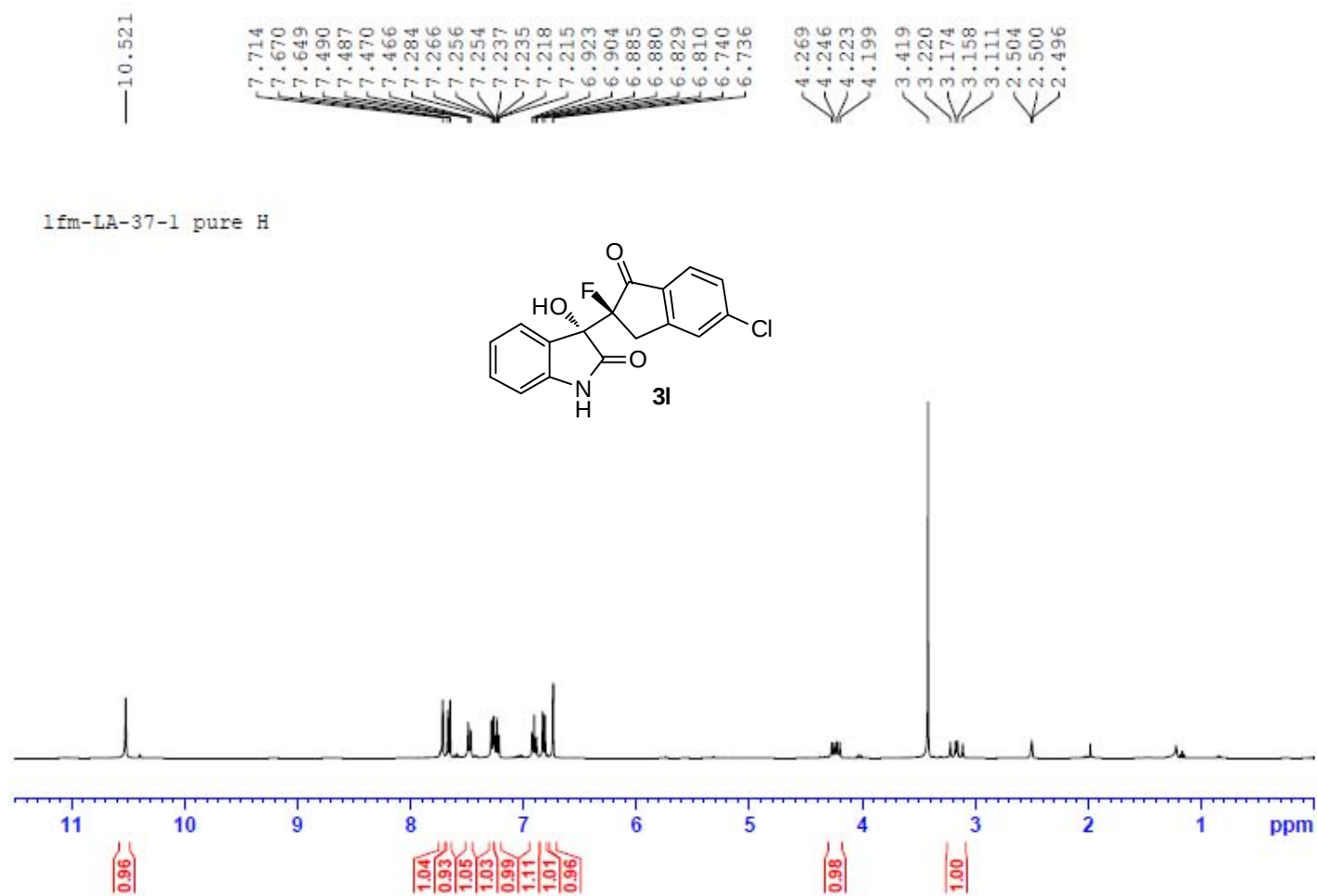


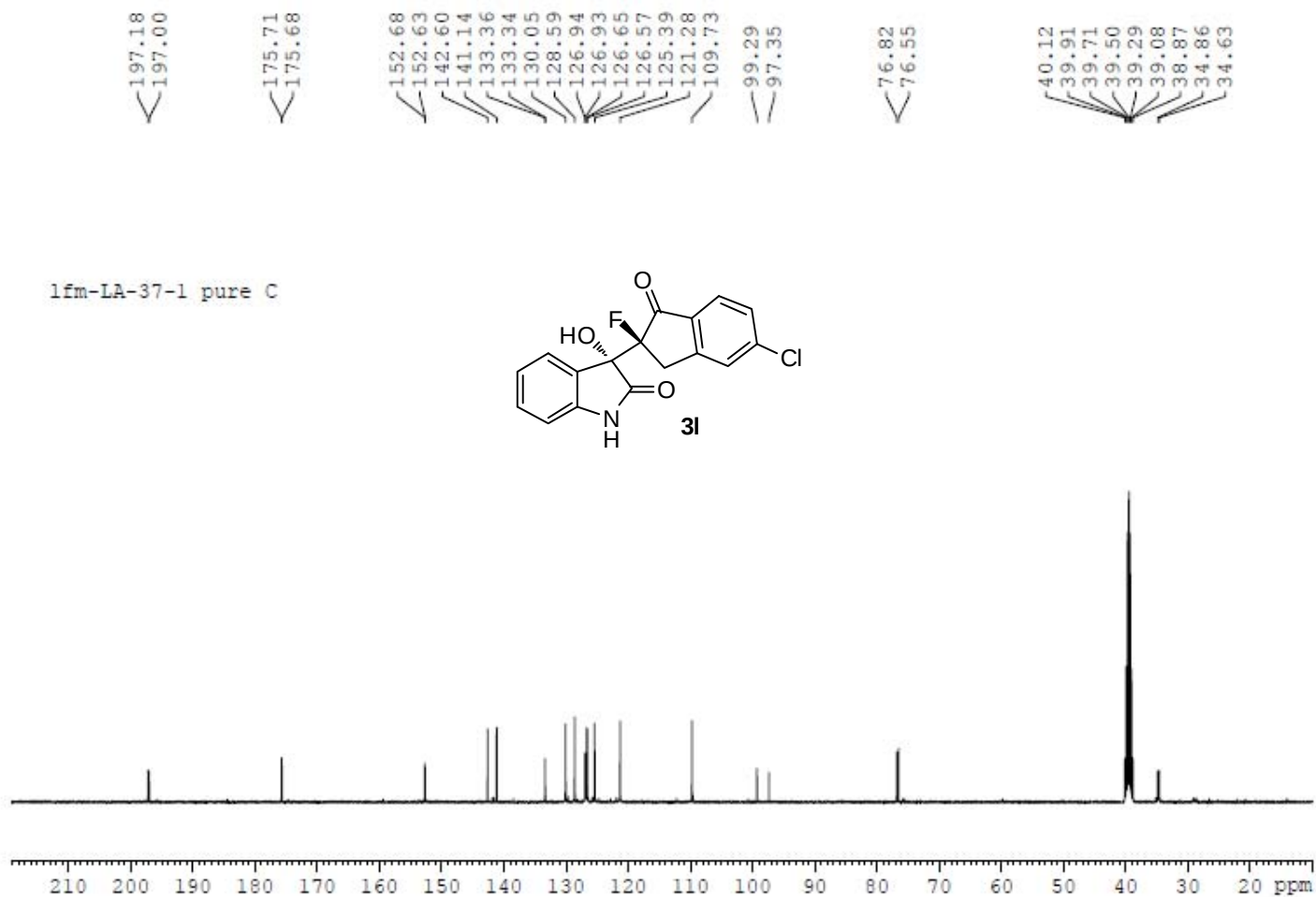


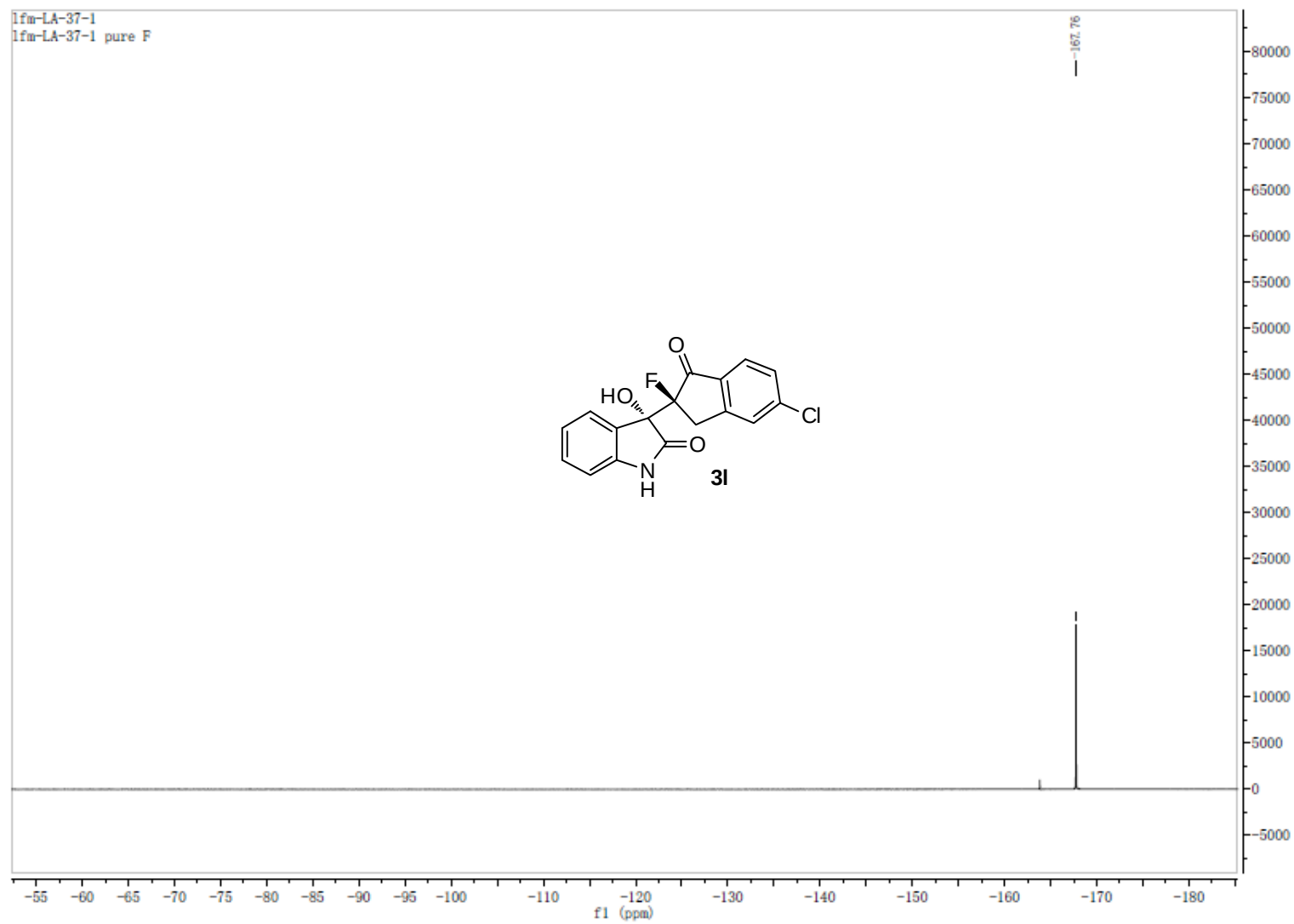


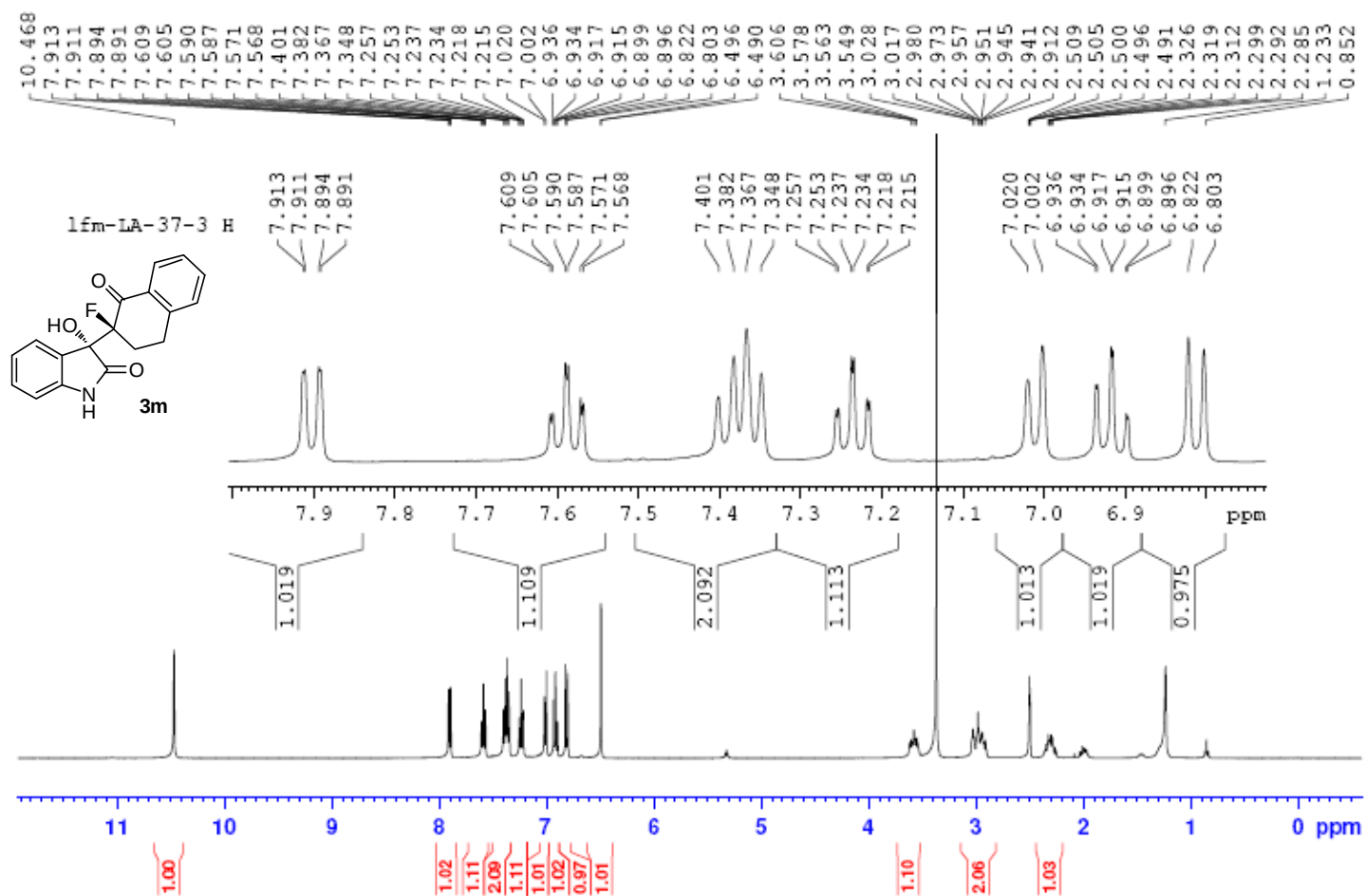


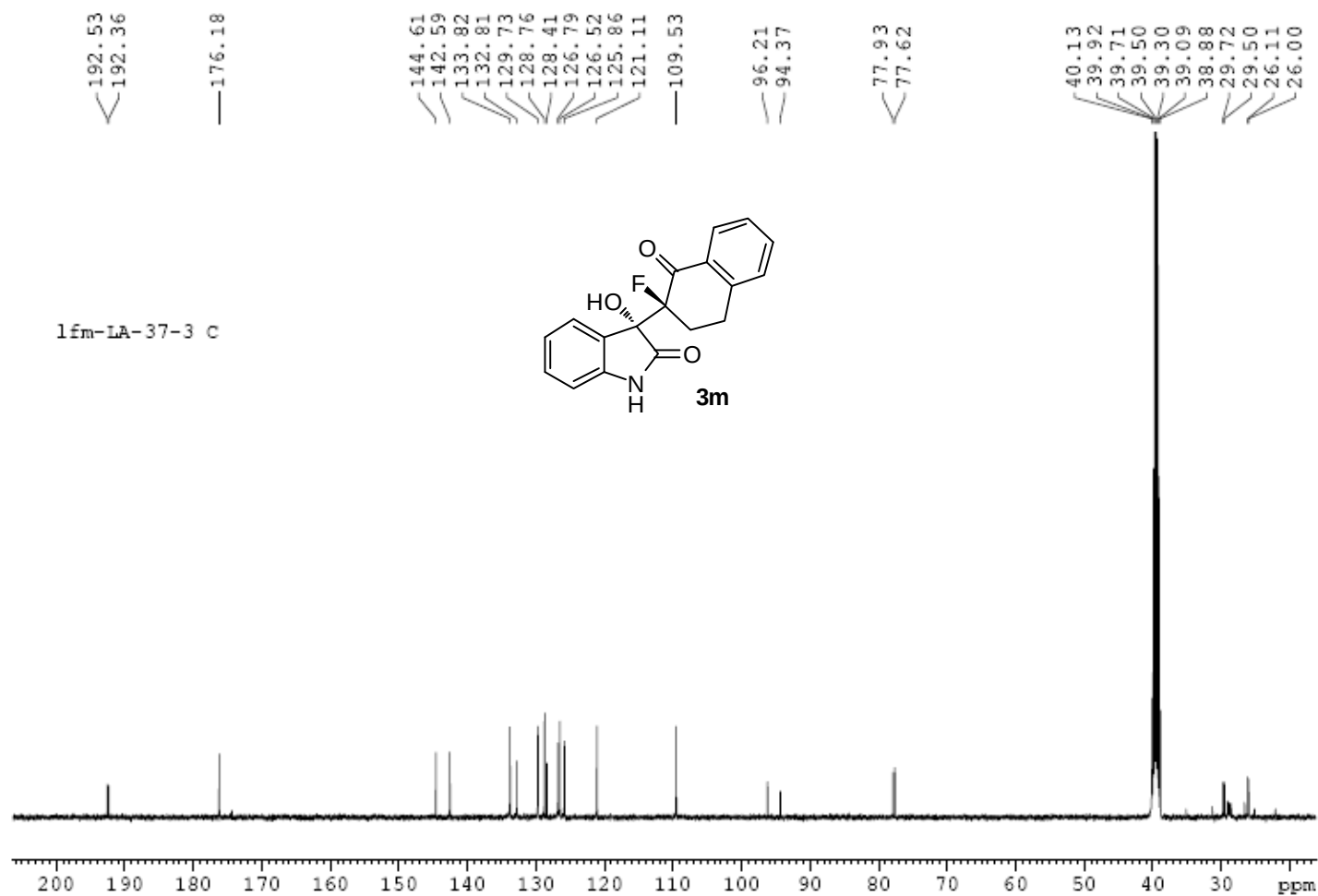


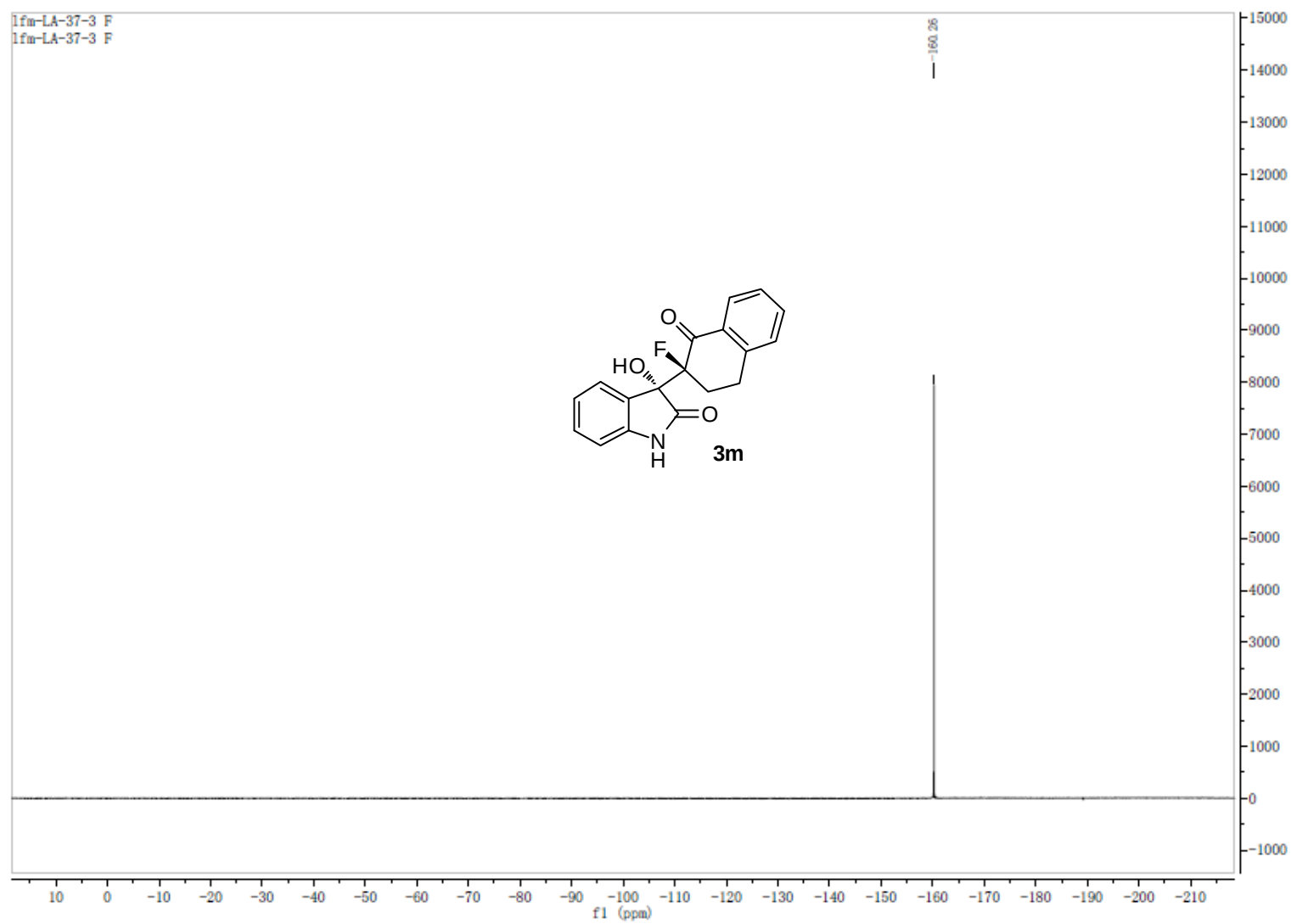


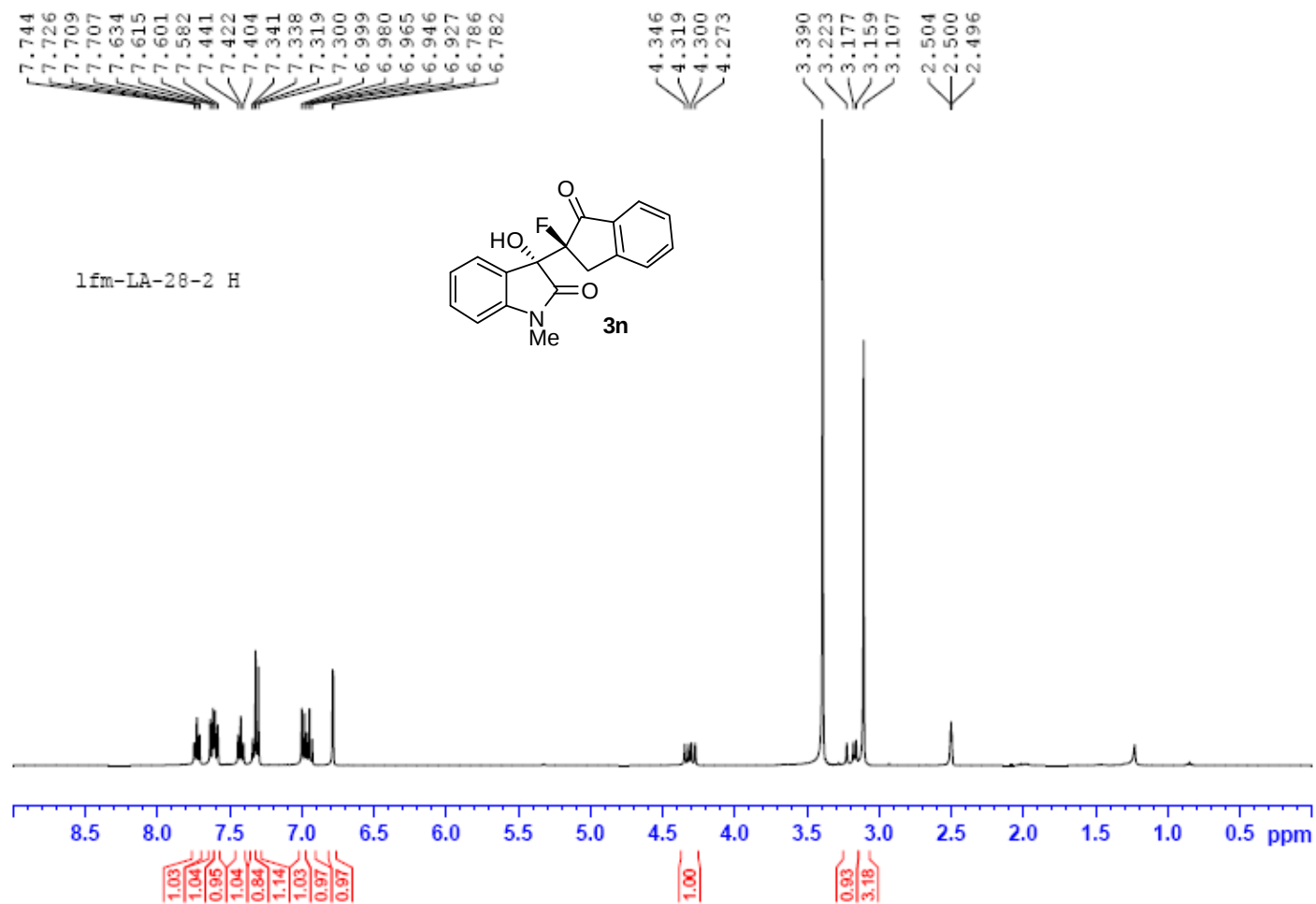


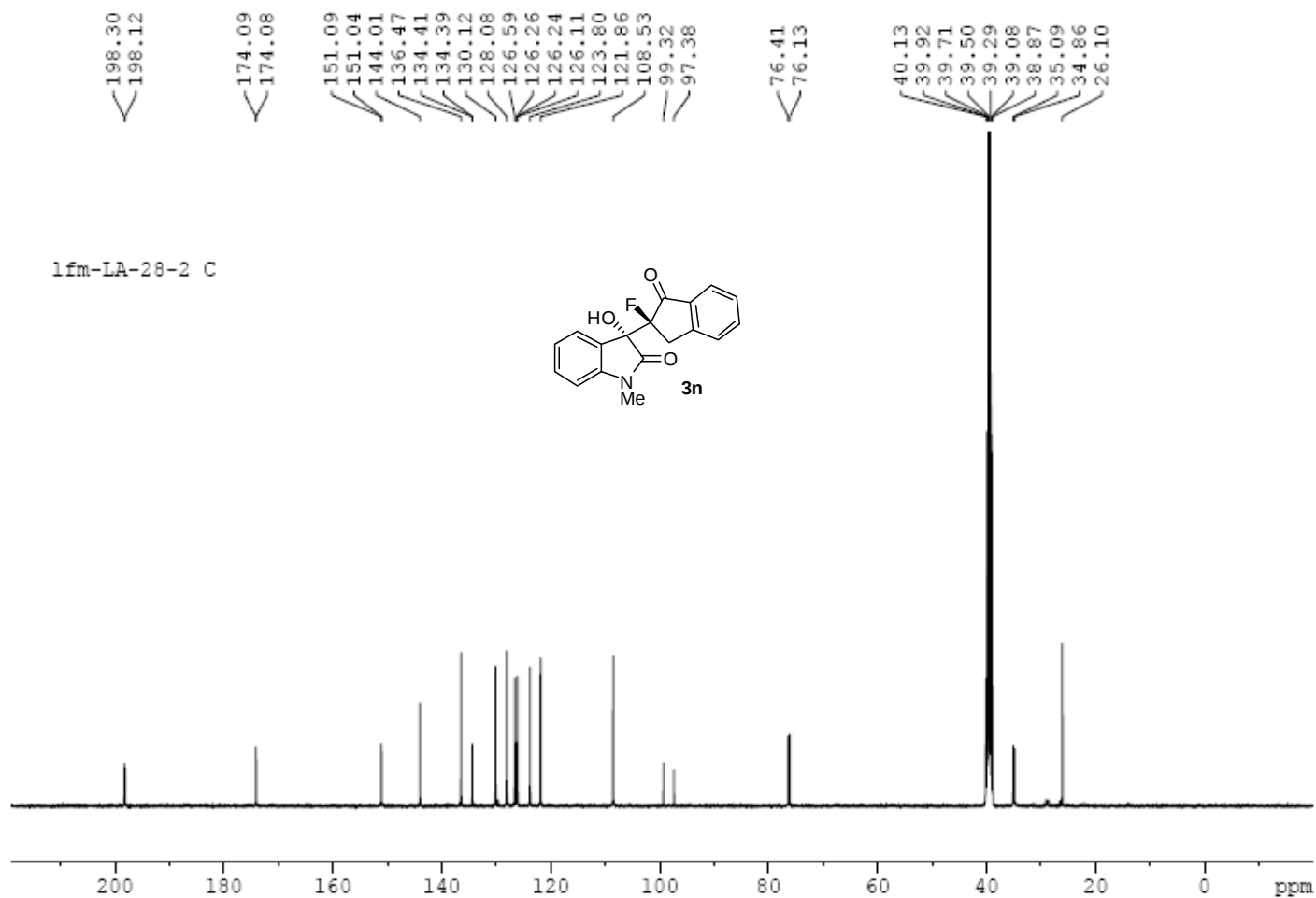


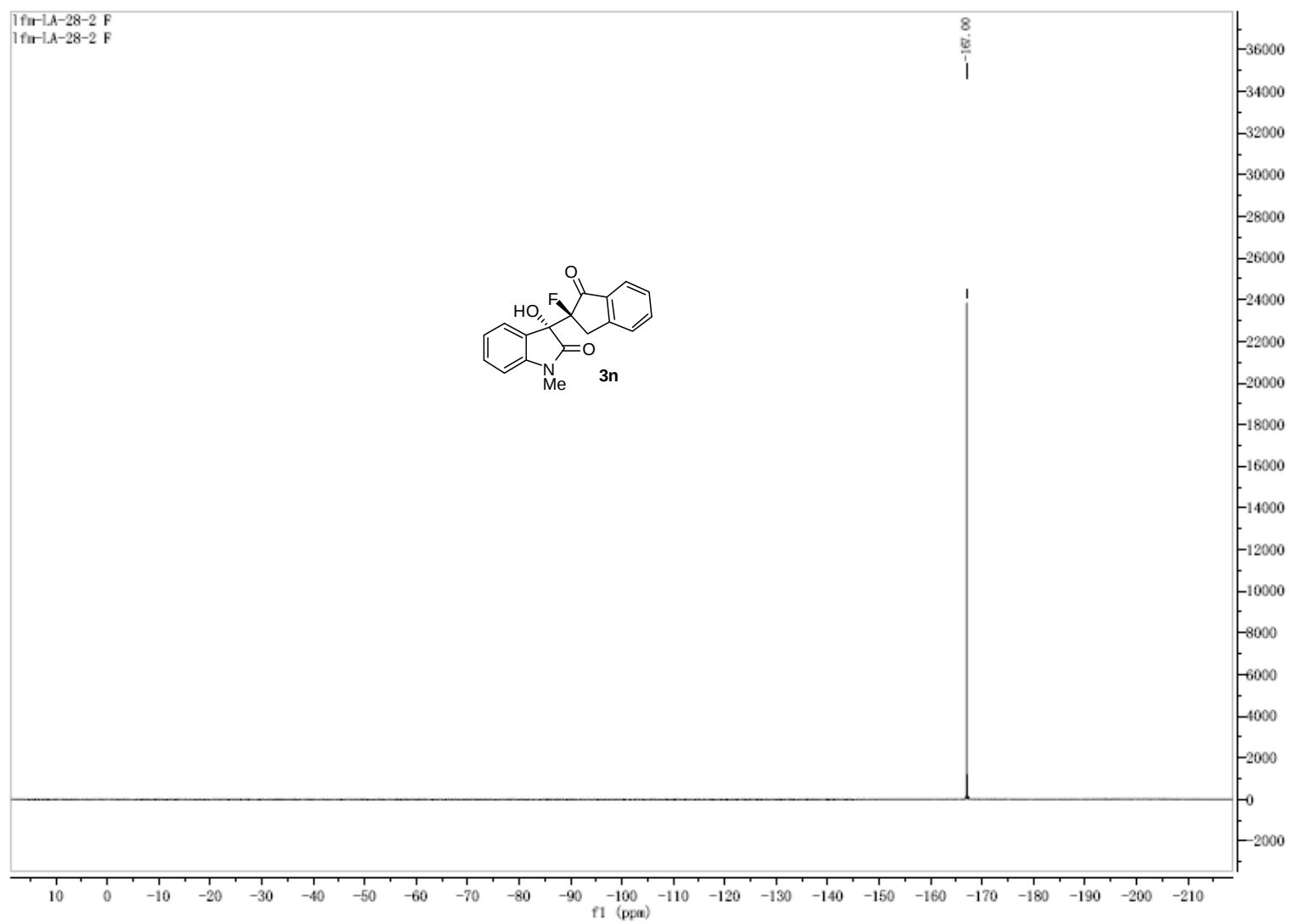


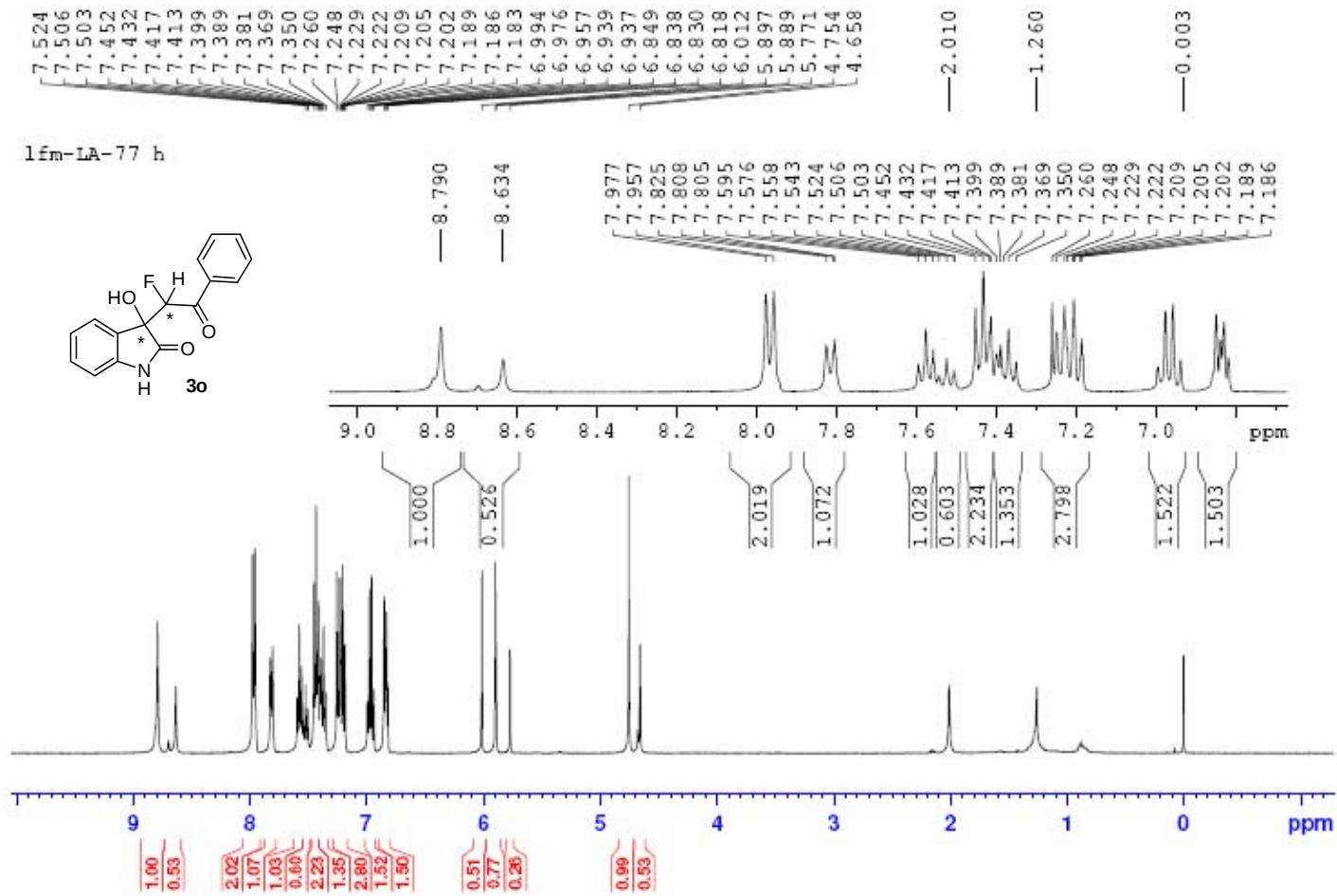


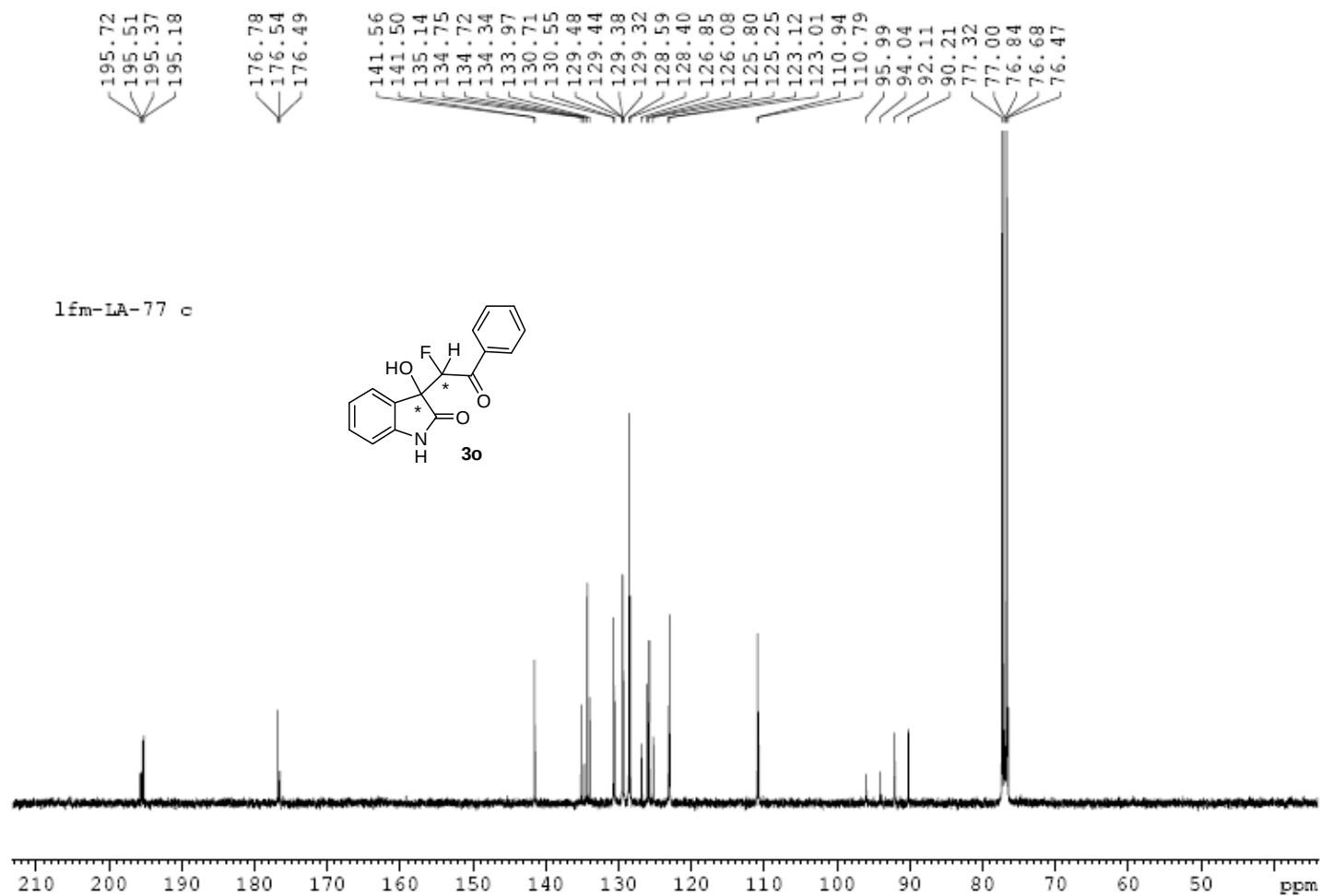




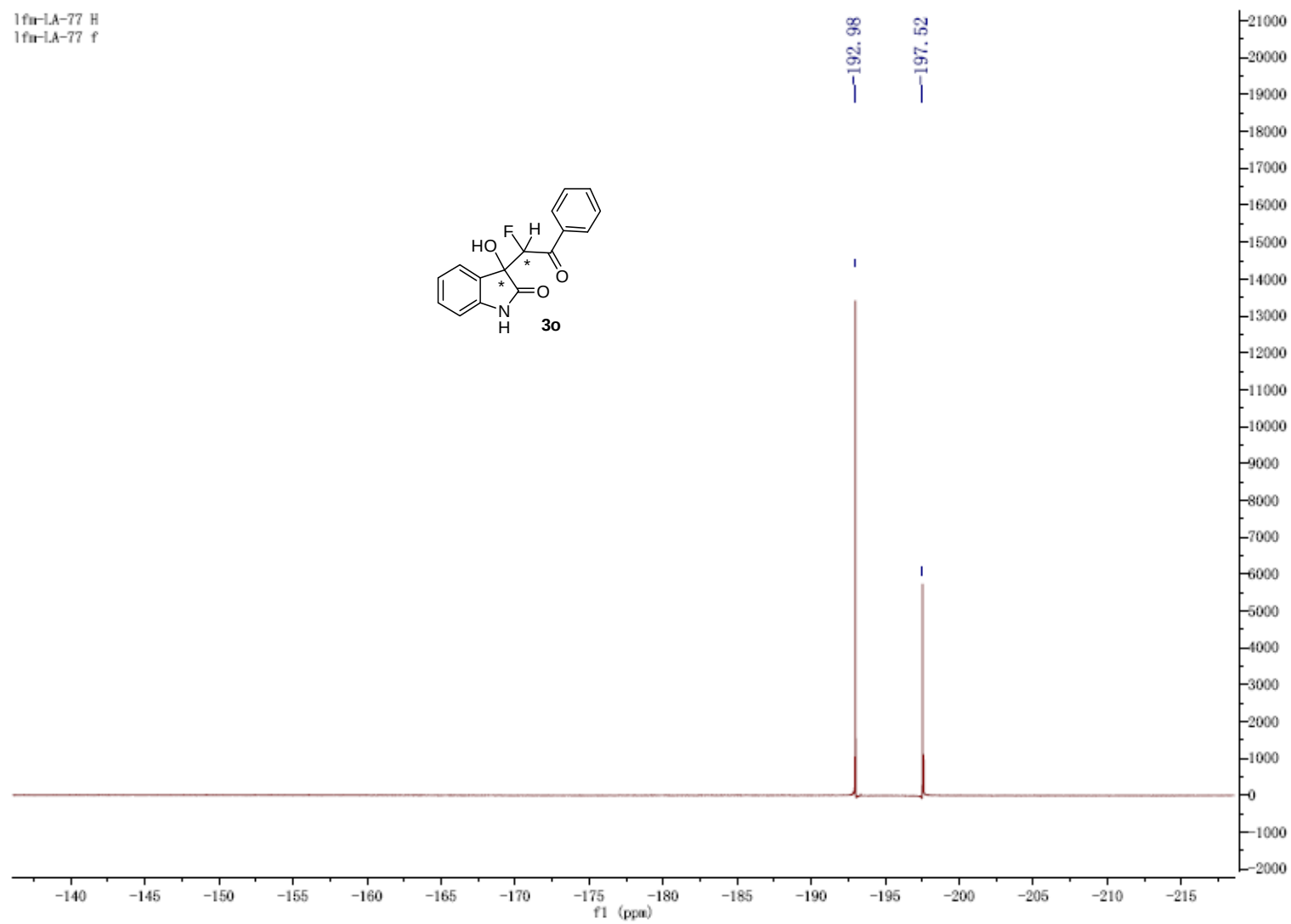
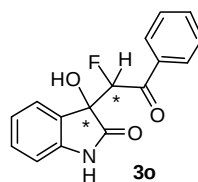


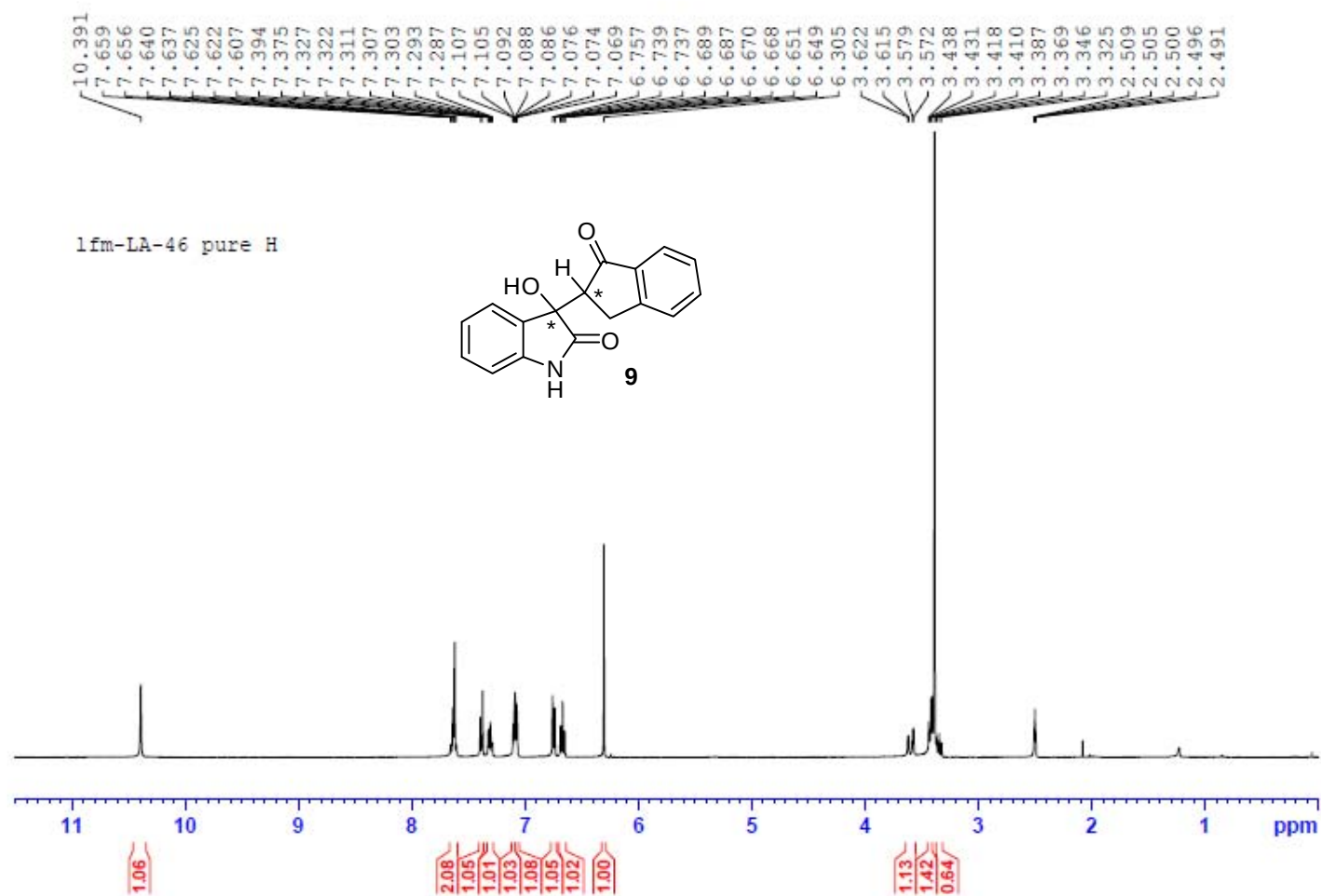


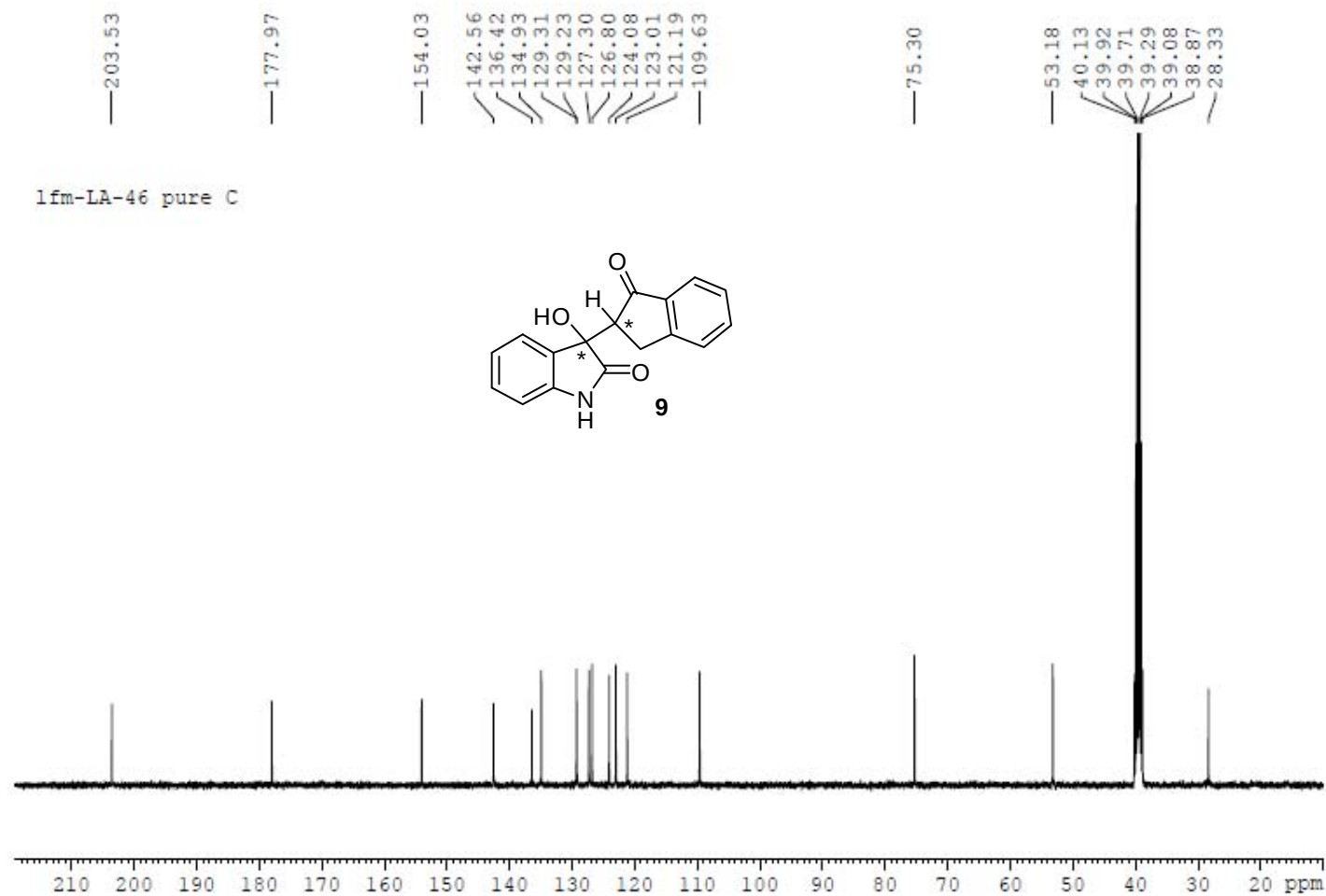


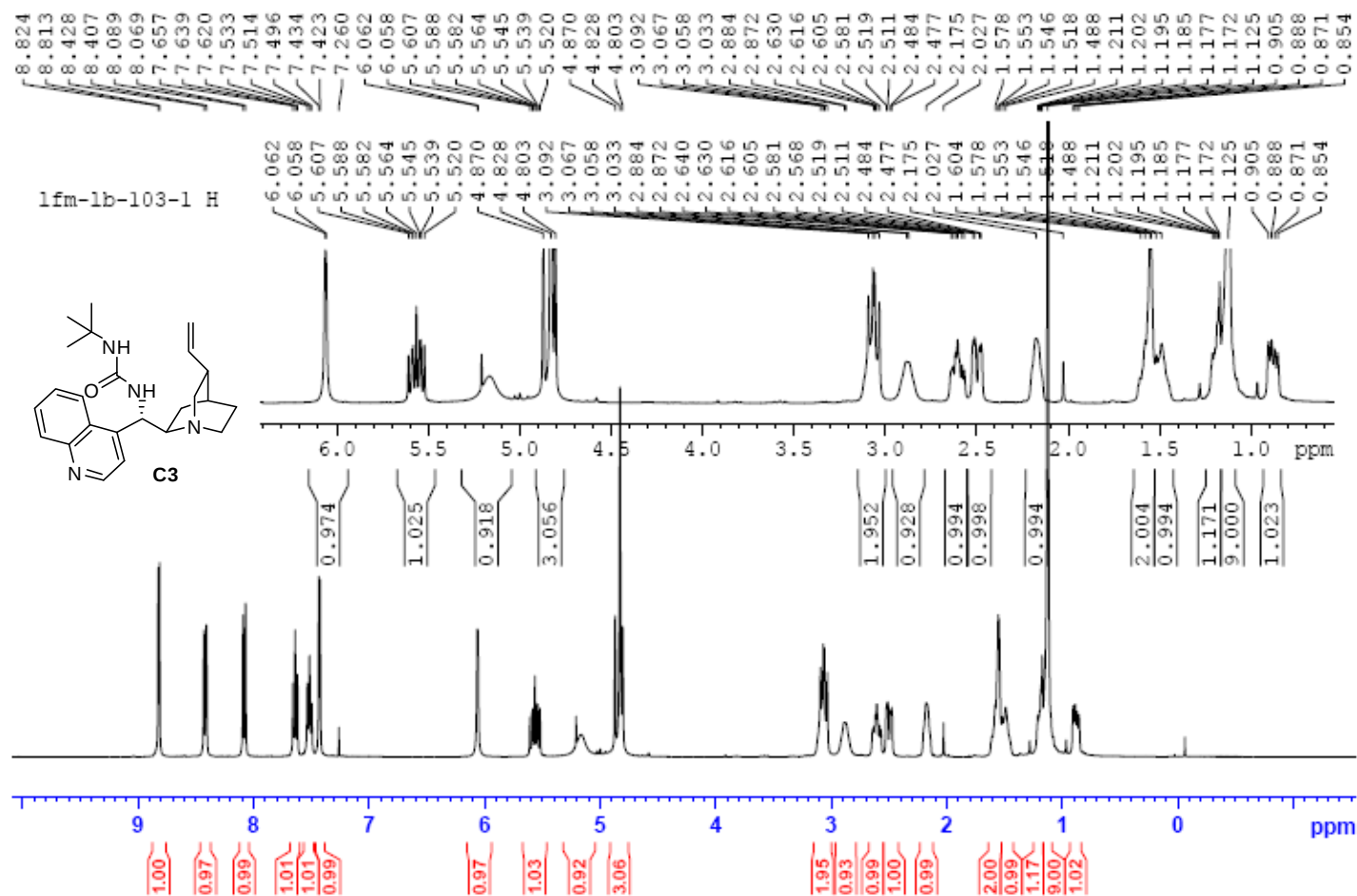


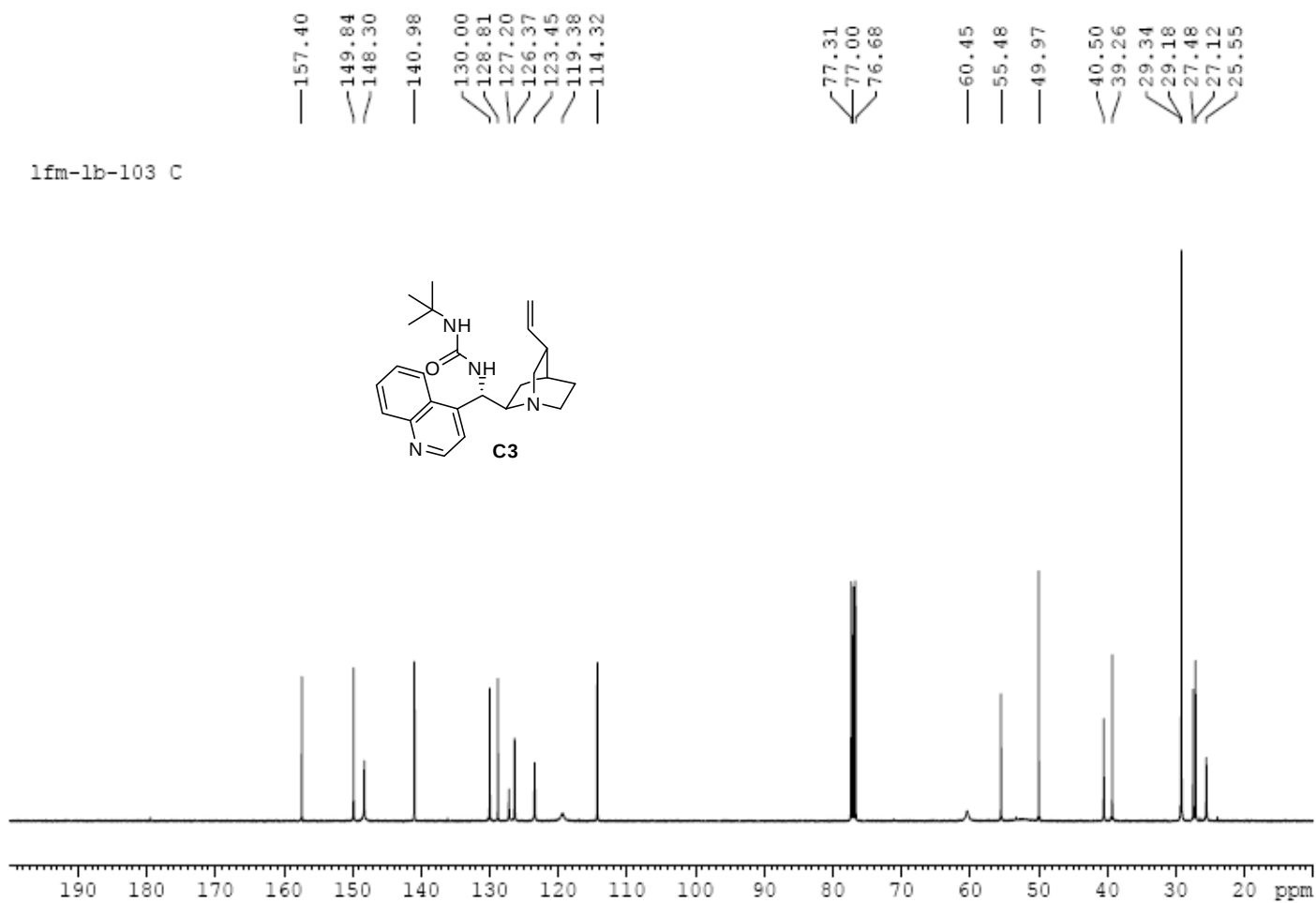
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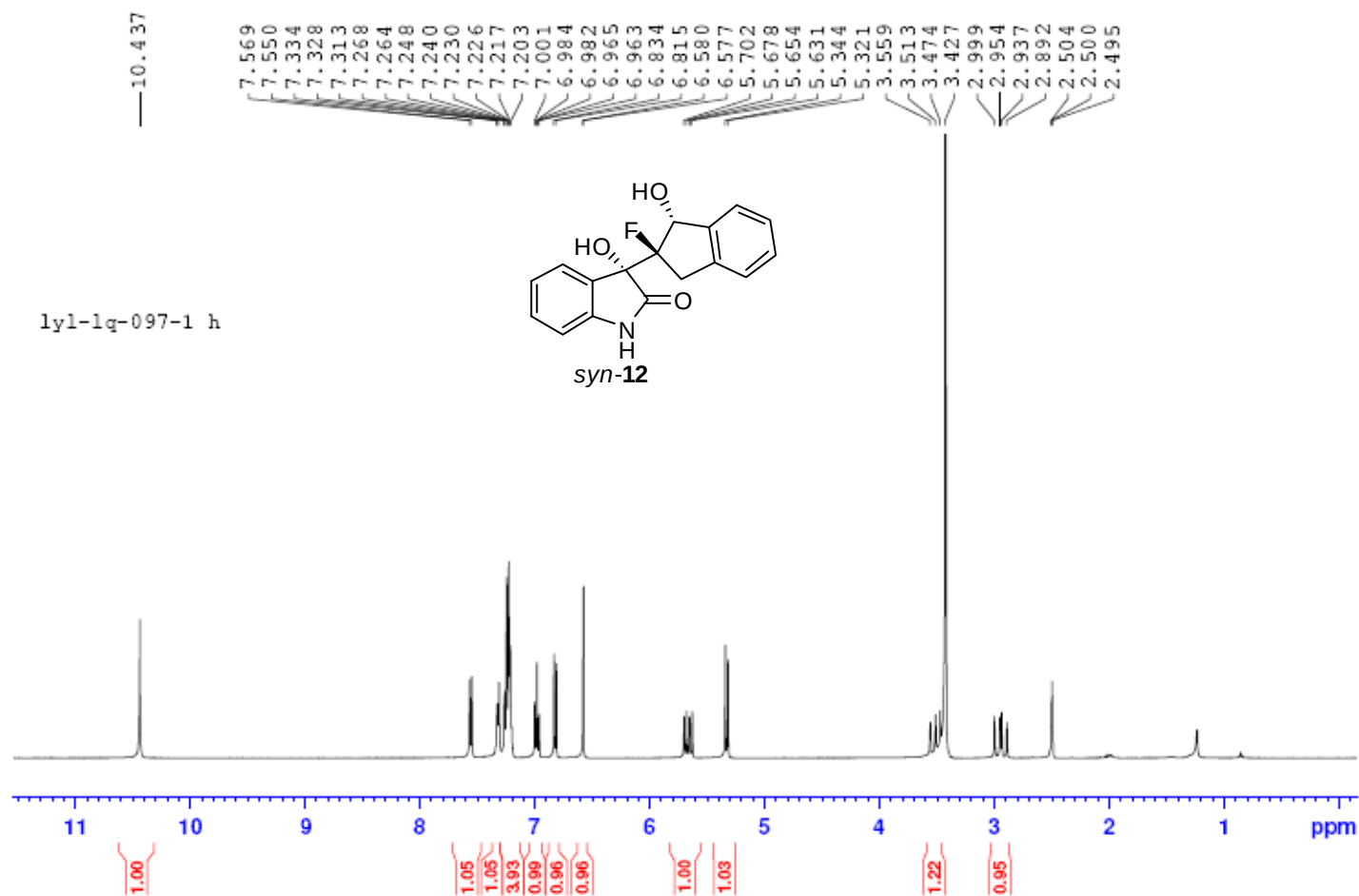


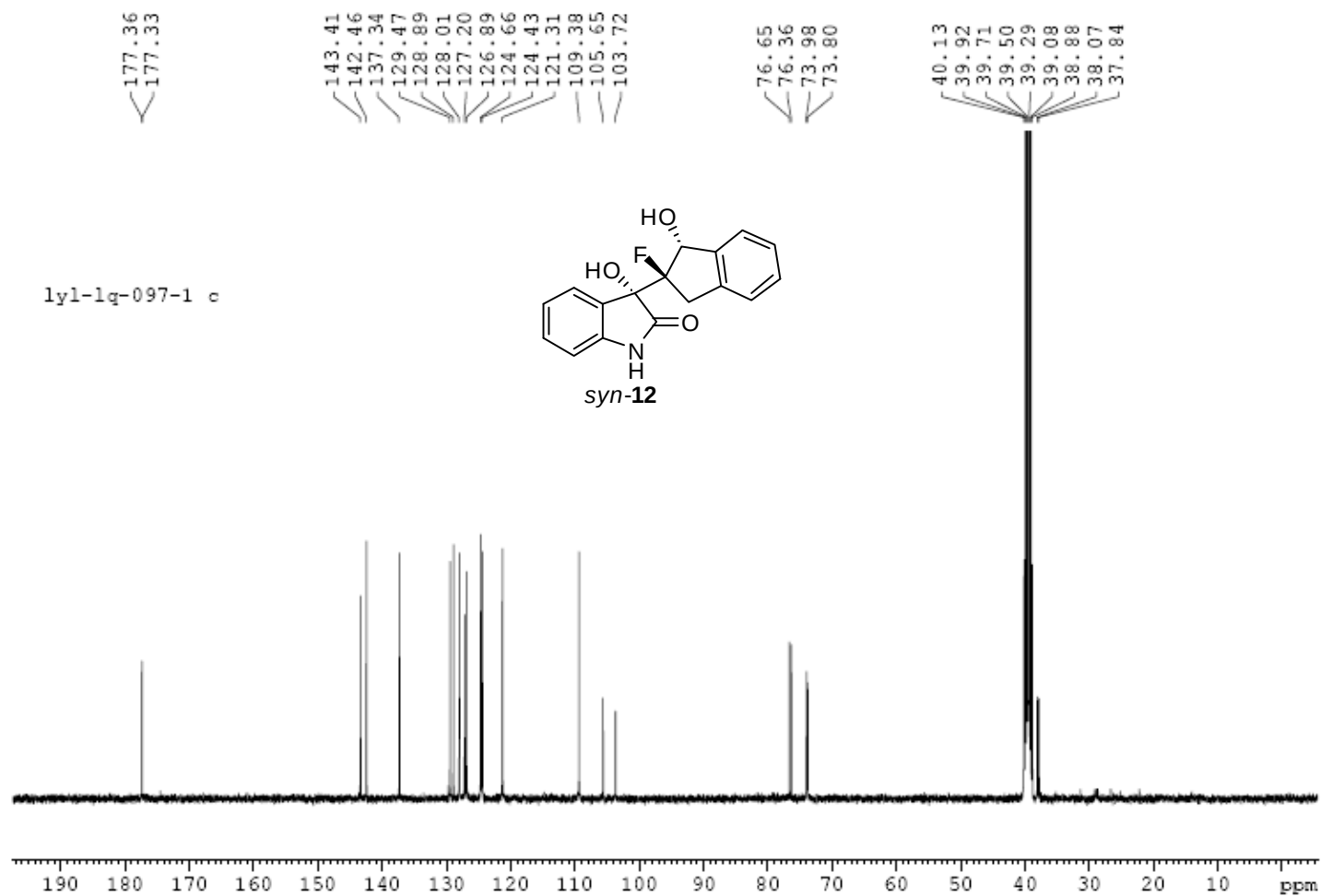




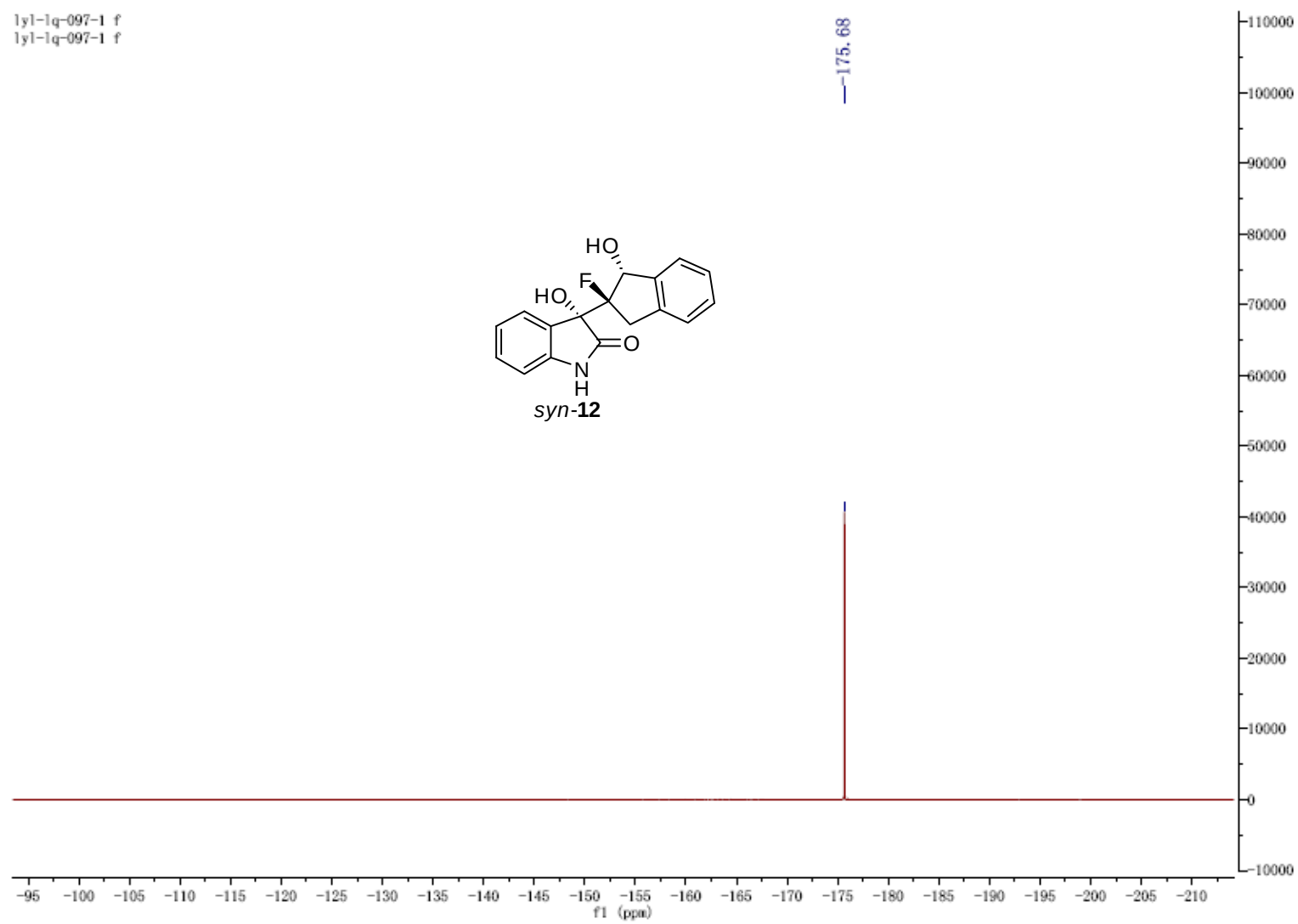


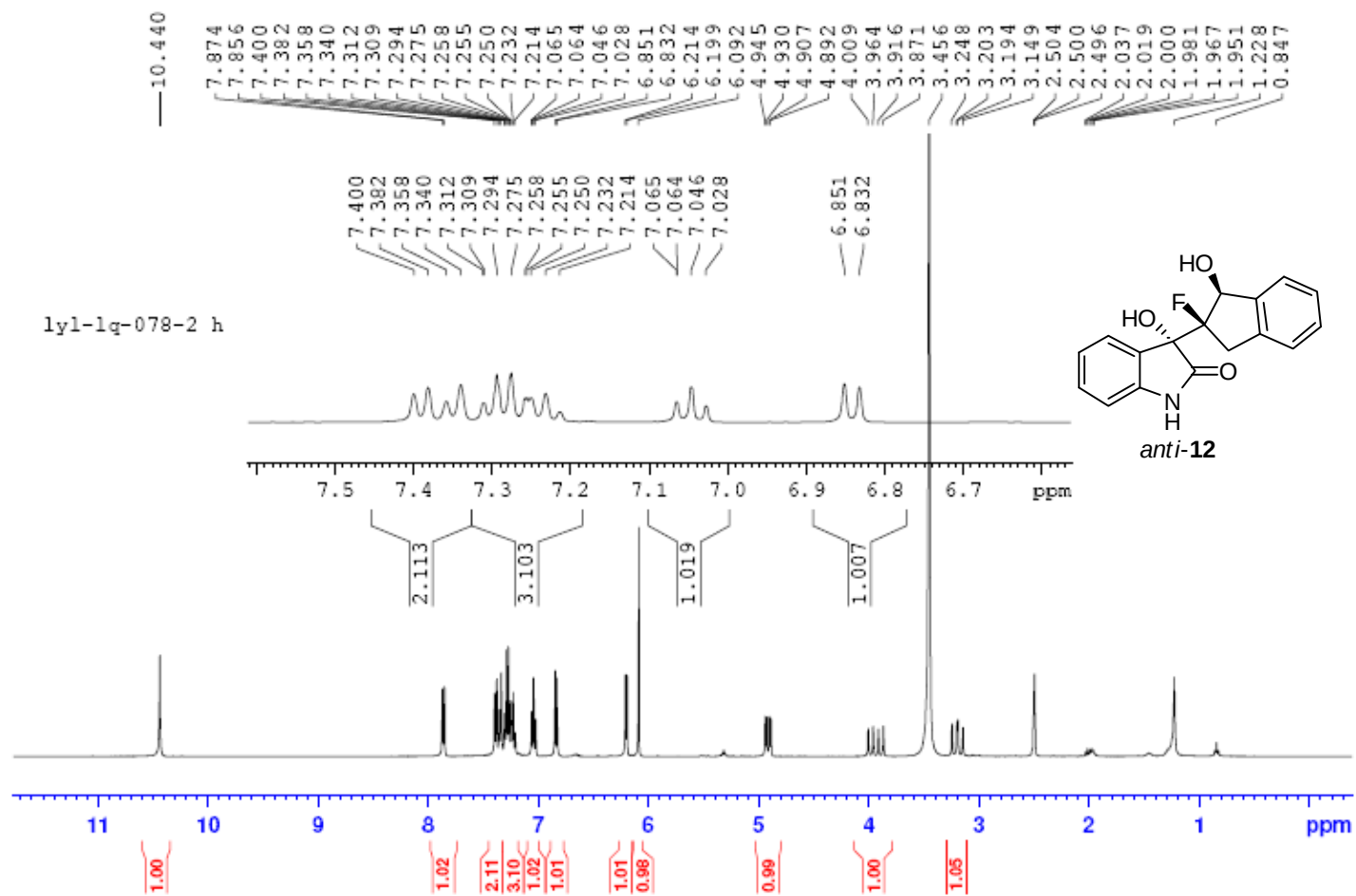


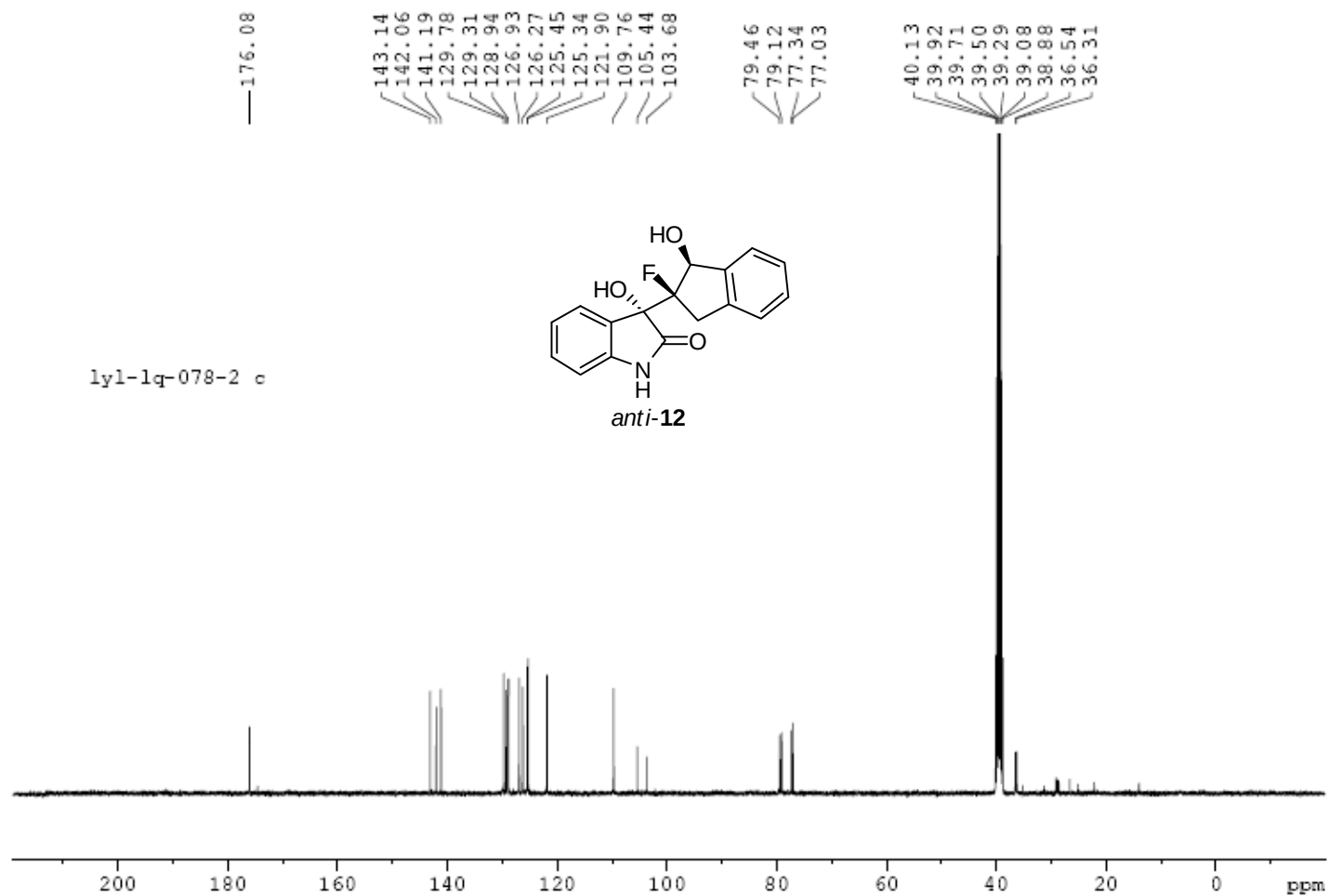




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