

Dual targeting ligands - histamine H₃ receptor ligands with monoamine oxidase B inhibitory activity – *in vitro* and *in vivo* evaluation

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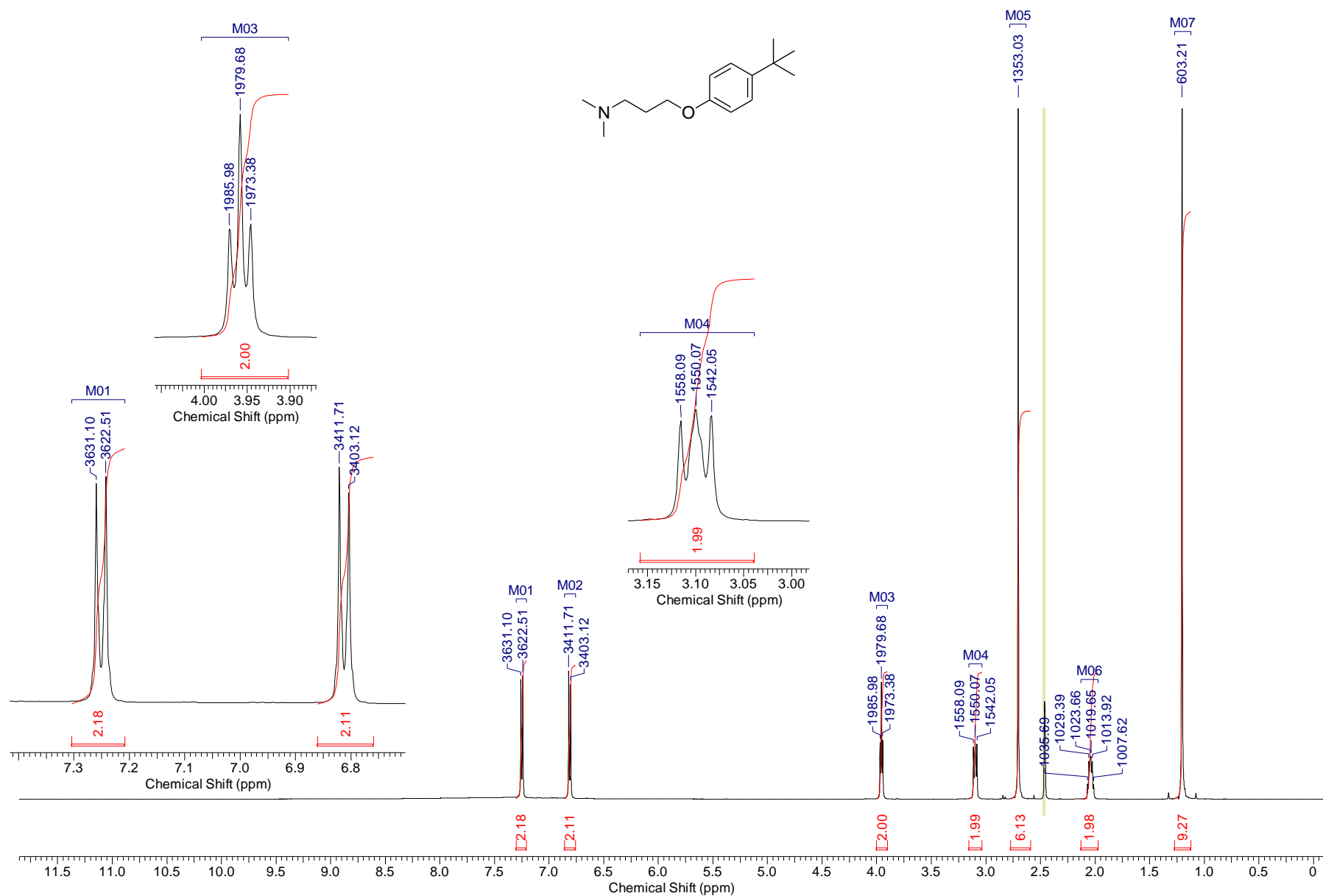
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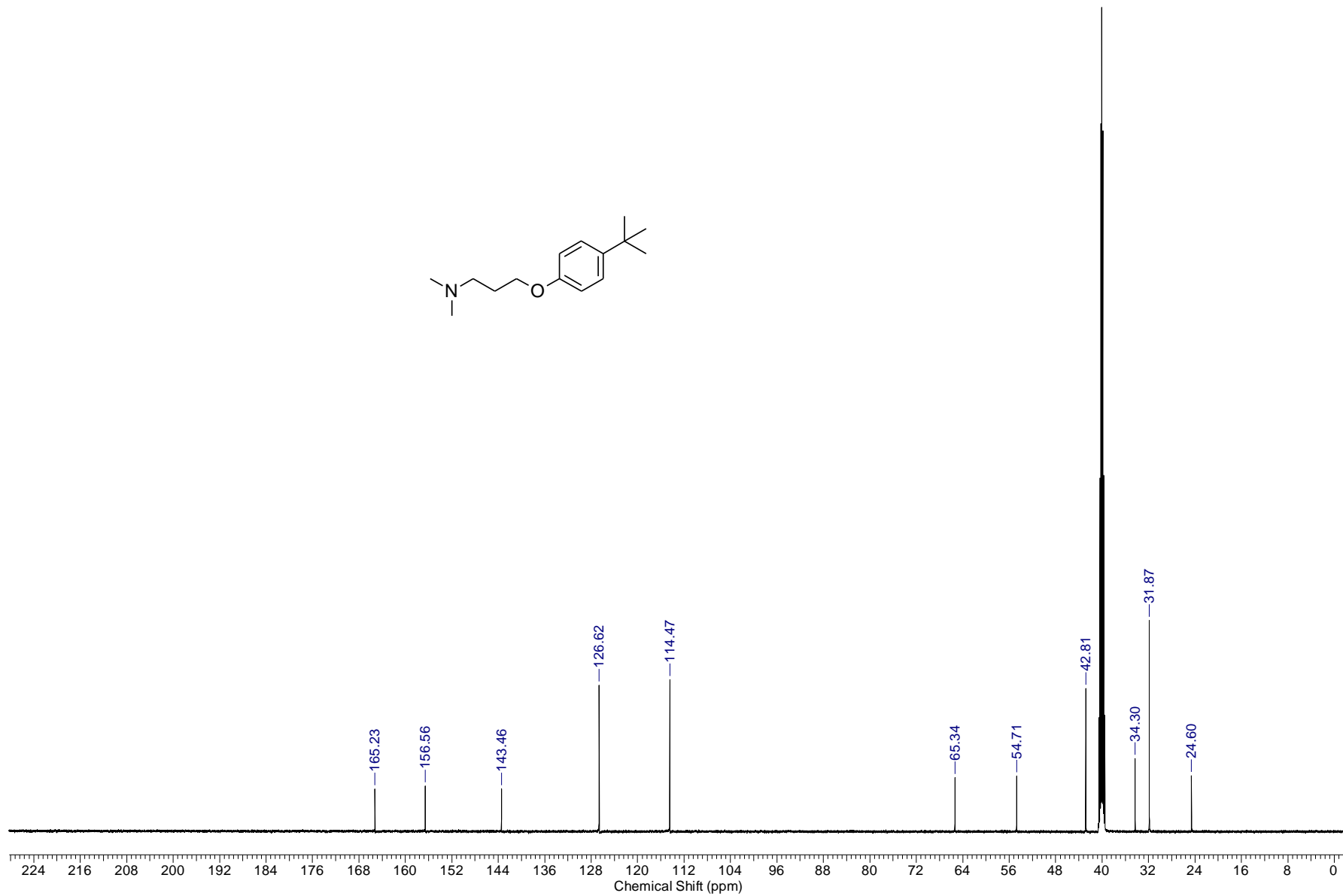
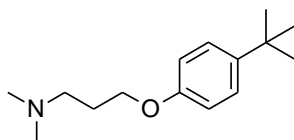
⁷ Laboratory of Cellular Immunology, Institute of Medical Biology of Polish Academy of Sciences, 106 Lodowa Str., 93-232 Łódź, Poland (W.W.)

*Correspondence: dorota.lazewska@uj.edu.pl (D.Ł.); anna.stasiak@umed.lodz.pl (A.St.)

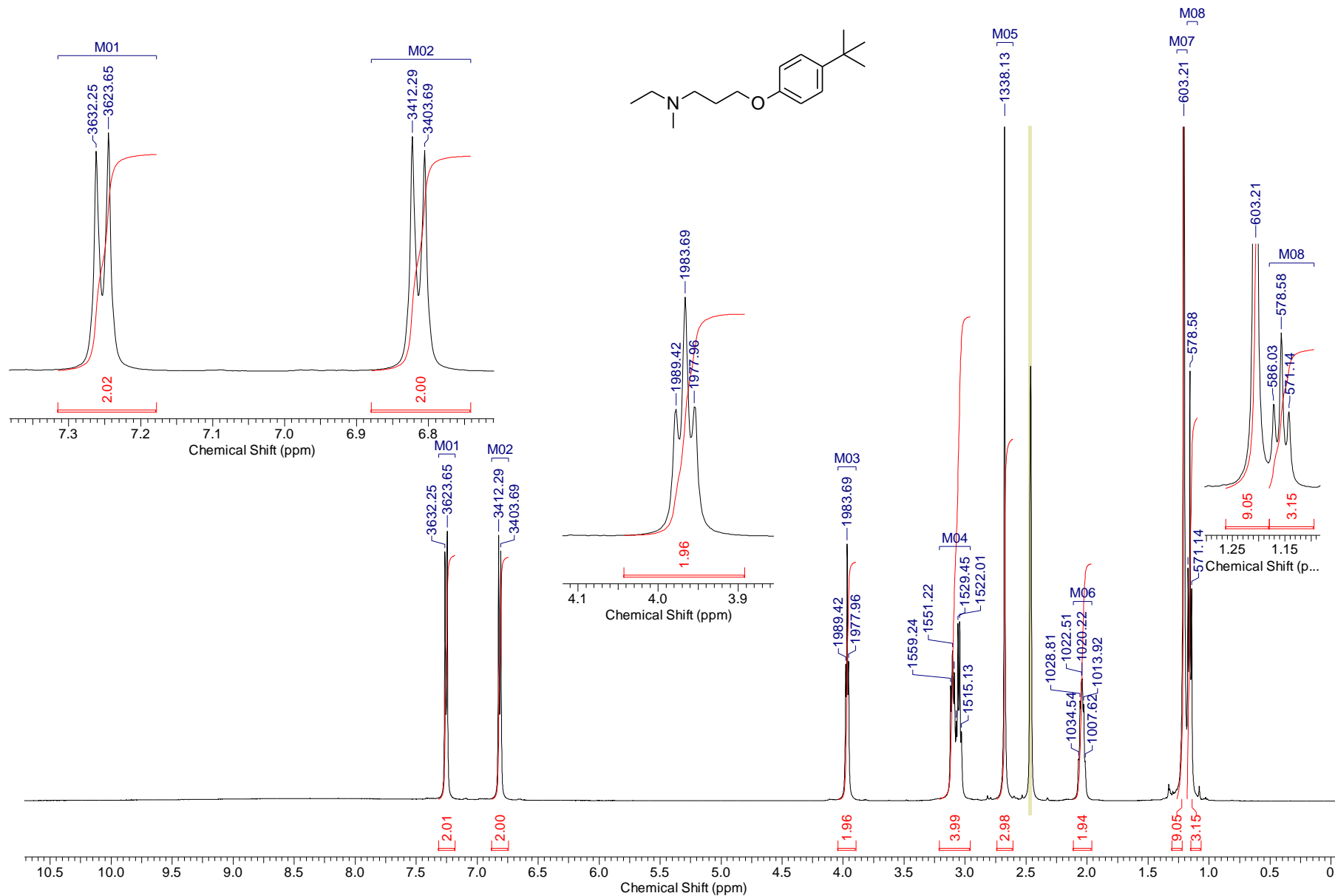
¹H and ¹³C NMR spectra of synthesized compounds



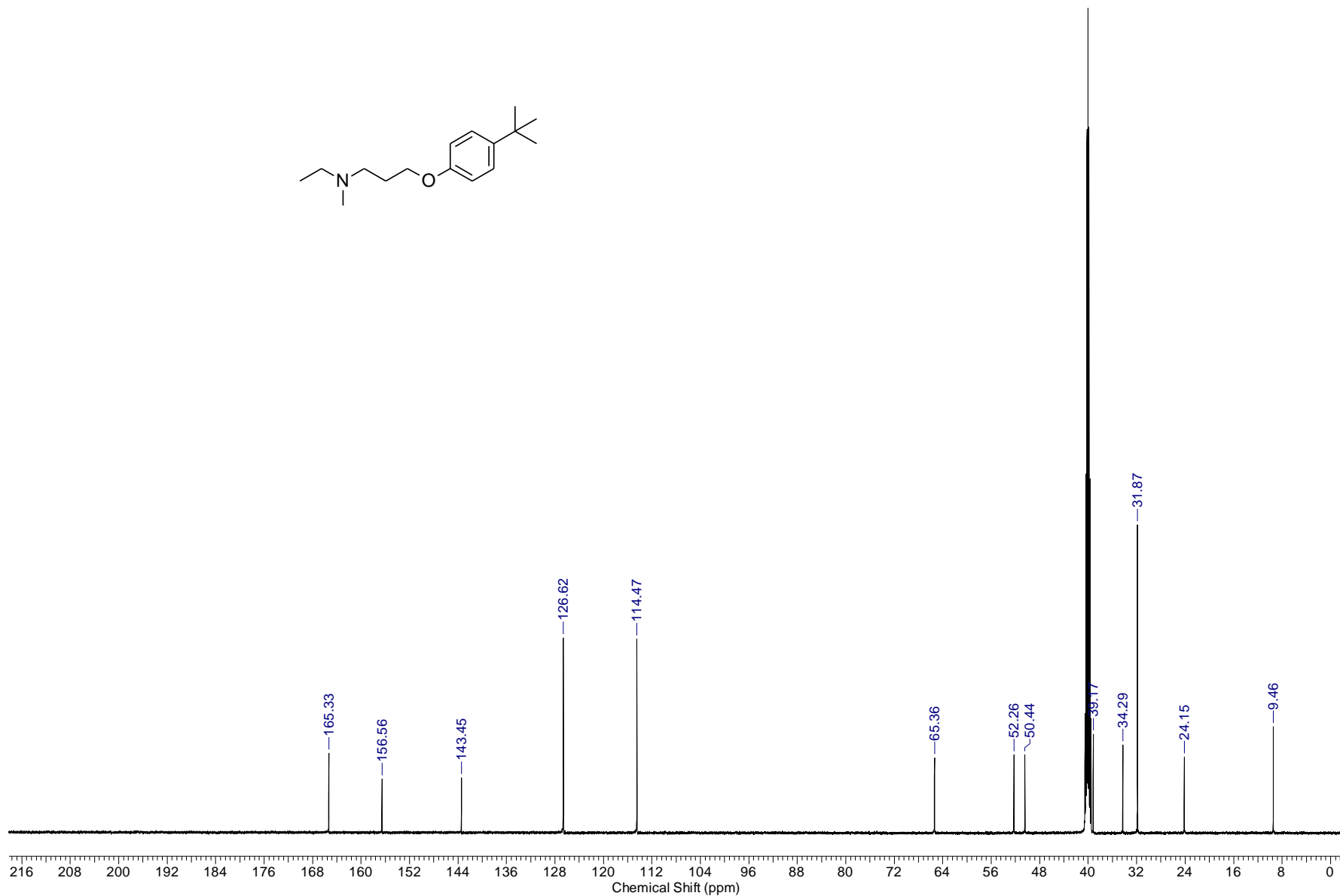
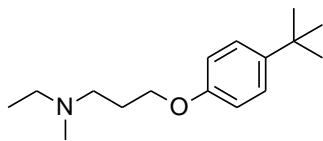
^1H NMR spectrum of 3-(4-(*tert*-butyl)phenoxy)-*N,N*-dimethylpropan-1-amine hydrogen oxalate (**4**)



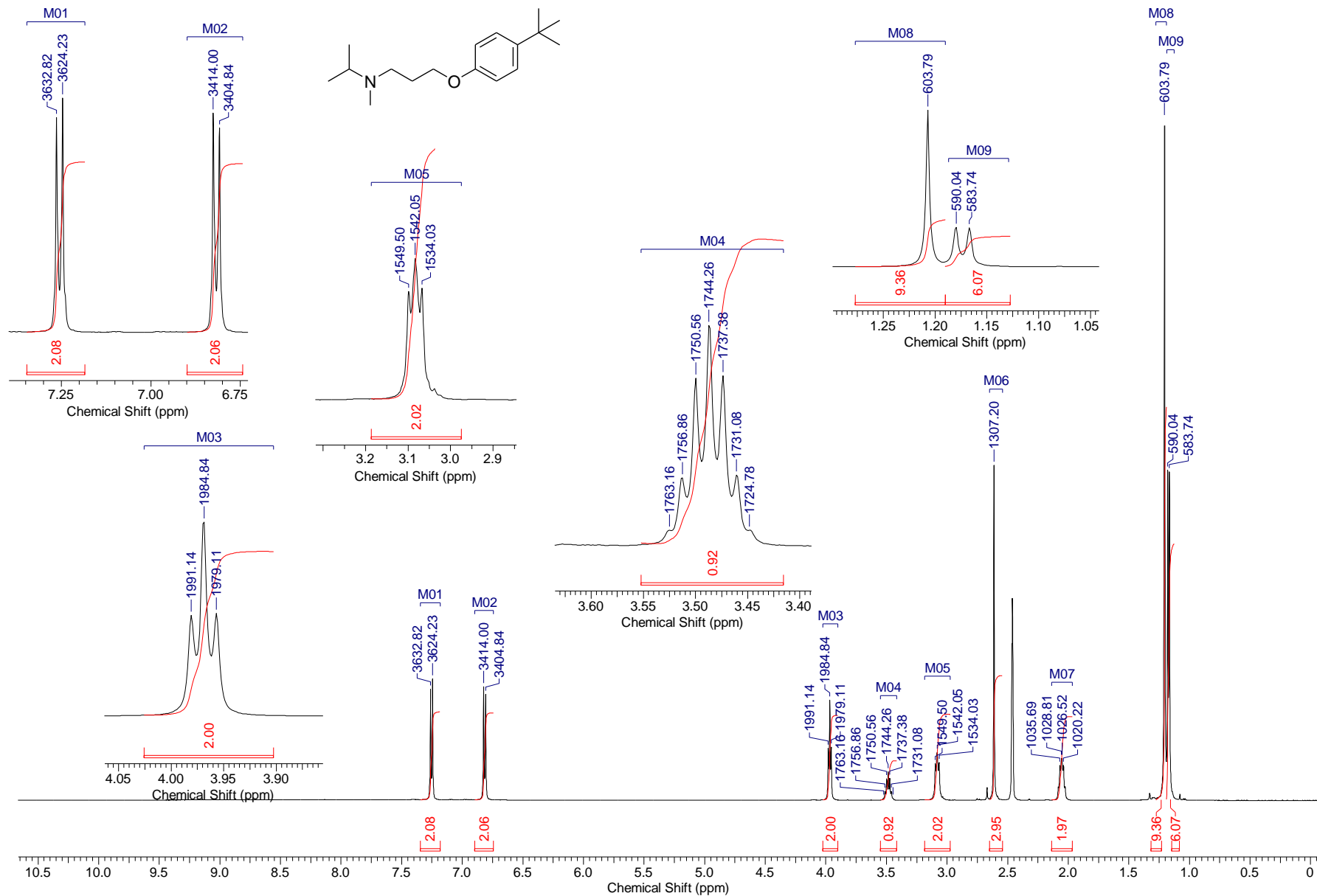
^{13}C NMR spectrum of 3-(4-(*tert*-butyl)phenoxy)-*N,N*-dimethylpropan-1-amine hydrogen oxalate (4)



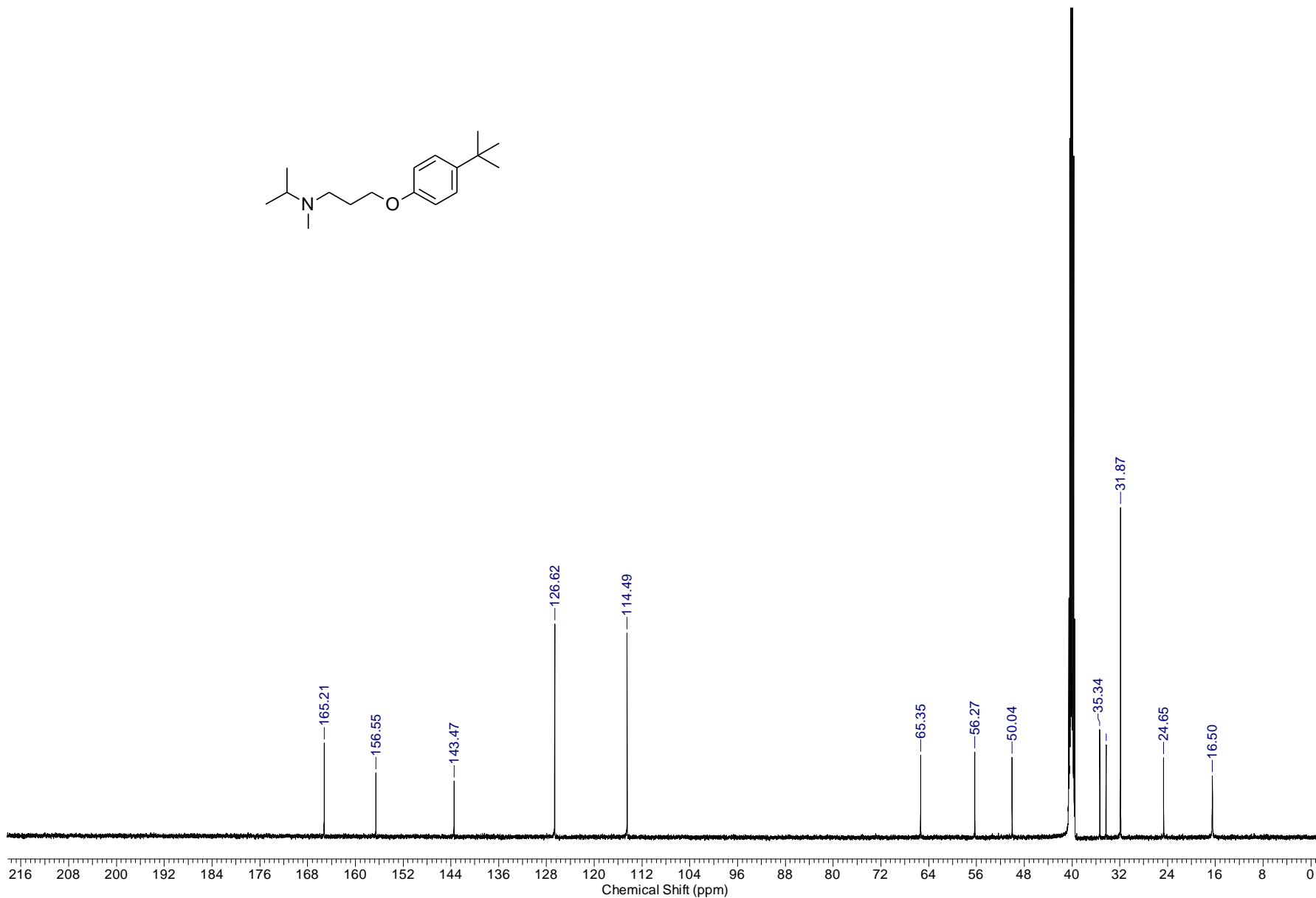
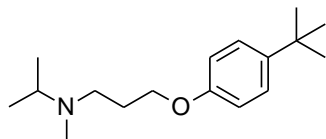
¹H NMR spectrum 3-(4-(*tert*-butyl)phenoxy)-*N*-isopropyl-*N*-methylpropan-1-amine hydroxalate (5)



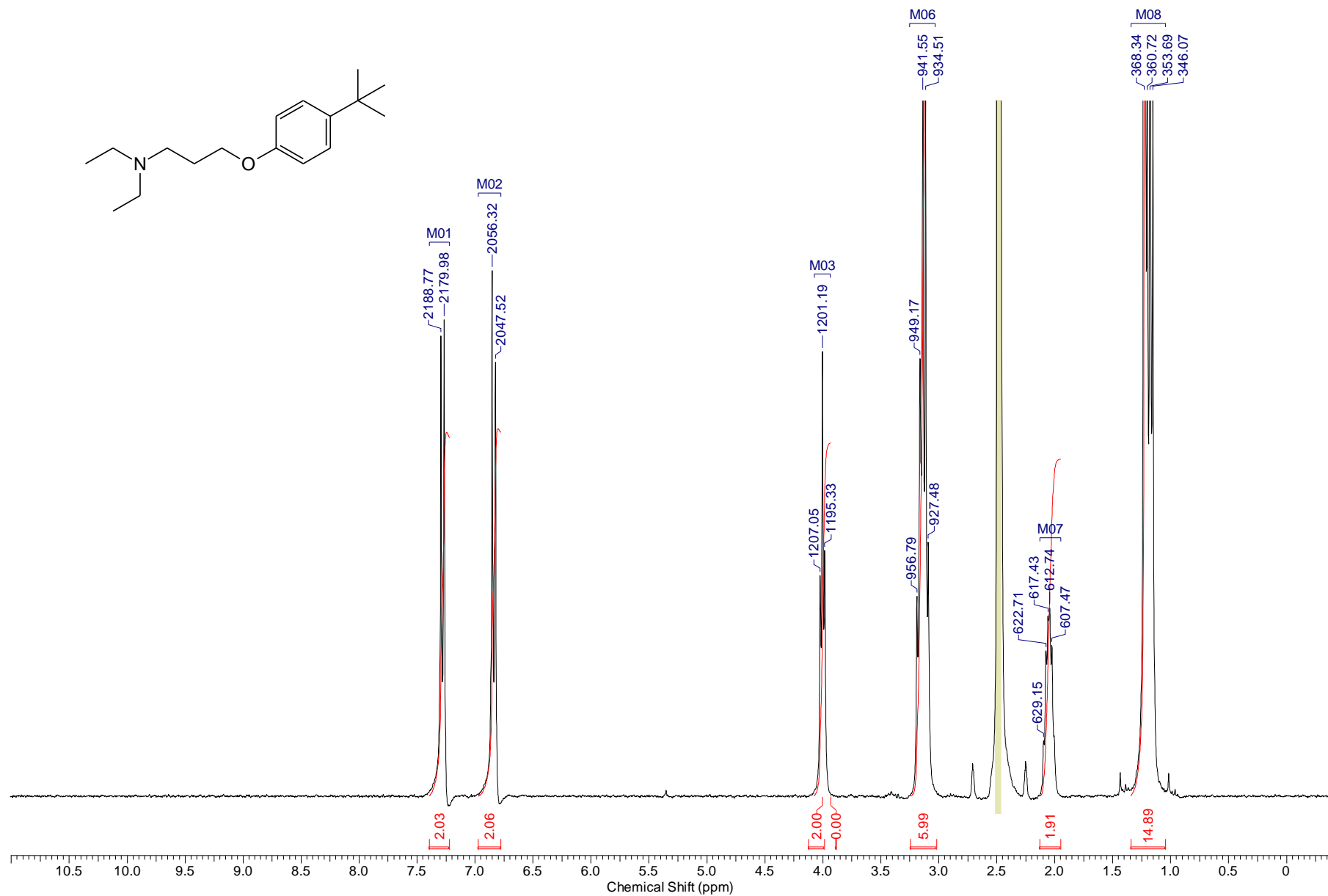
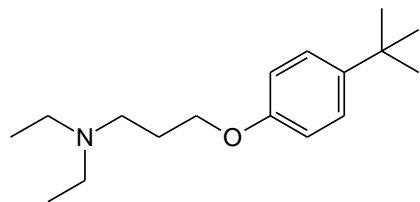
¹³C NMR spectrum of 3-(4-(*tert*-butyl)phenoxy)-*N*-ethyl-*N*-methylpropan-1-amine hydrogen oxalate (5)



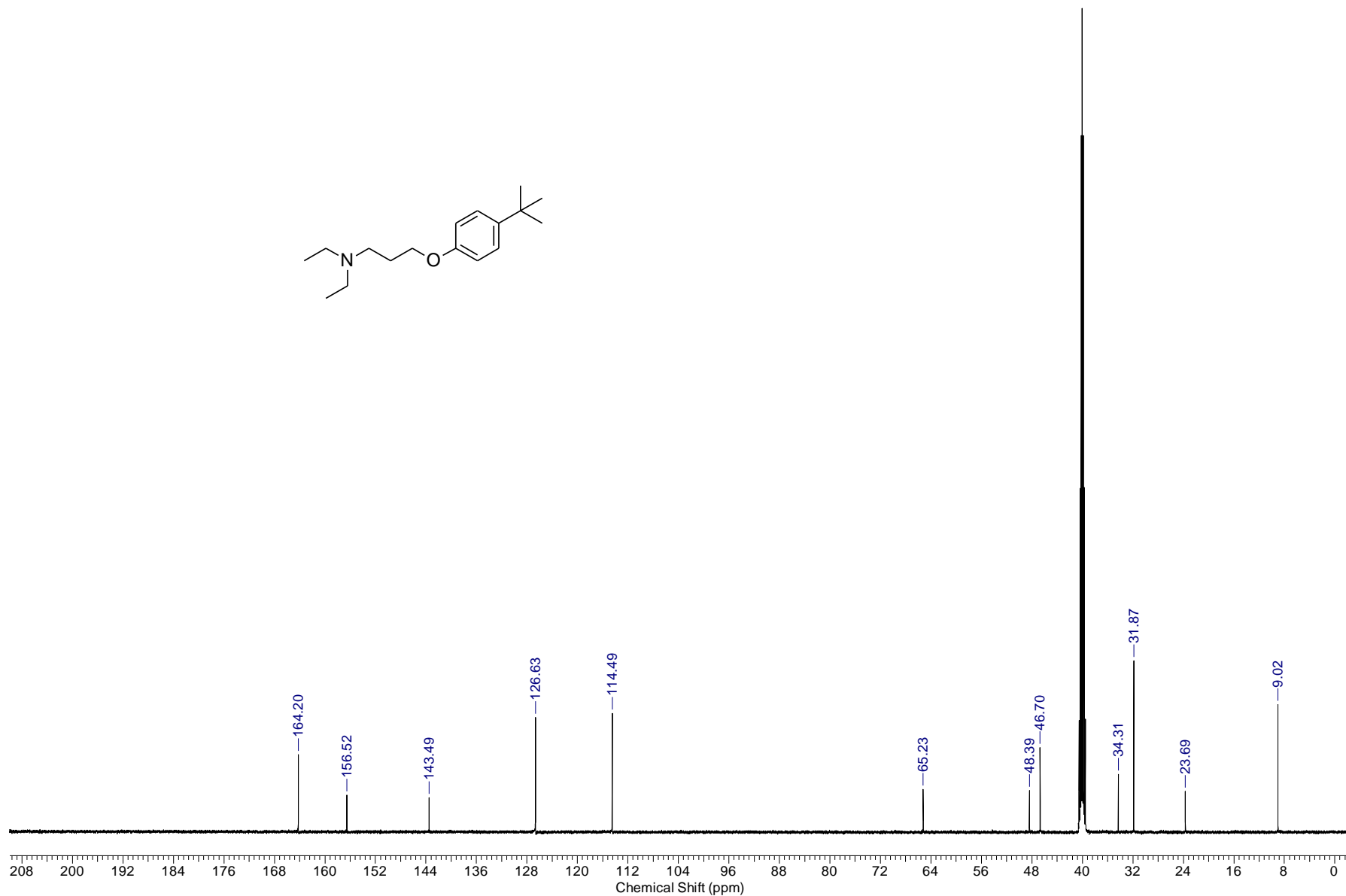
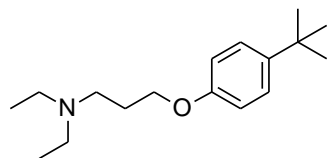
¹H NMR spectrum of 3-(4-(*tert*-butyl)phenoxy)-*N*-ethyl-*N*-methylpropan-1-amine hydrogen oxalate (6)



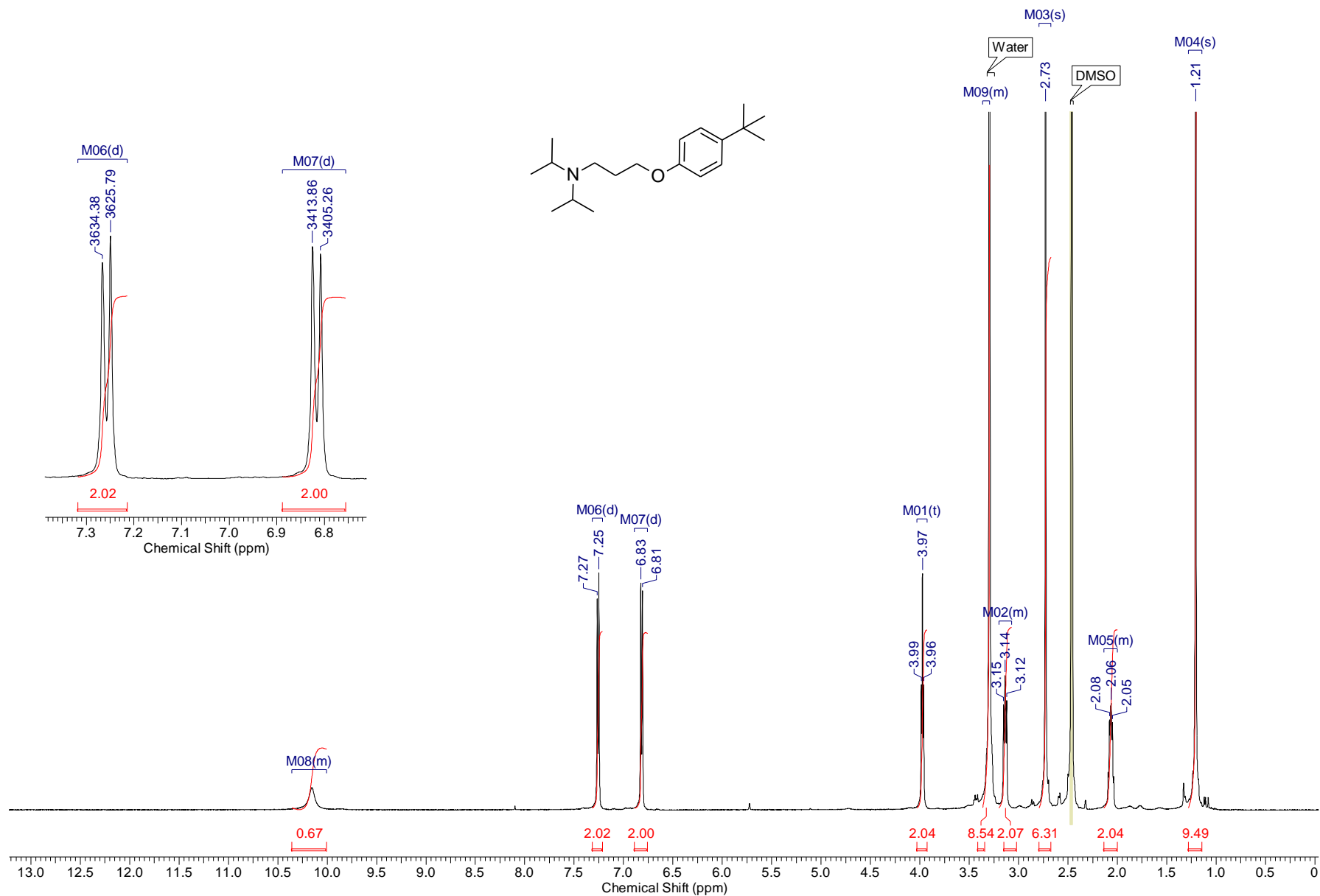
¹³C NMR spectrum 3-(4-(*tert*-butyl)phenoxy)-*N*-isopropyl-*N*-methylpropan-1-amine hydrogen oxalate (6)



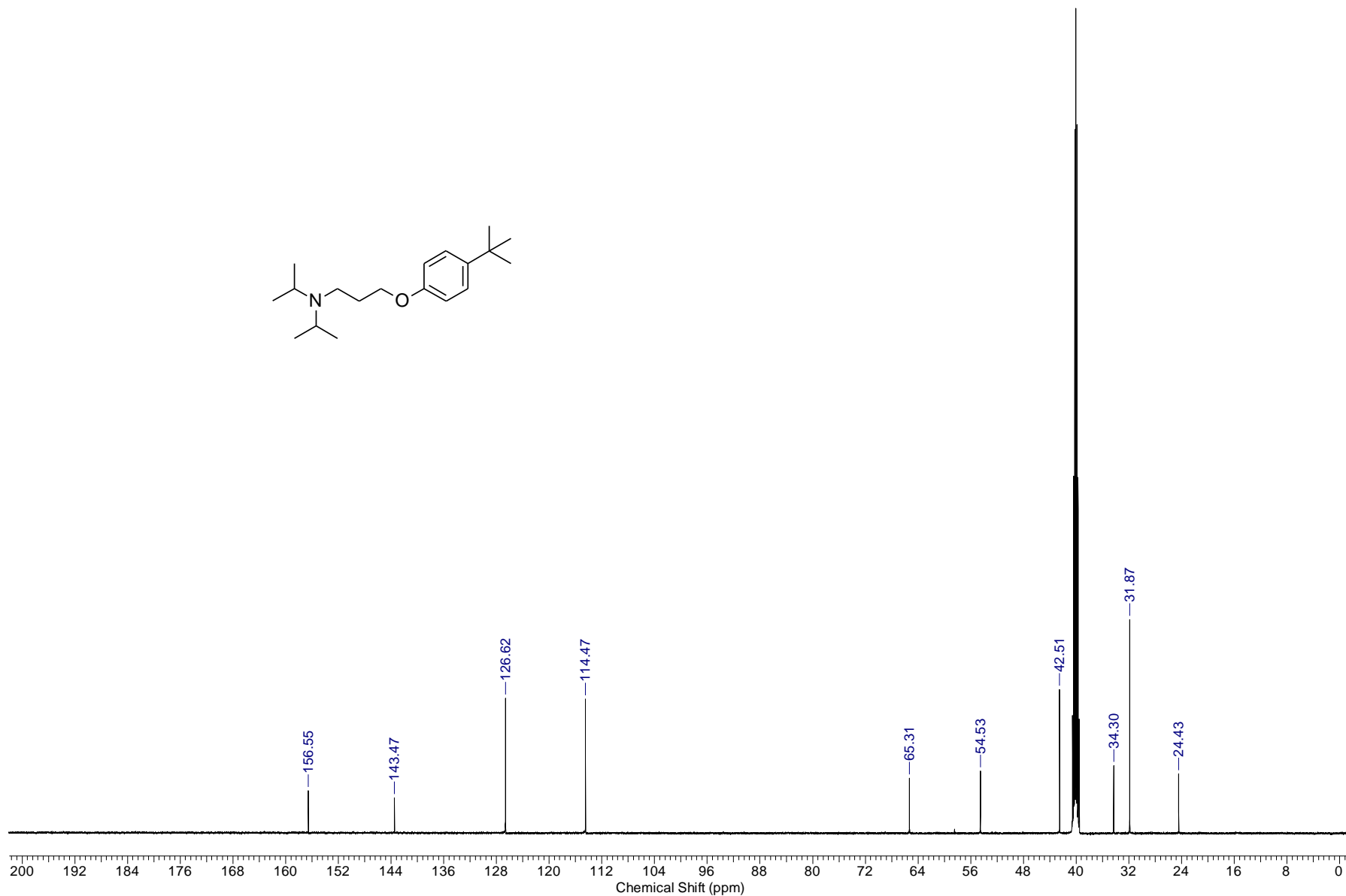
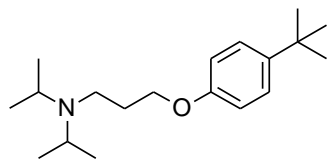
¹H NMR spectrum of 3-(4-(*tert*-butyl)phenoxy)-*N,N*-diethylpropan-1-amine hydrogen oxalate (7)



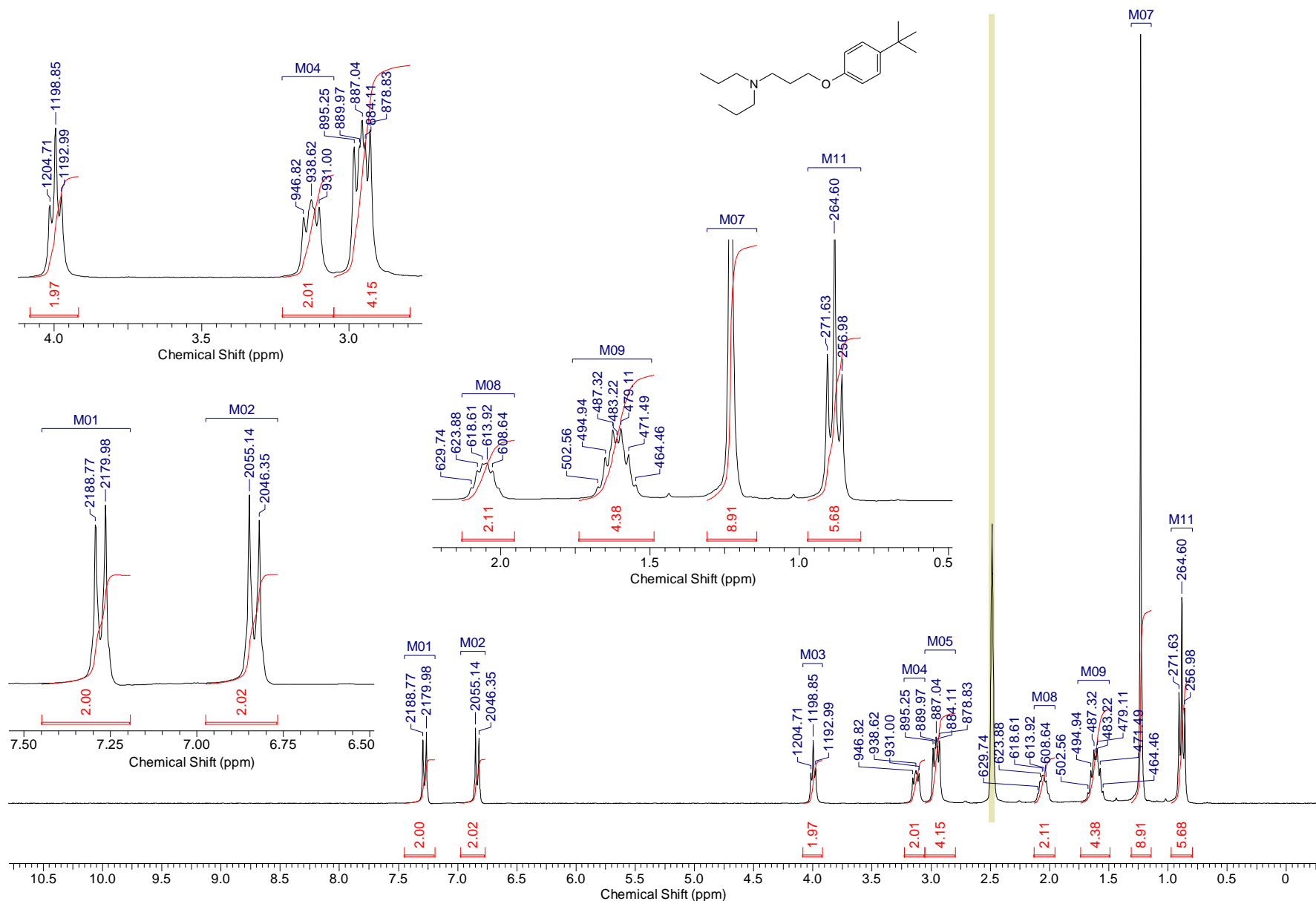
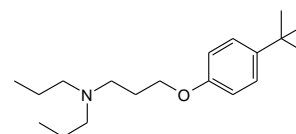
¹³C NMR spectrum of 3-(4-(*tert*-butyl)phenoxy)-*N,N*-diethylpropan-1-amine hydrogen oxalate (7)



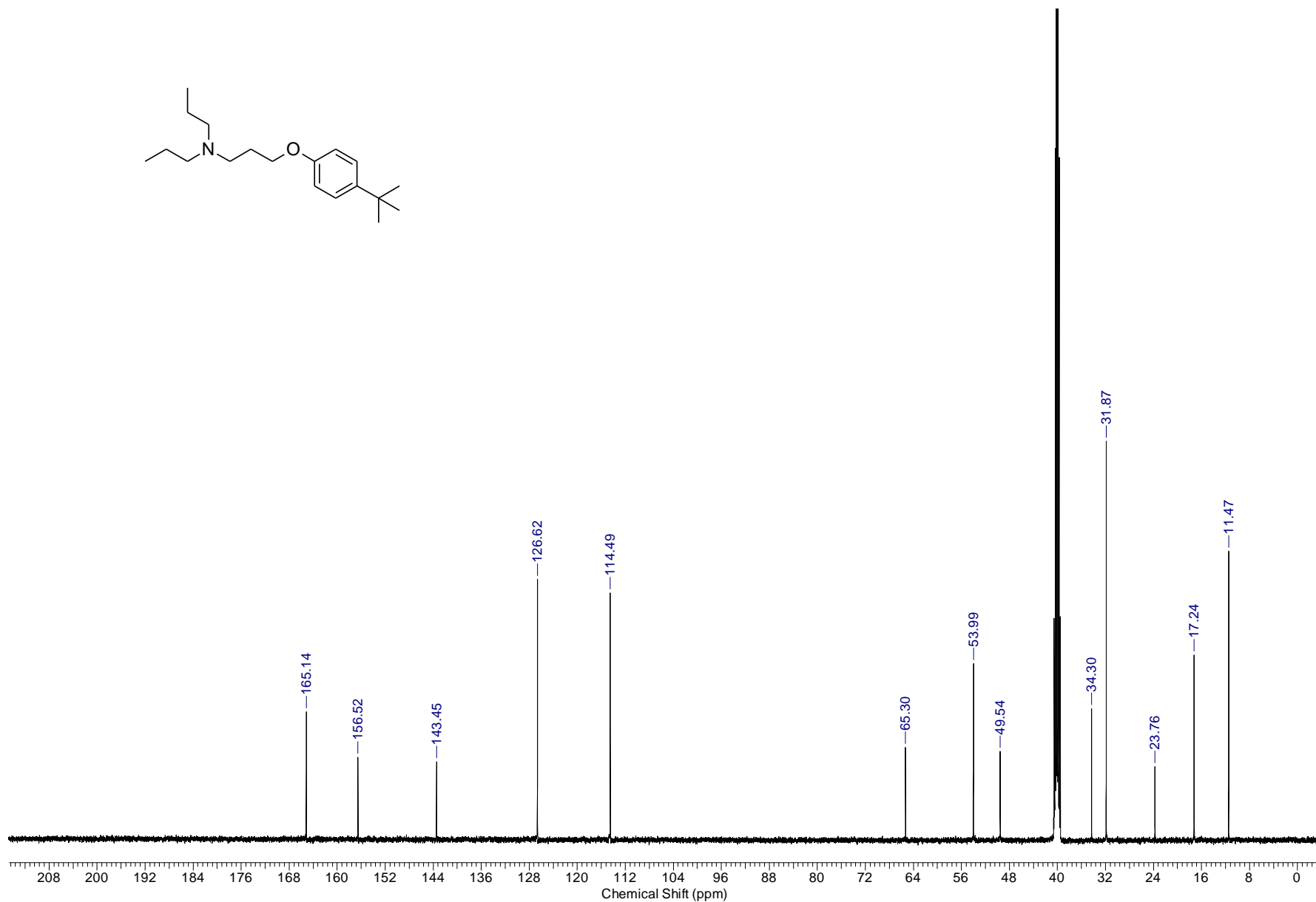
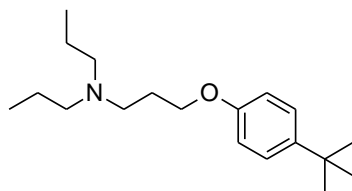
^1H NMR spectrum of 3-(4-(*tert*-butyl)phenoxy)-*N,N*-diisopropylpropan-1-amine hydrogen chloride (**8**)



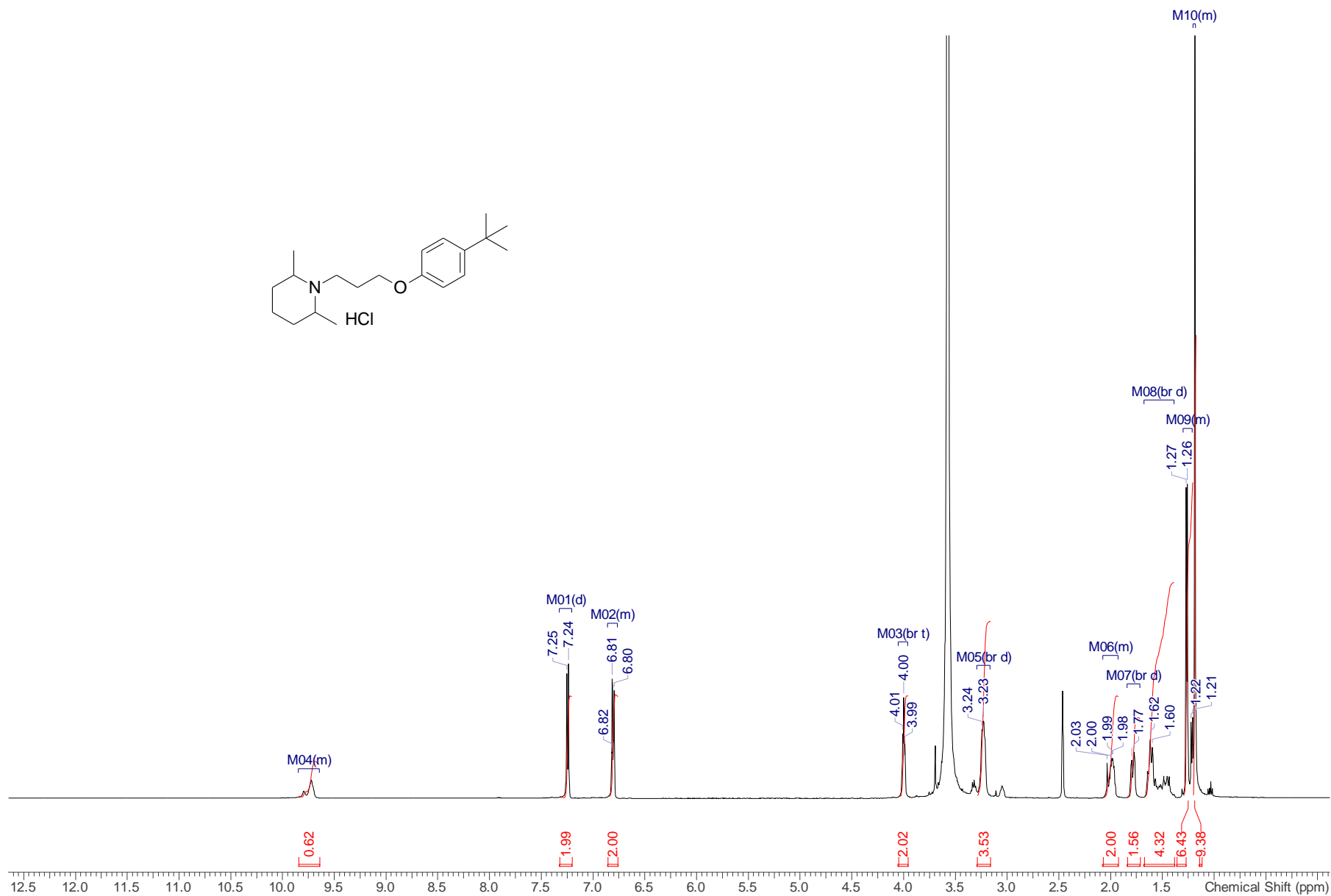
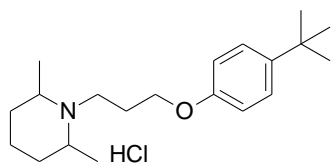
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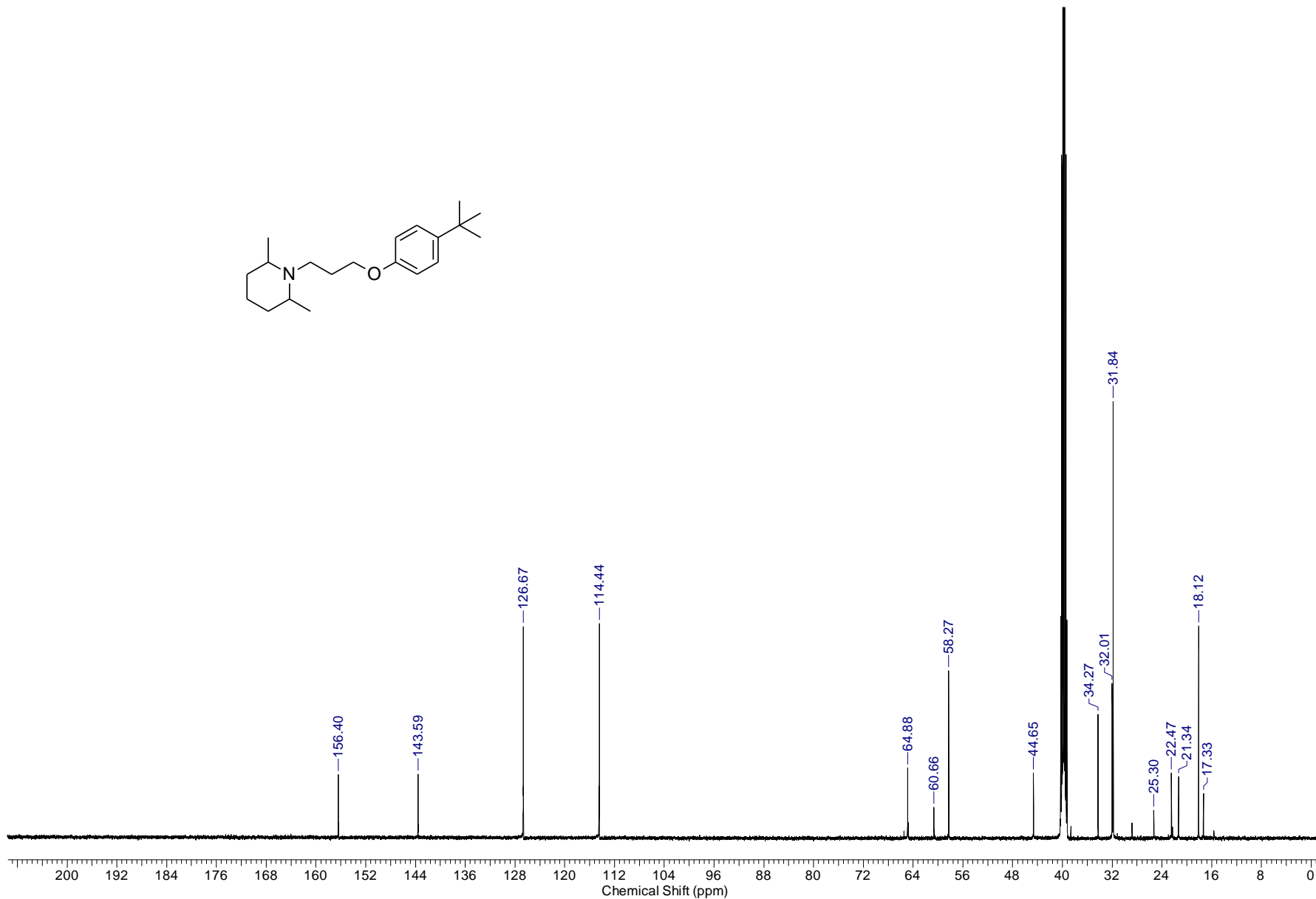
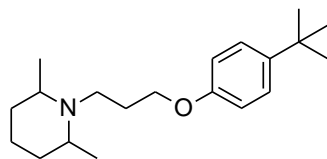
^1H NMR spectrum of 3-(4-(*tert*-butyl)phenoxy)-*N,N*-dipropylpropan-1-amine hydrogen oxalate (**9**)



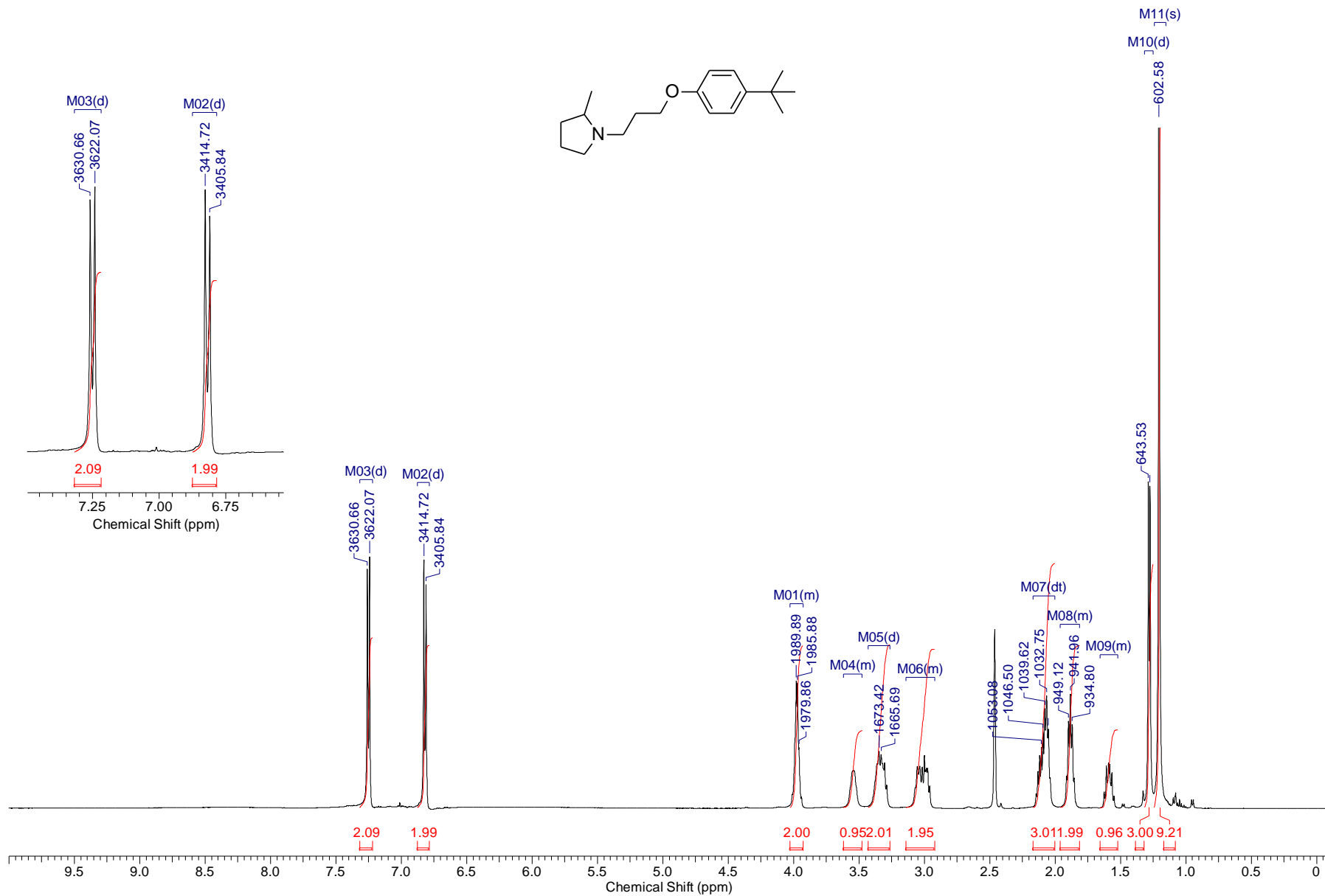
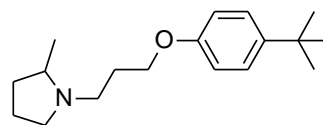
¹³C NMR spectrum of 3-(4-(*tert*-butyl)phenoxy)-*N,N*-dipropylpropan-1-amine hydrogen oxalate (9)



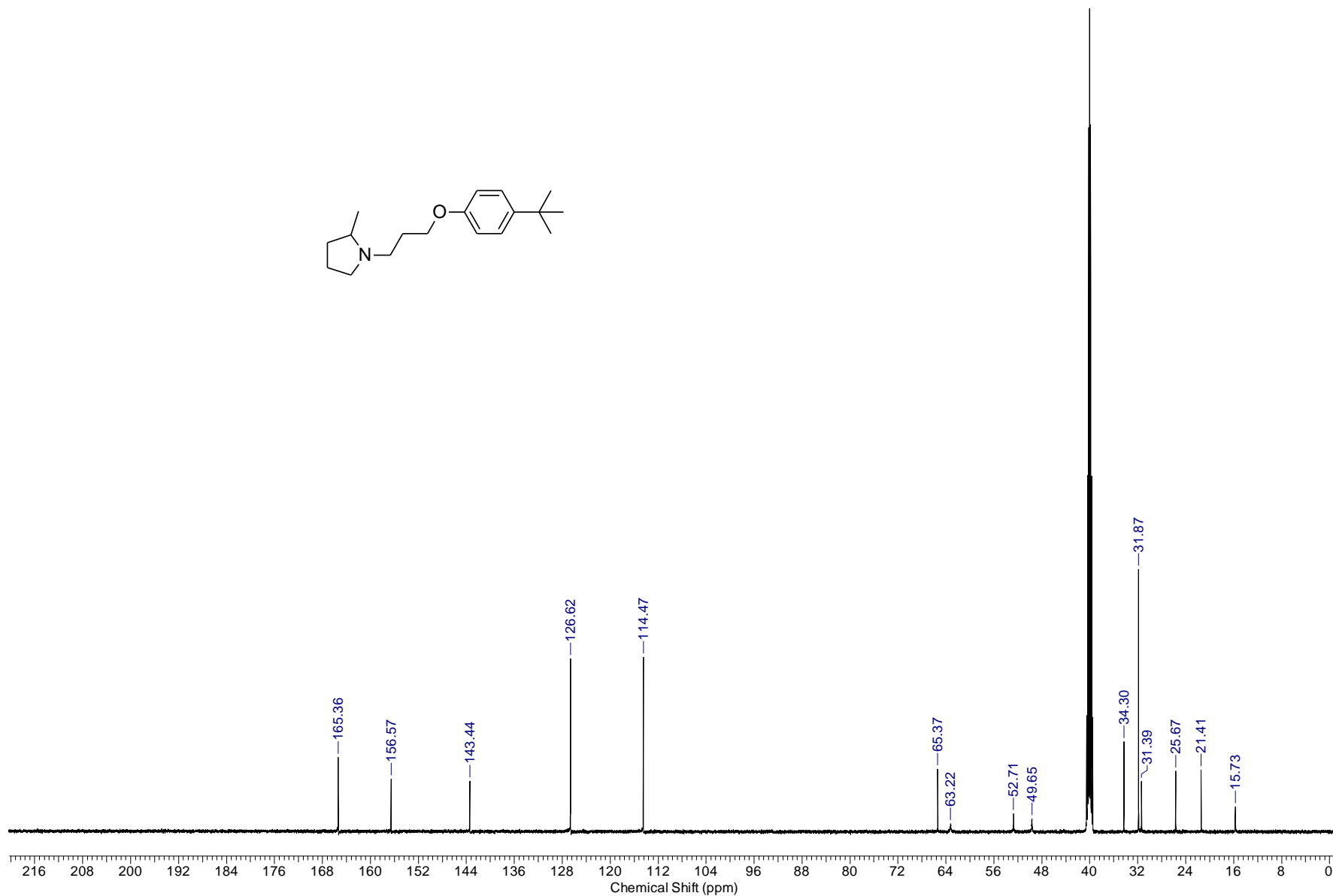
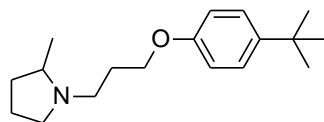
¹H NMR spectrum of 1-(3-(4-(*tert*-butyl)phenoxy)propyl)-2,6-dimethylpiperidine hydrogen chloride (**11**)



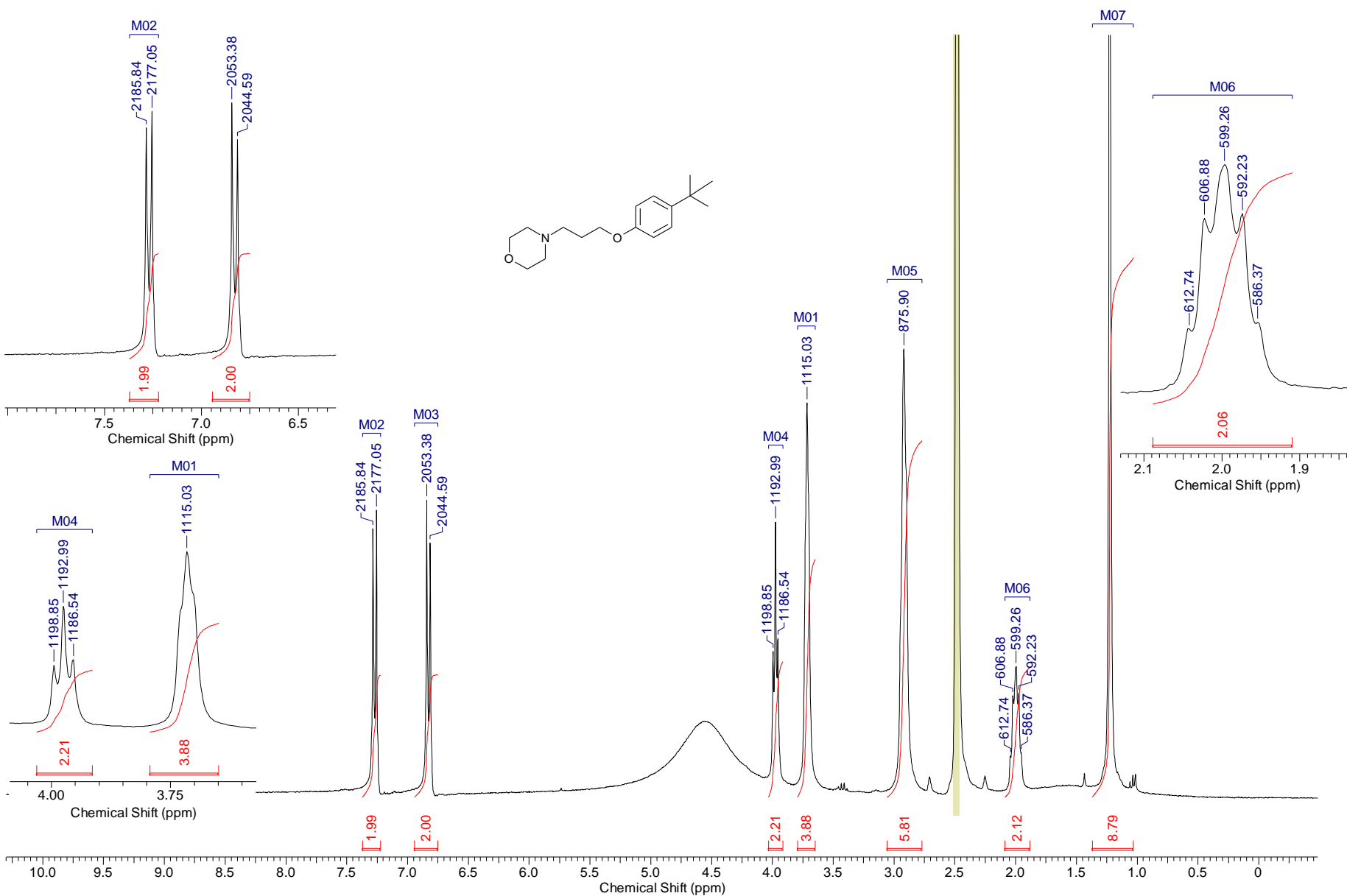
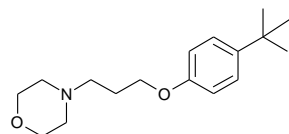
¹³C NMR spectrum of 1-(3-(4-(*tert*-butyl)phenoxy)propyl)-2,6-dimethylpiperidine hydrogen chloride (**11**)



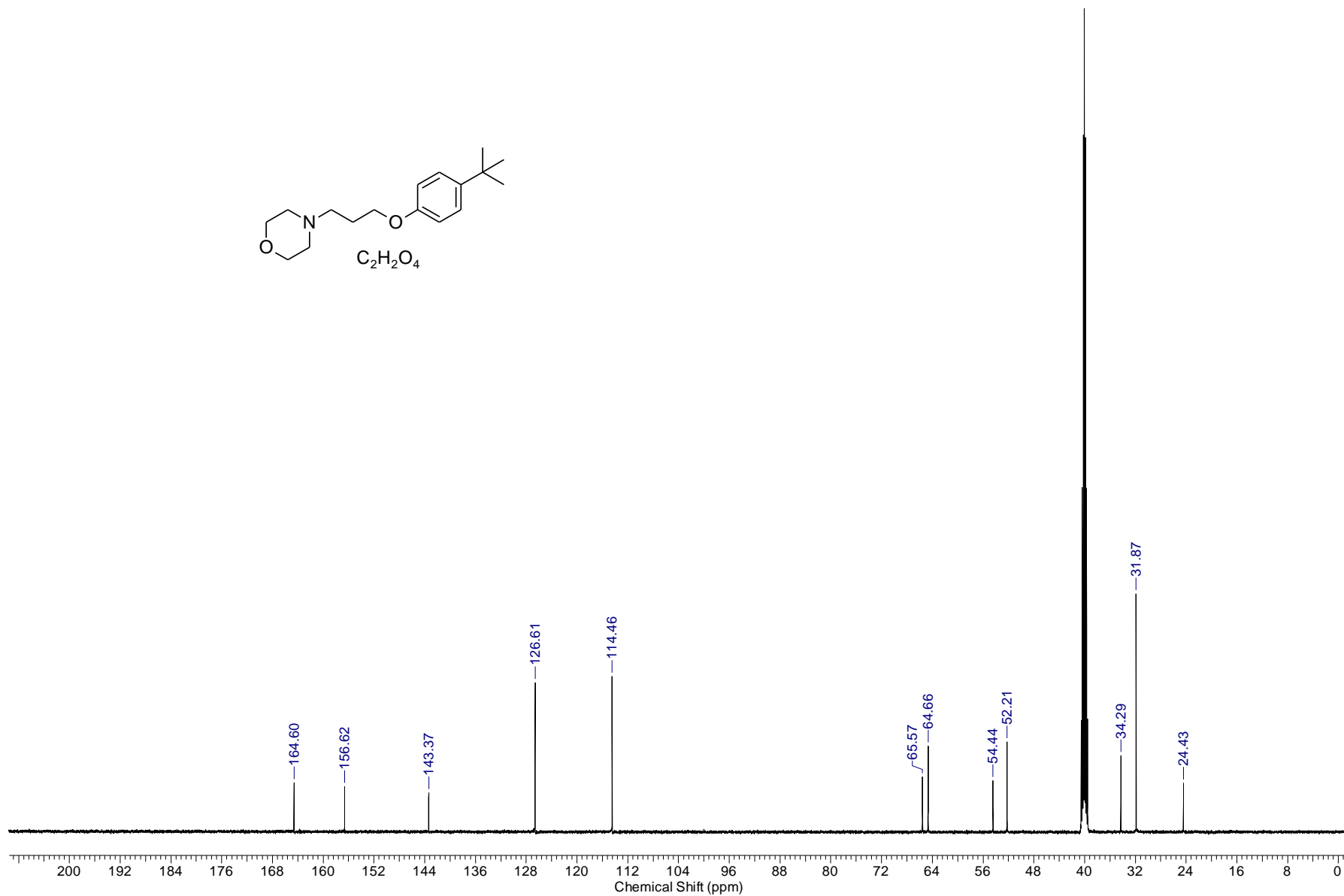
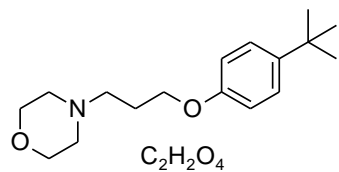
^1H NMR spectrum of 1-(3-(4-(*tert*-butyl)phenoxy)propyl)-2-methylpyrrolidine hydrogen oxalate (**13**)



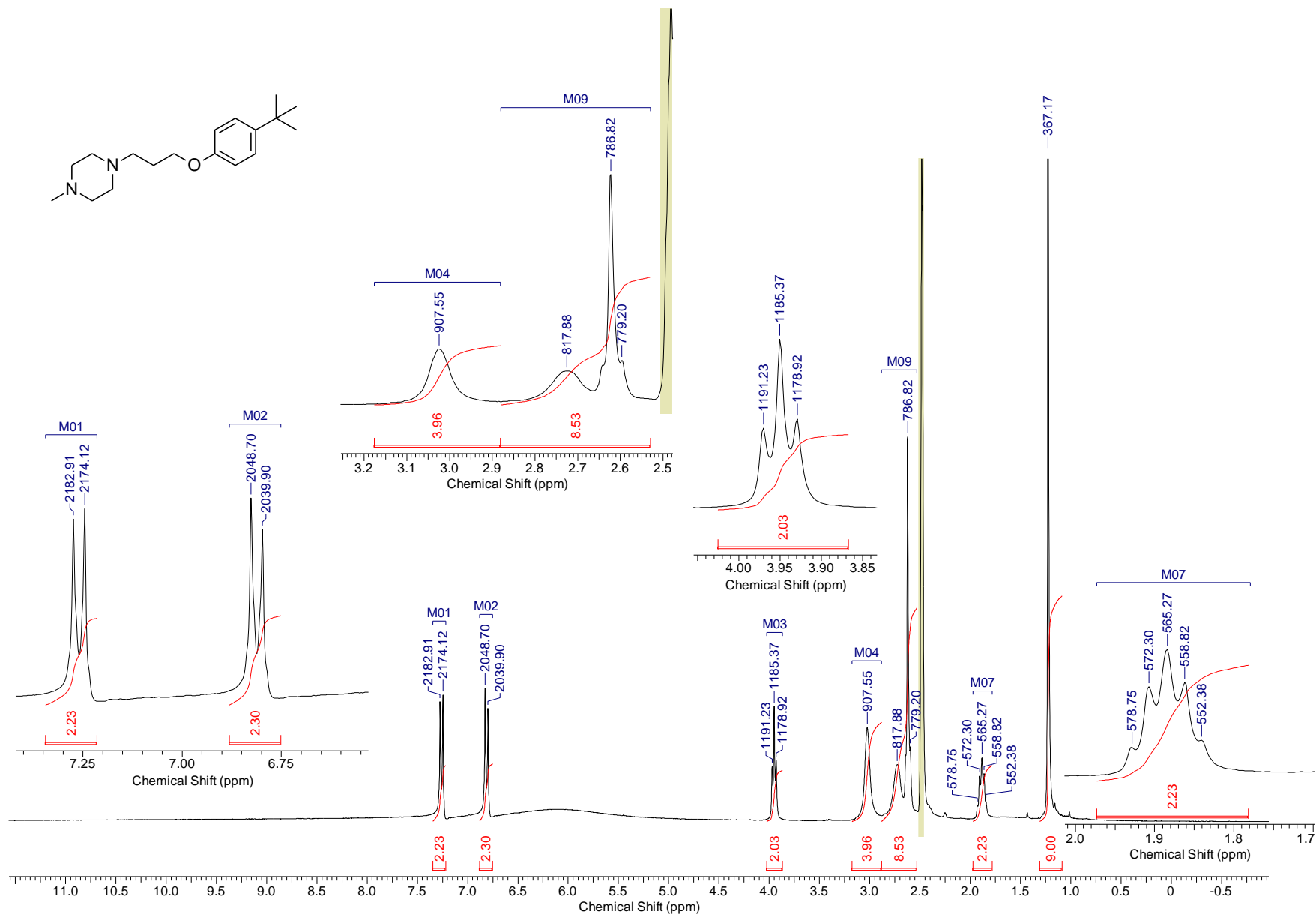
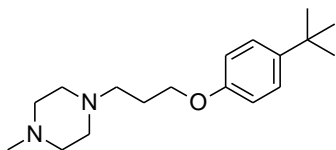
¹³C NMR spectrum of 1-(3-(4-(*tert*-butyl)phenoxy)propyl)-2-methylpyrrolidine hydrogen oxalate (**13**)



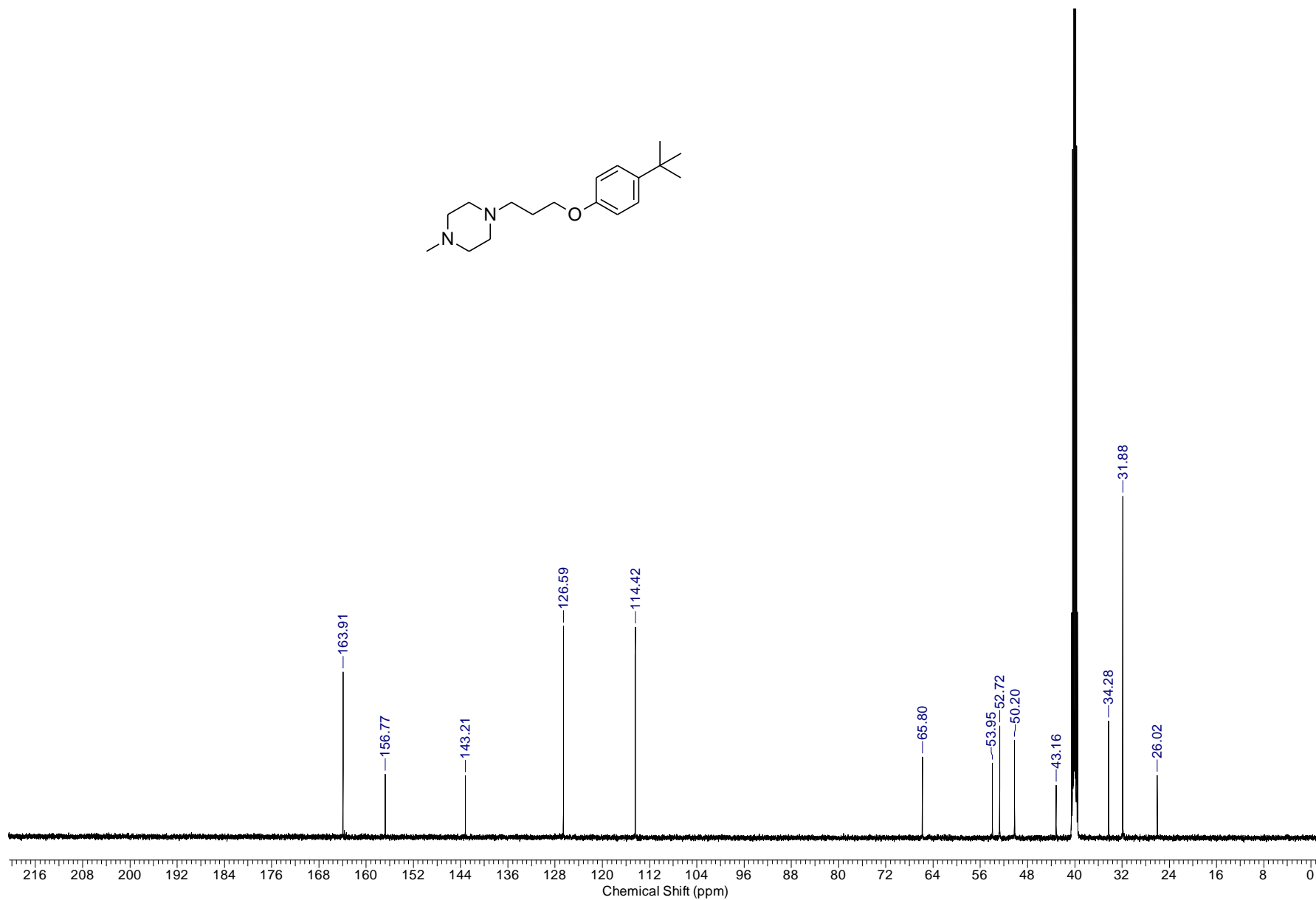
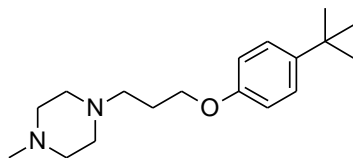
^1H NMR spectrum of 4-(3-(4-(*tert*-butyl)phenoxy)propyl)morpholine hydrogen oxalate (**14**)



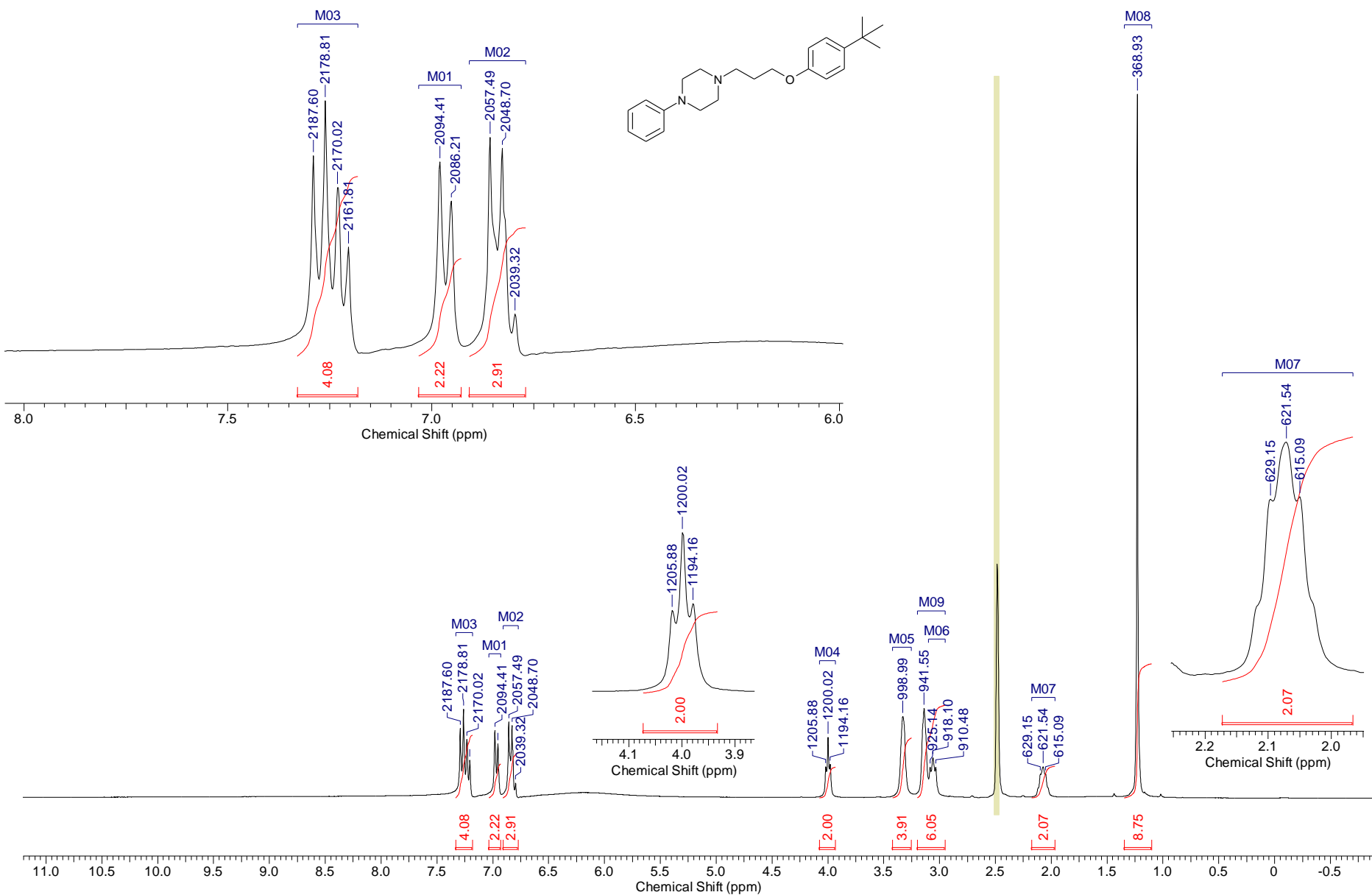
¹³C NMR spectrum of 4-(3-(4-(*tert*-butyl)phenoxy)propyl)morpholine hydrogen oxalate (**14**)



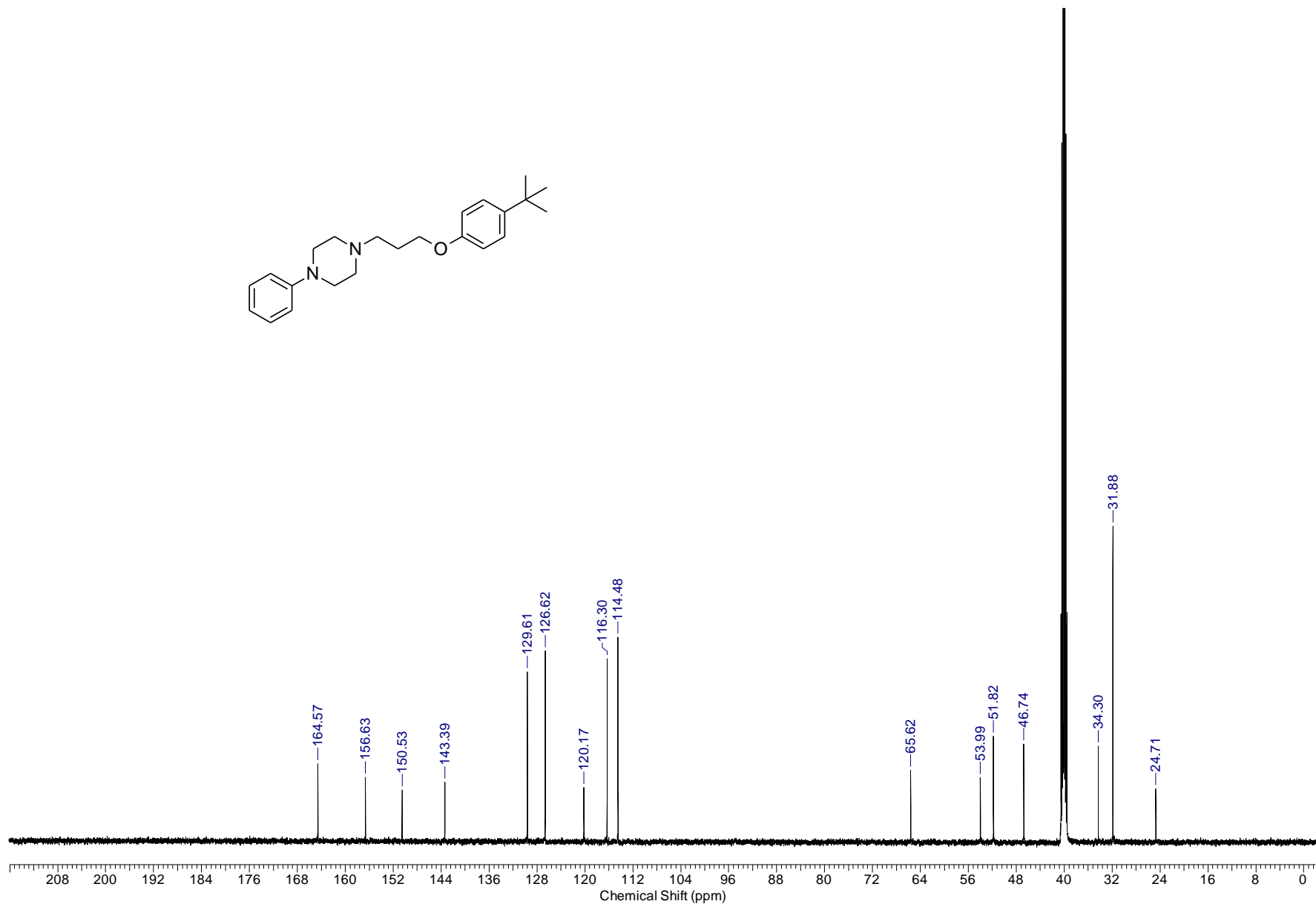
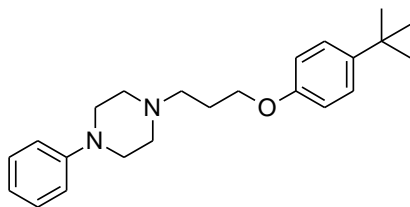
^1H NMR spectrum of 1-(3-(4-(*tert*-butyl)phenoxy)propyl)-4-methylpiperazine hydrogen oxalate (**15**)



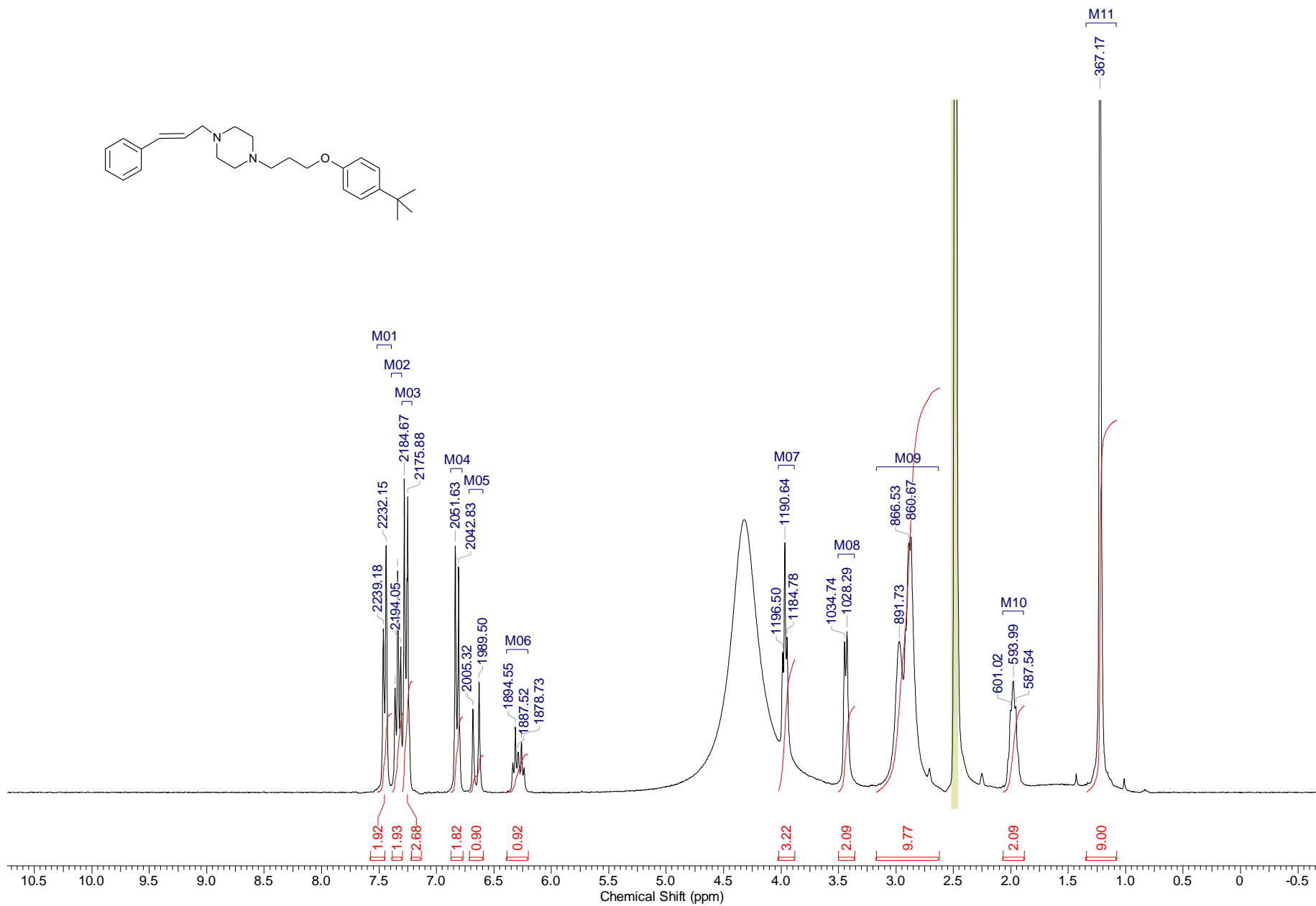
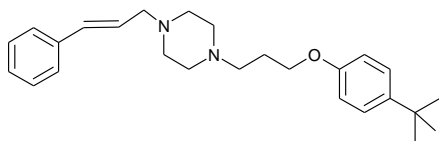
¹³C NMR spectrum of 1-(3-(4-(*tert*-butyl)phenoxy)propyl)-4-methylpiperazine hydrogen oxalate (**15**)



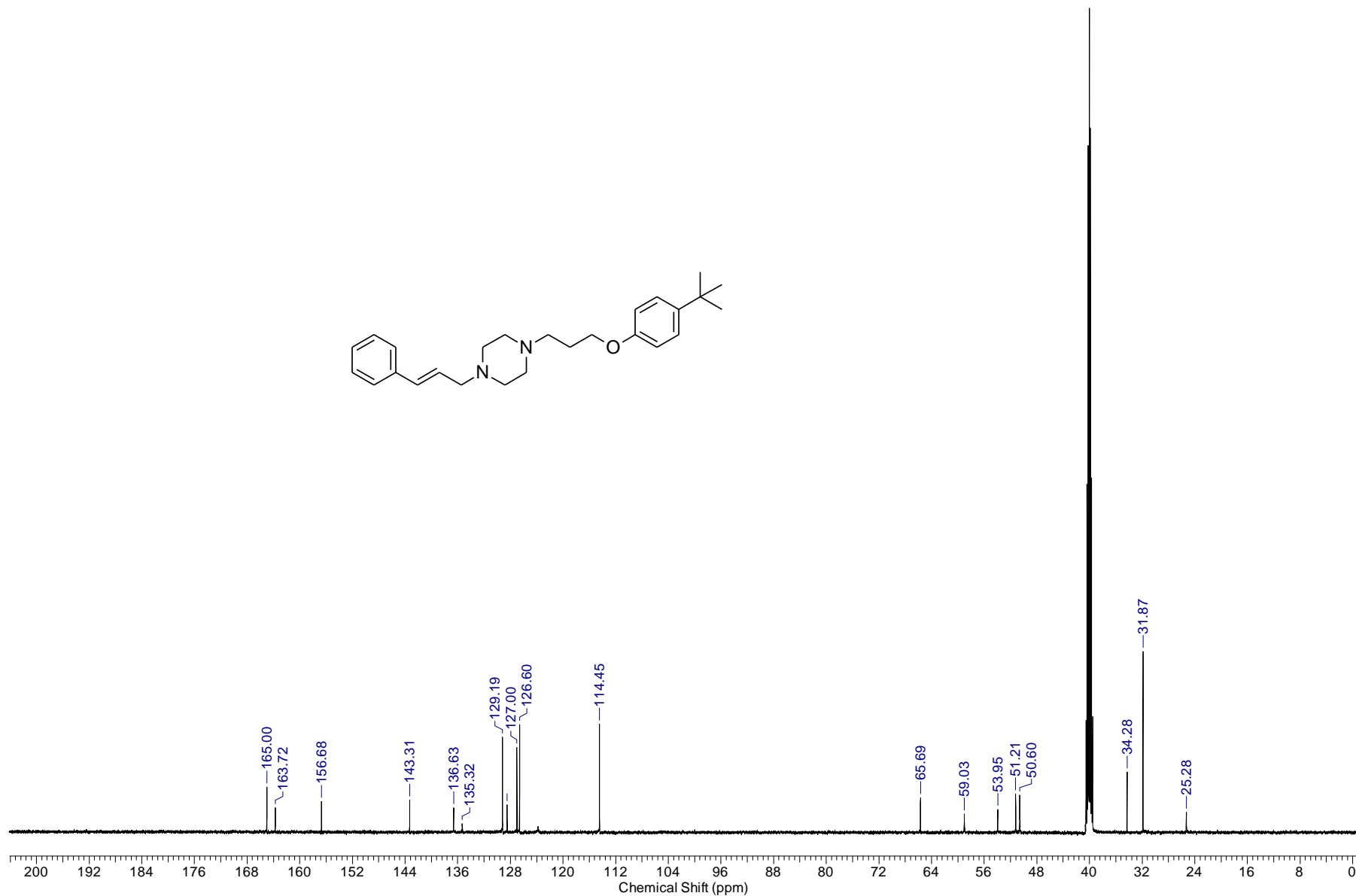
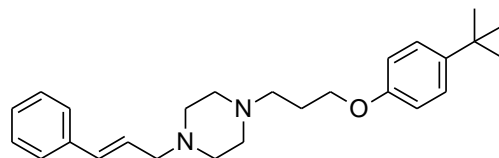
^1H NMR spectrum of 1-(3-(4-(*tert*-butyl)phenoxy)propyl)-4-phenylpiperazine hydrogen oxalate (**16**)



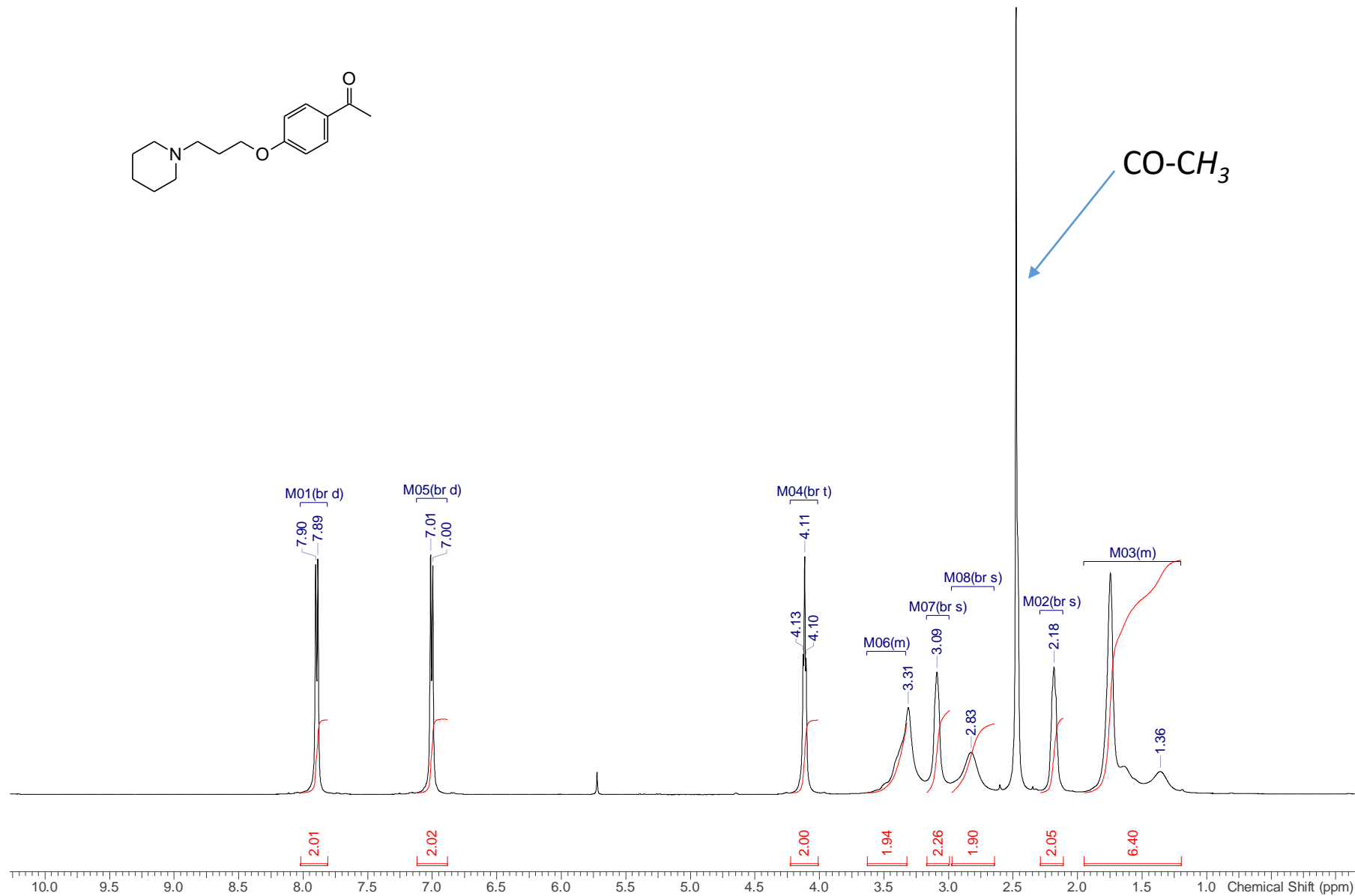
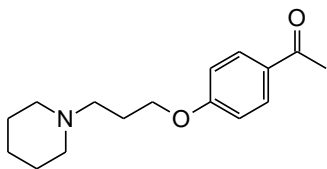
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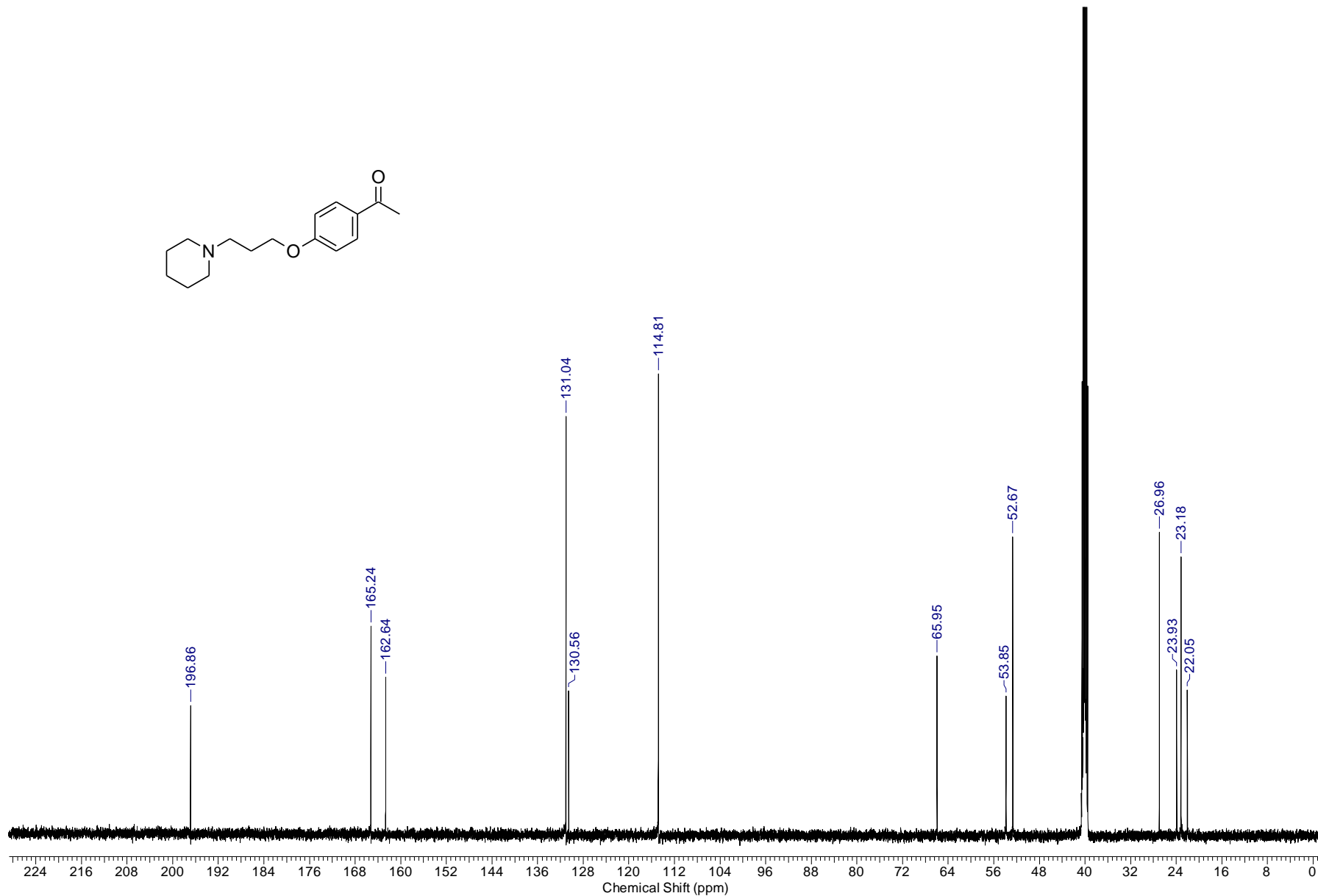
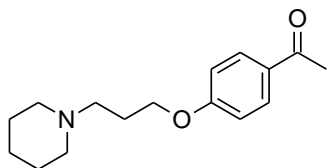
^1H NMR spectrum of 1-(3-(4-(*tert*-butyl)phenoxy)propyl)-4-cinnamylpiperazine hydrogen oxalate (**17**)



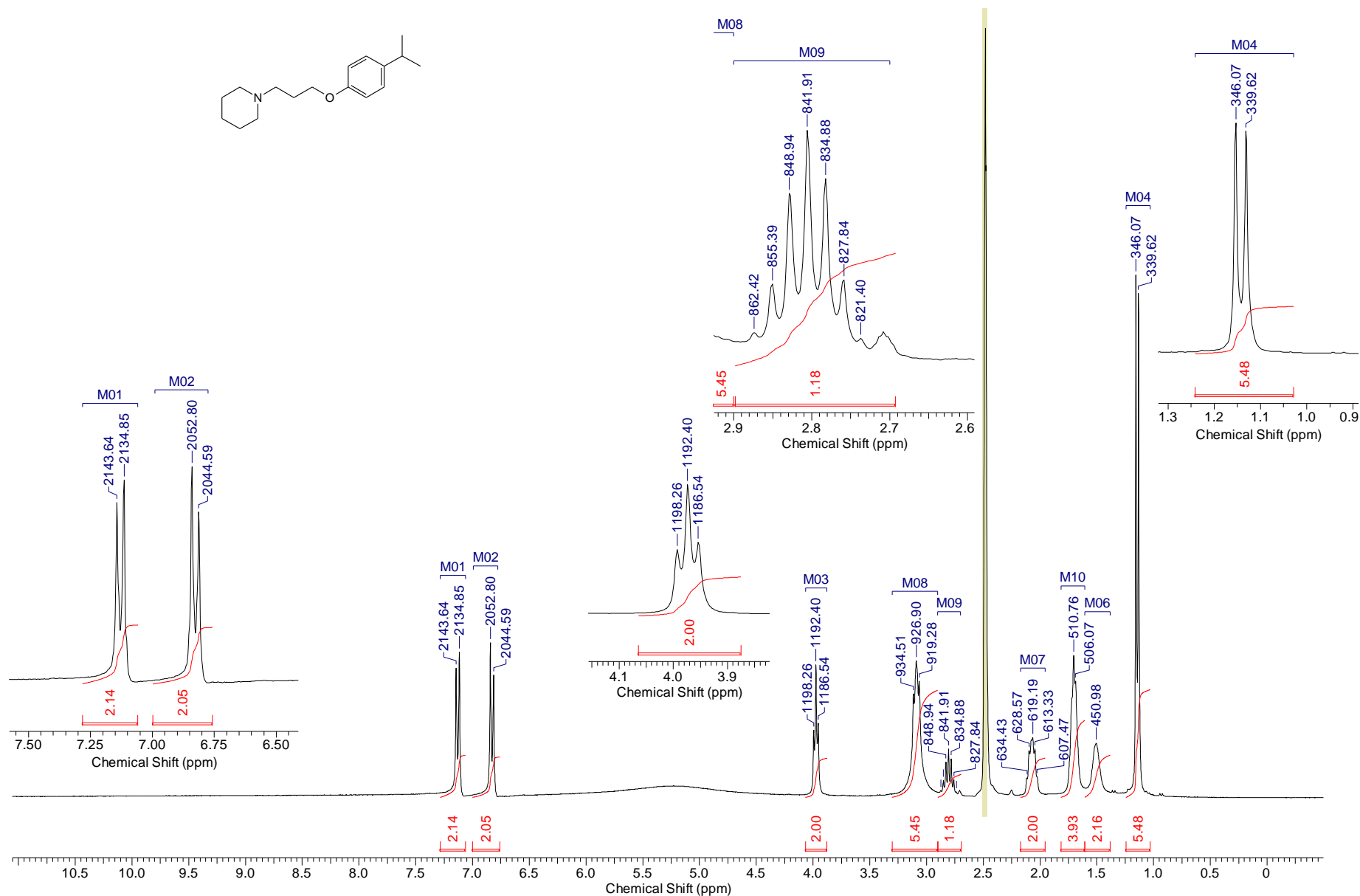
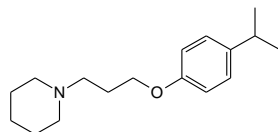
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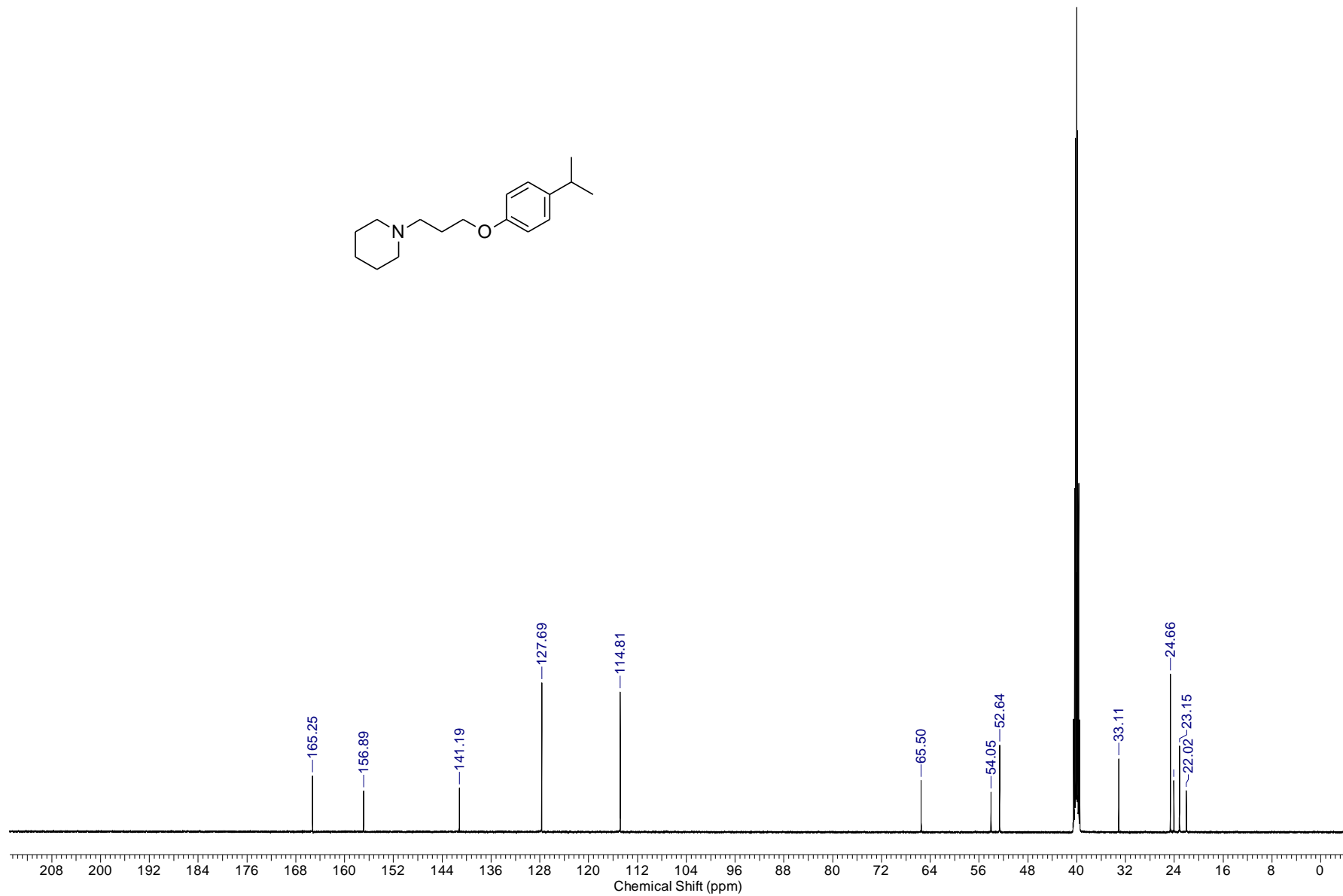
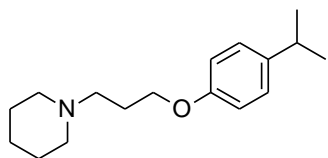
¹H NMR spectrum of 1-(4-(3-(piperidin-1-yl)propoxy)phenyl)ethan-1-one hydrogen oxalate (**18**)



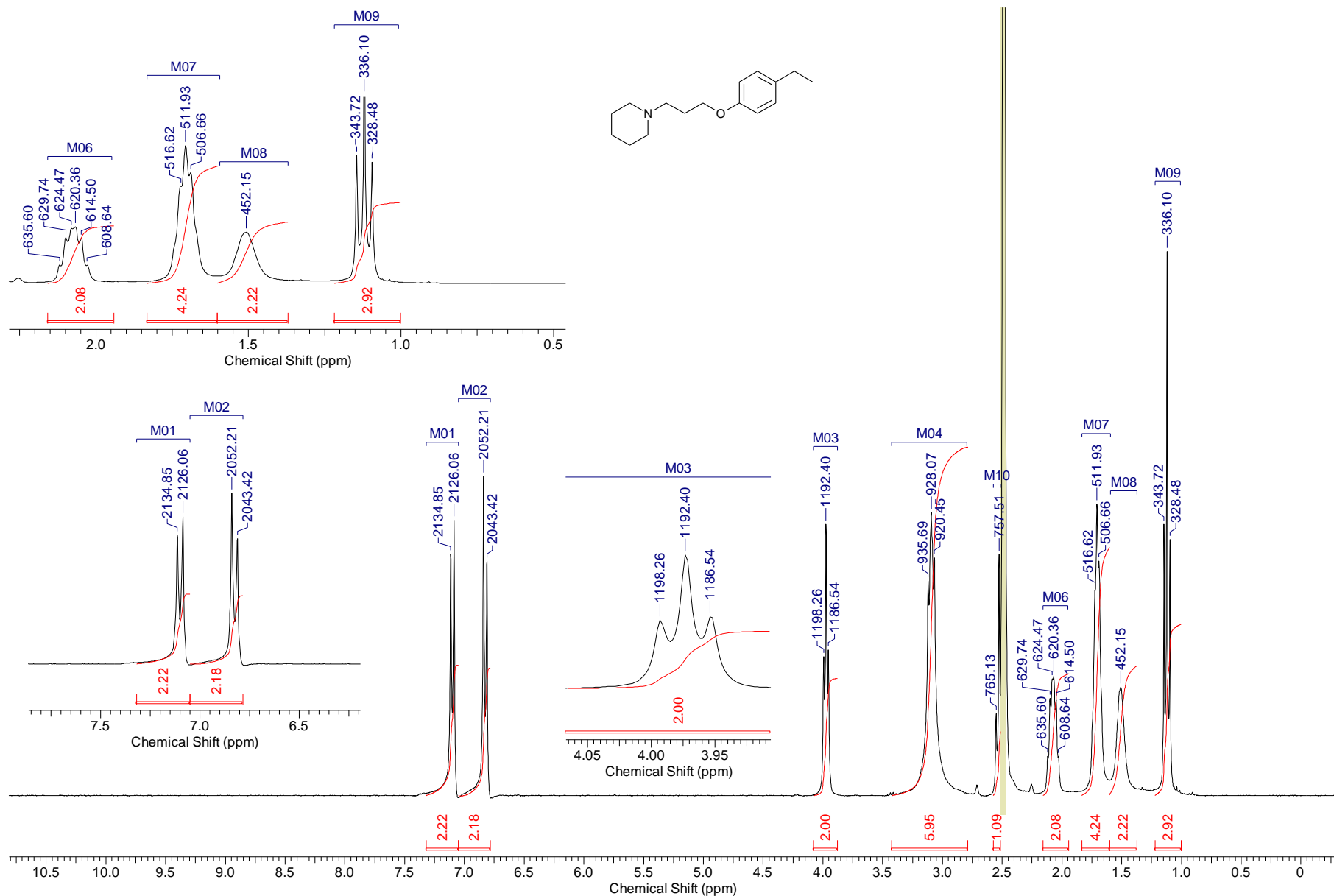
¹³C NMR spectrum of 1-(4-(3-(piperidin-1-yl)propoxy)phenyl)ethan-1-one hydrogen oxalate (18)



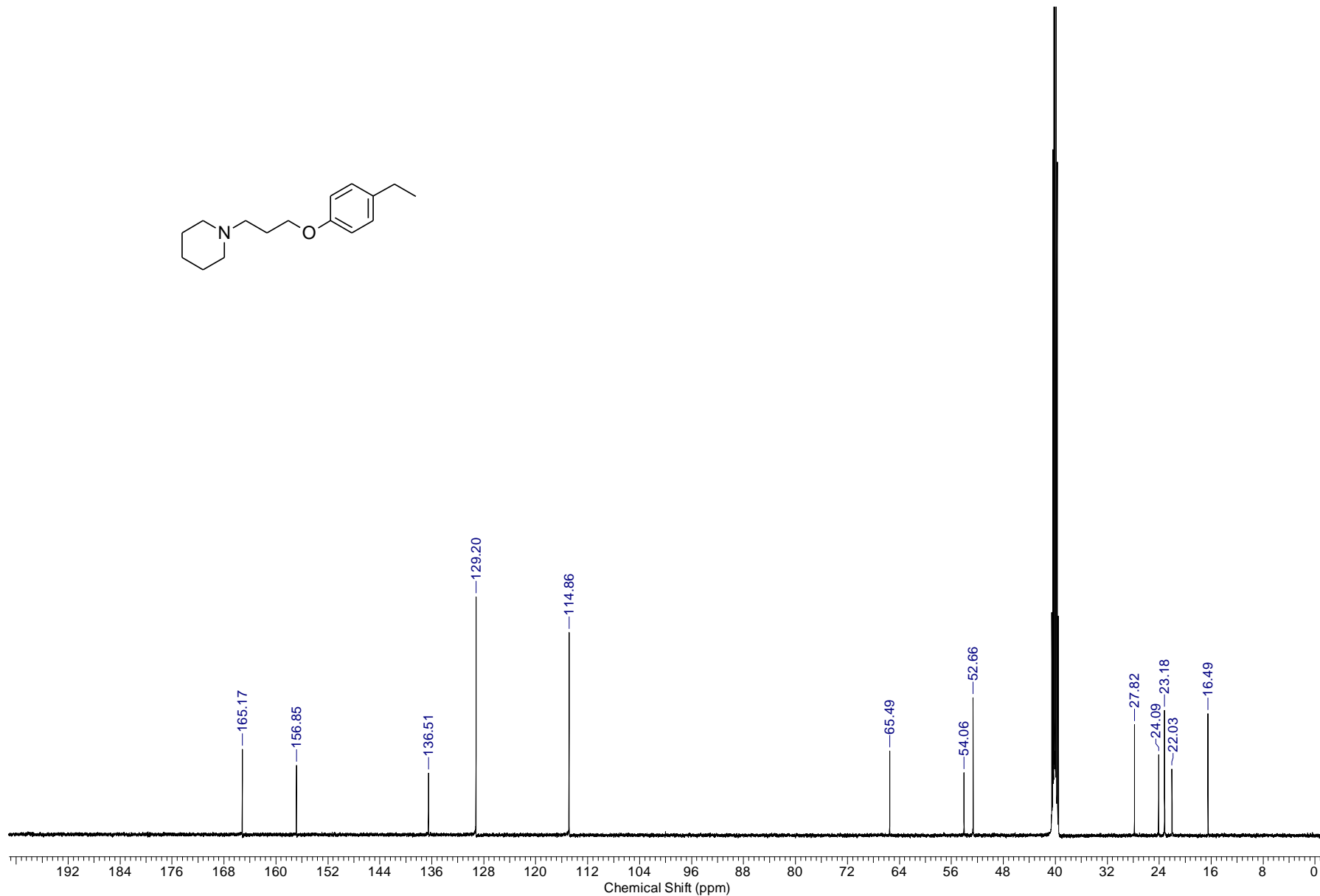
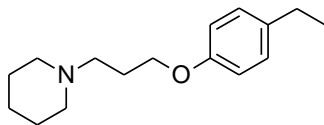
^1H NMR spectrum of 1-(3-(4-isopropylphenoxy)propyl)piperidine hydrogen oxalate (**19**)



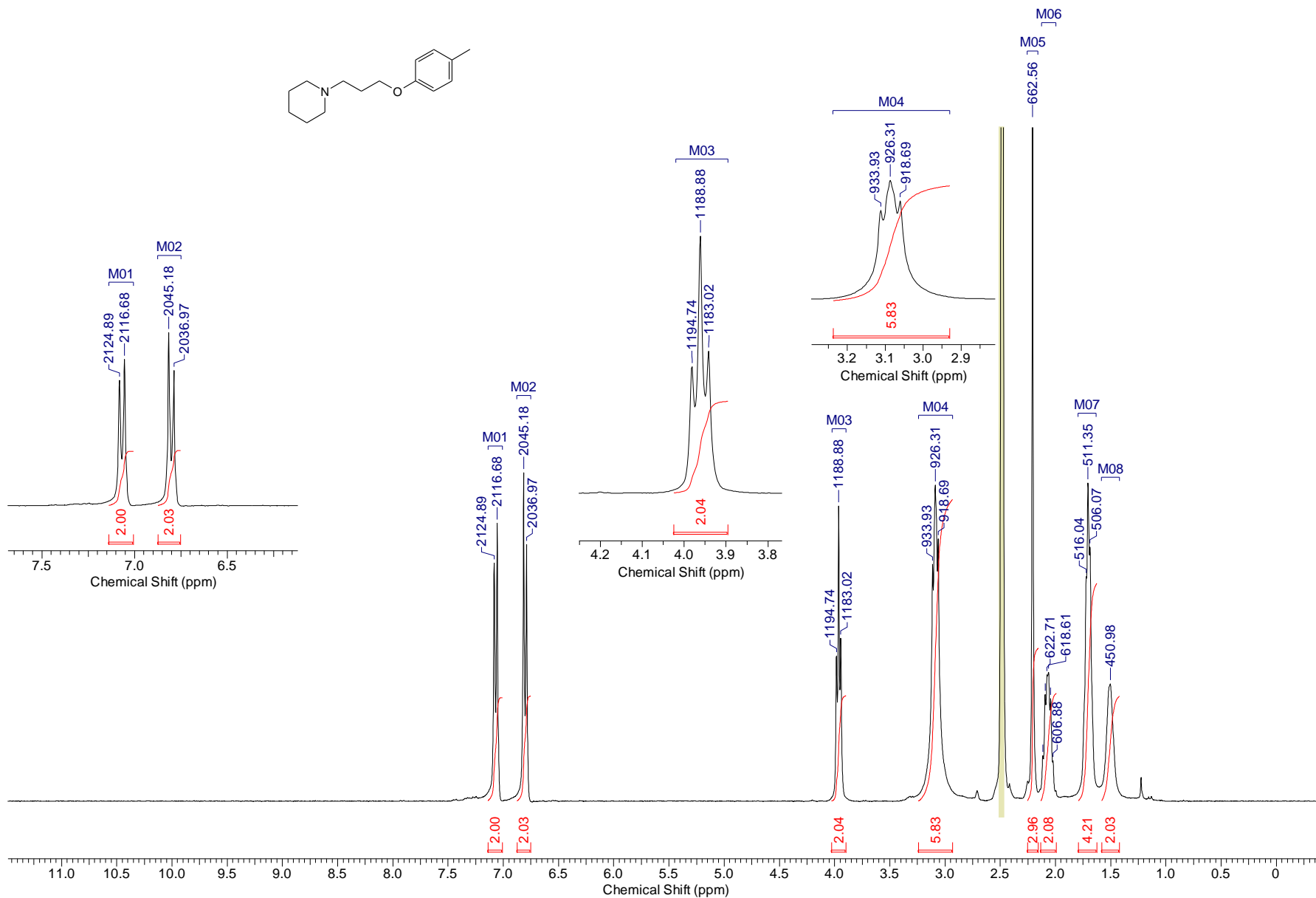
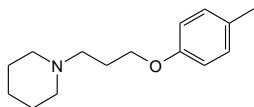
¹³C NMR spectrum of 1-(3-(4-isopropylphenoxy)propyl)piperidine hydrogen oxalate (**19**)



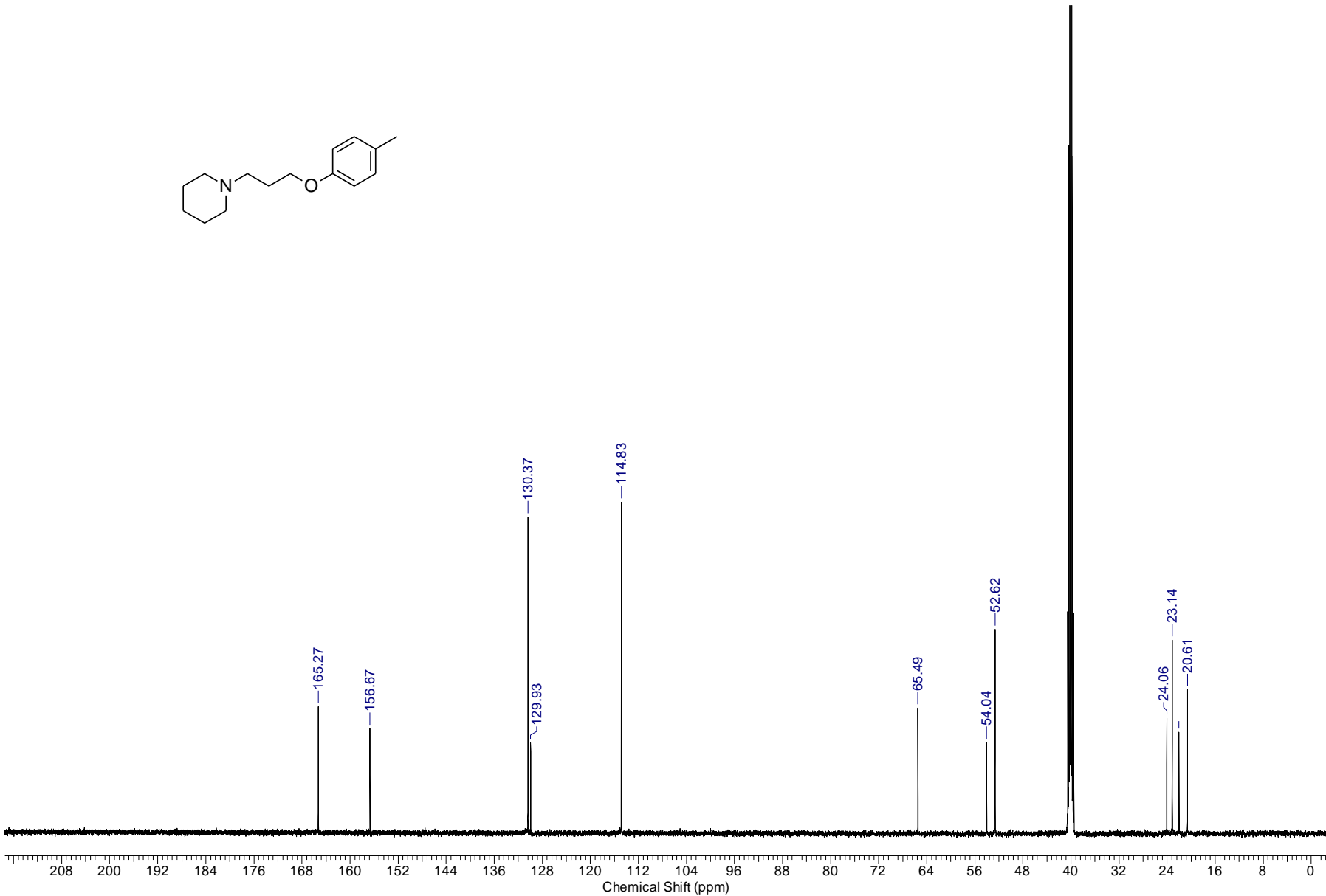
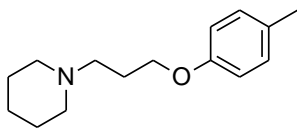
¹H NMR spectrum of 1-(3-(4-ethylphenoxy)propyl)piperidine hydrogen oxalate (20)



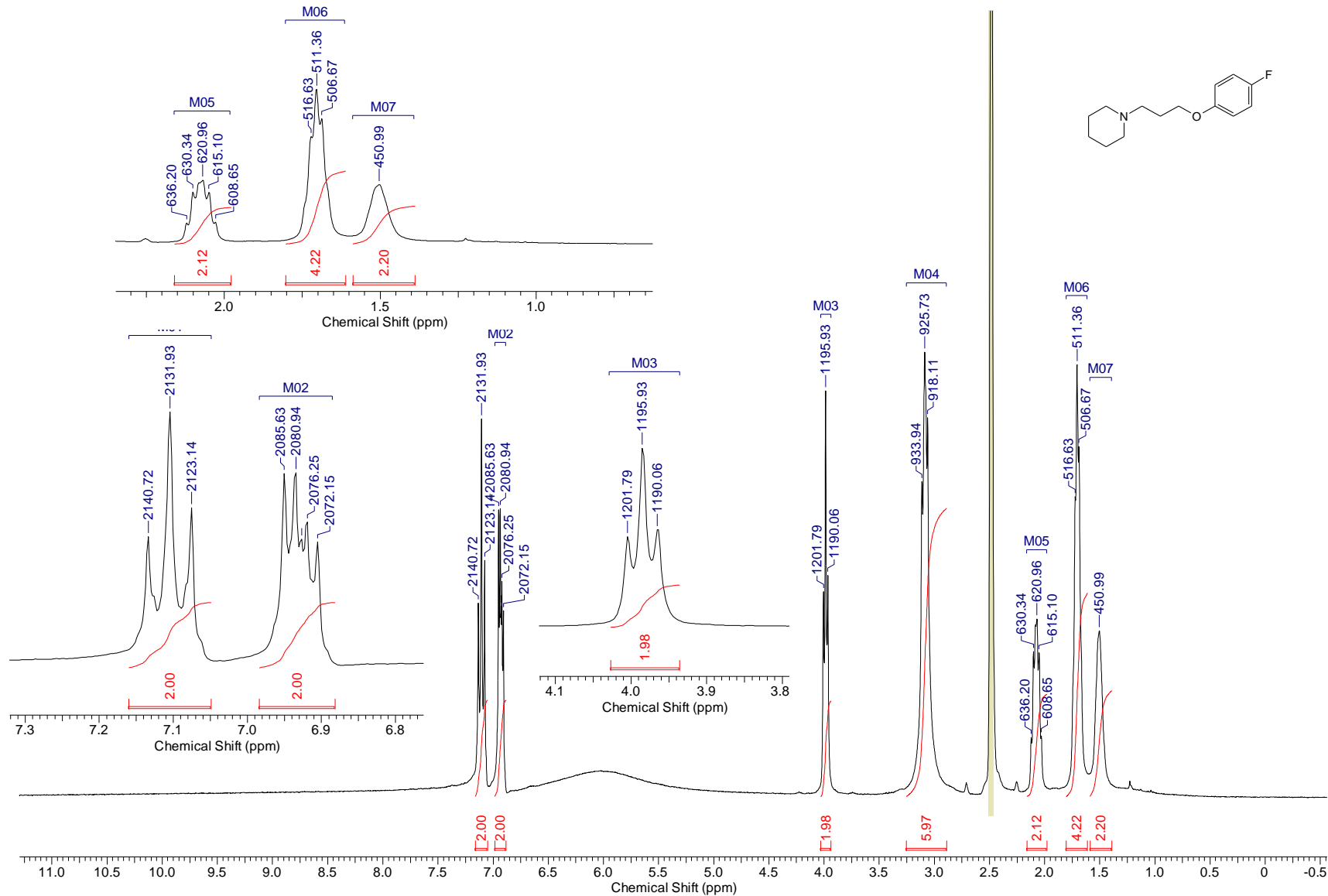
¹³C NMR spectrum of 1-(3-(4-ethylphenoxy)propyl)piperidine hydrogen oxalate (20)



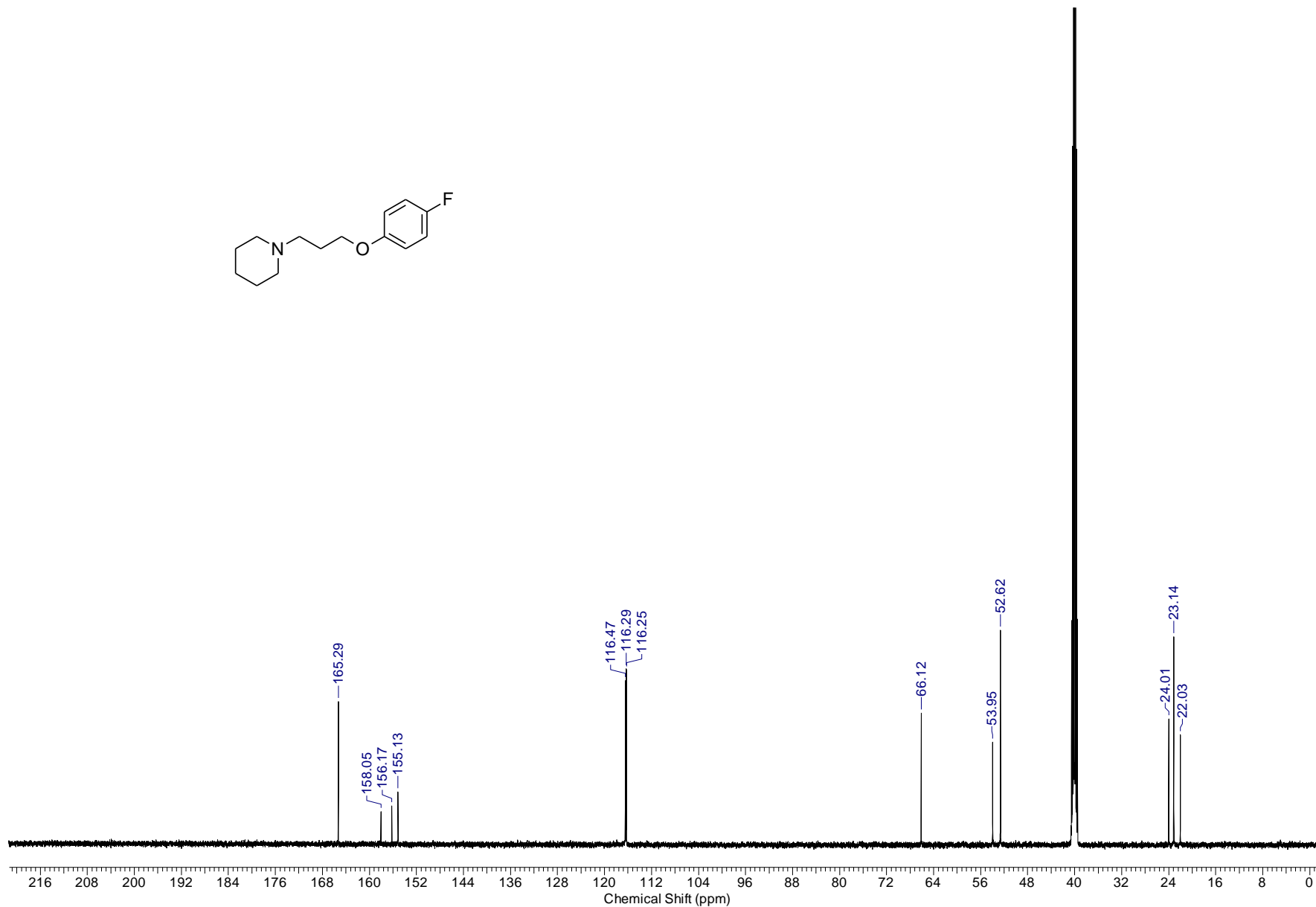
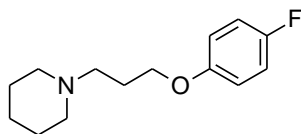
¹H NMR spectrum of 1-(3-(*p*-tolylloxy)propyl)piperidine hydrogen oxalate (**21**)



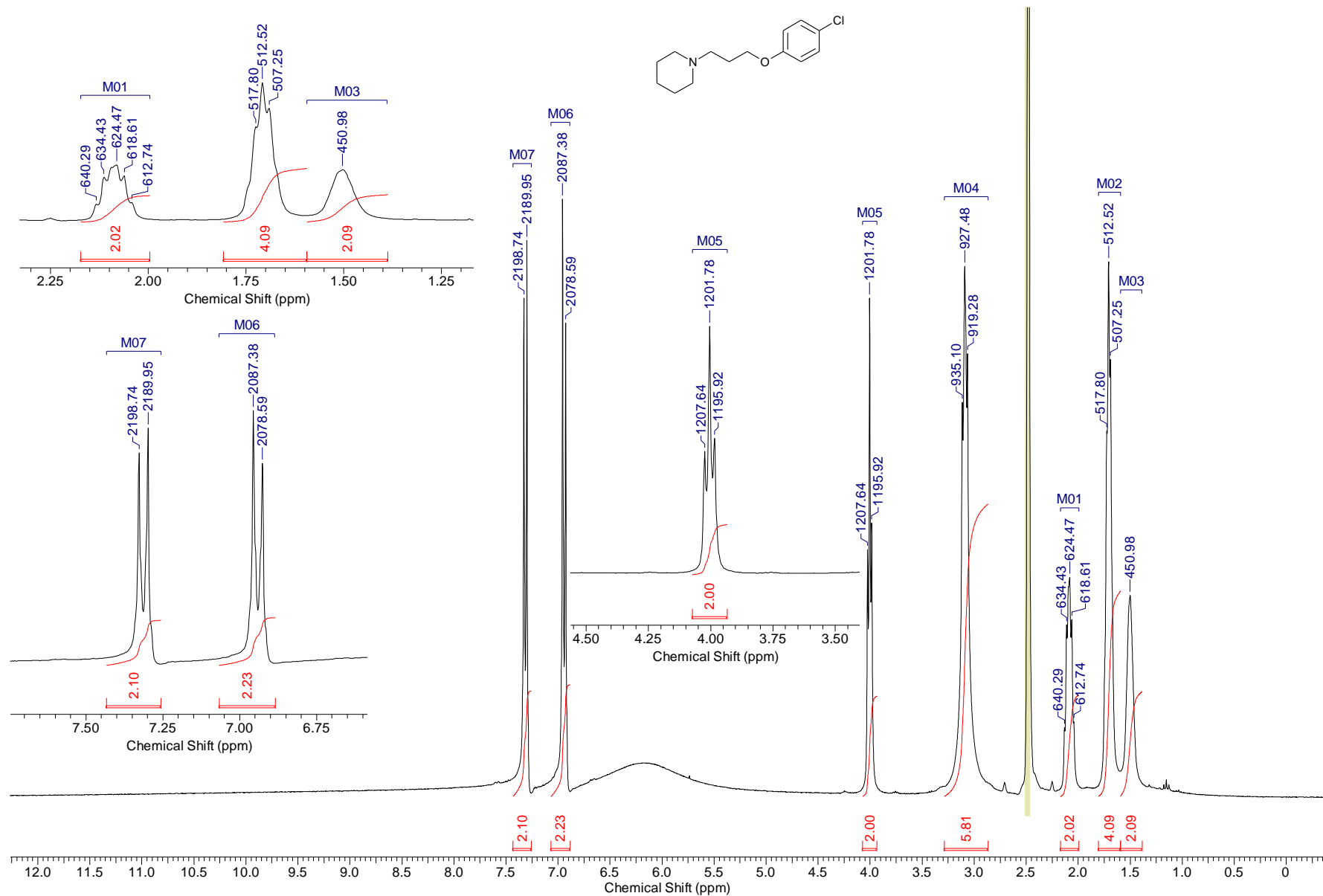
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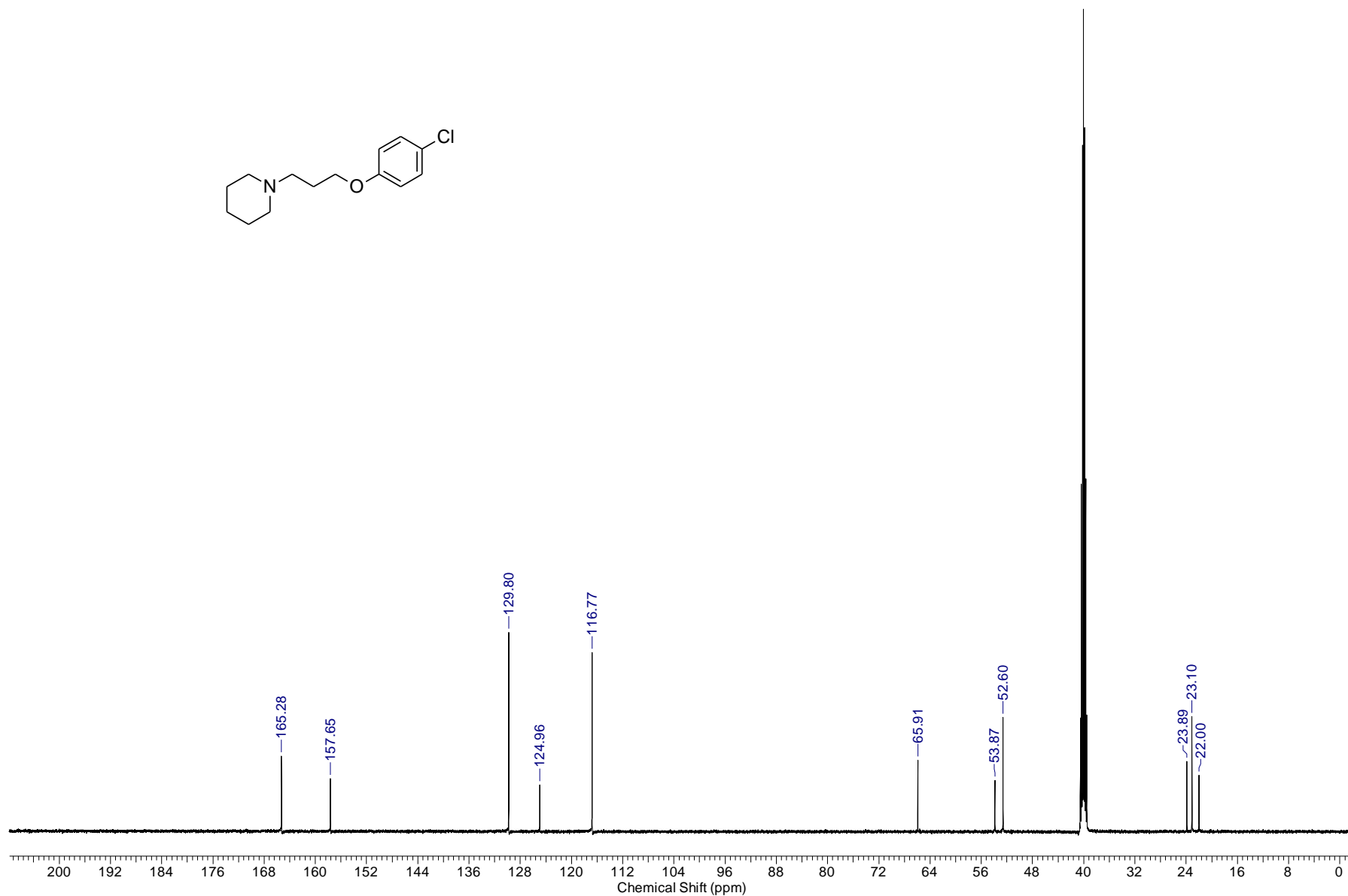
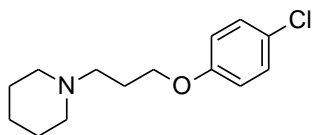
¹H NMR spectrum of 1-(3-(4-fluorophenoxy)propyl)piperidine hydrogen oxalate (**22**)



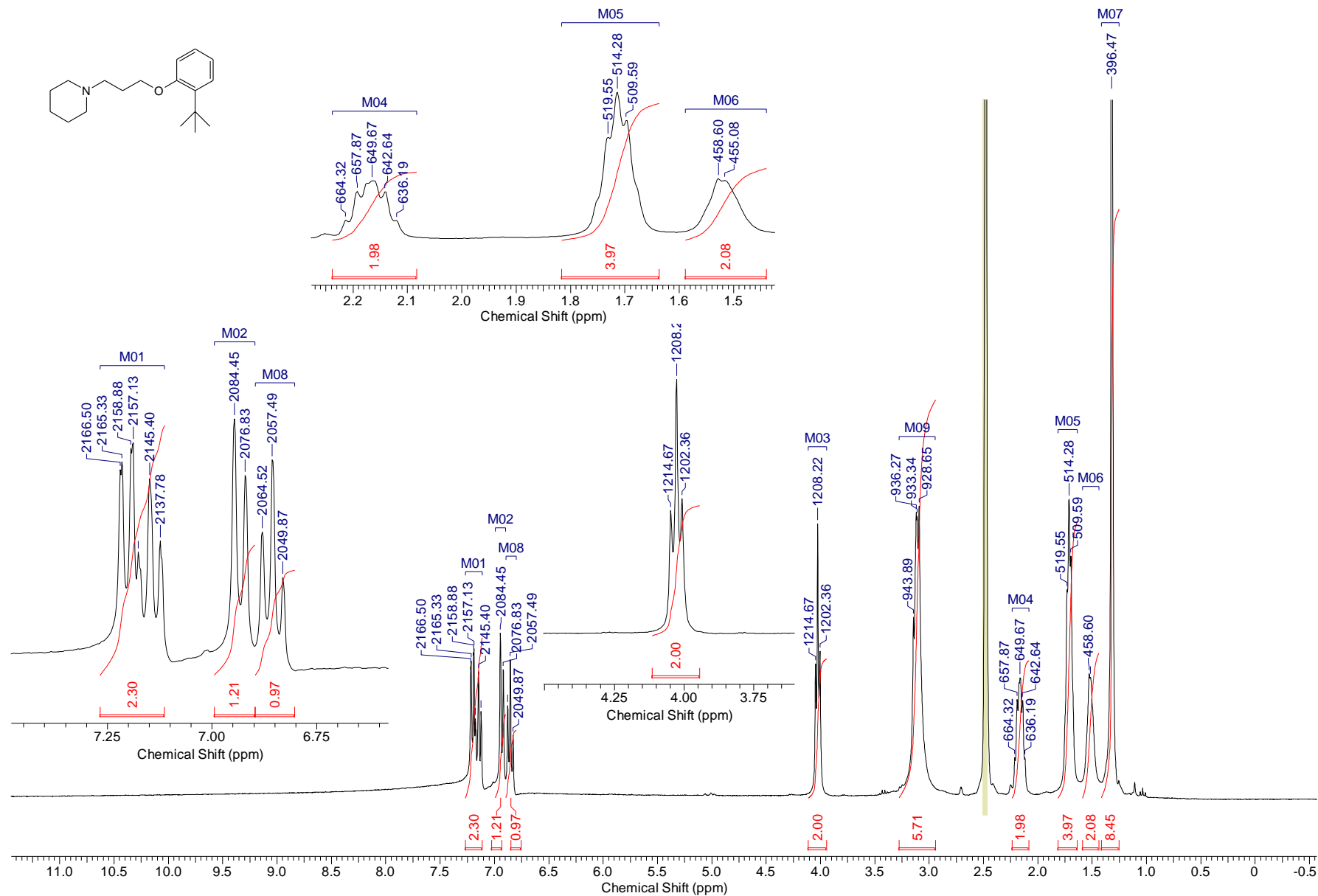
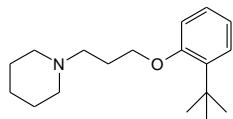
¹³C NMR spectrum of 1-(3-(4-fluorophenoxy)propyl)piperidine hydrogen oxalate (22)



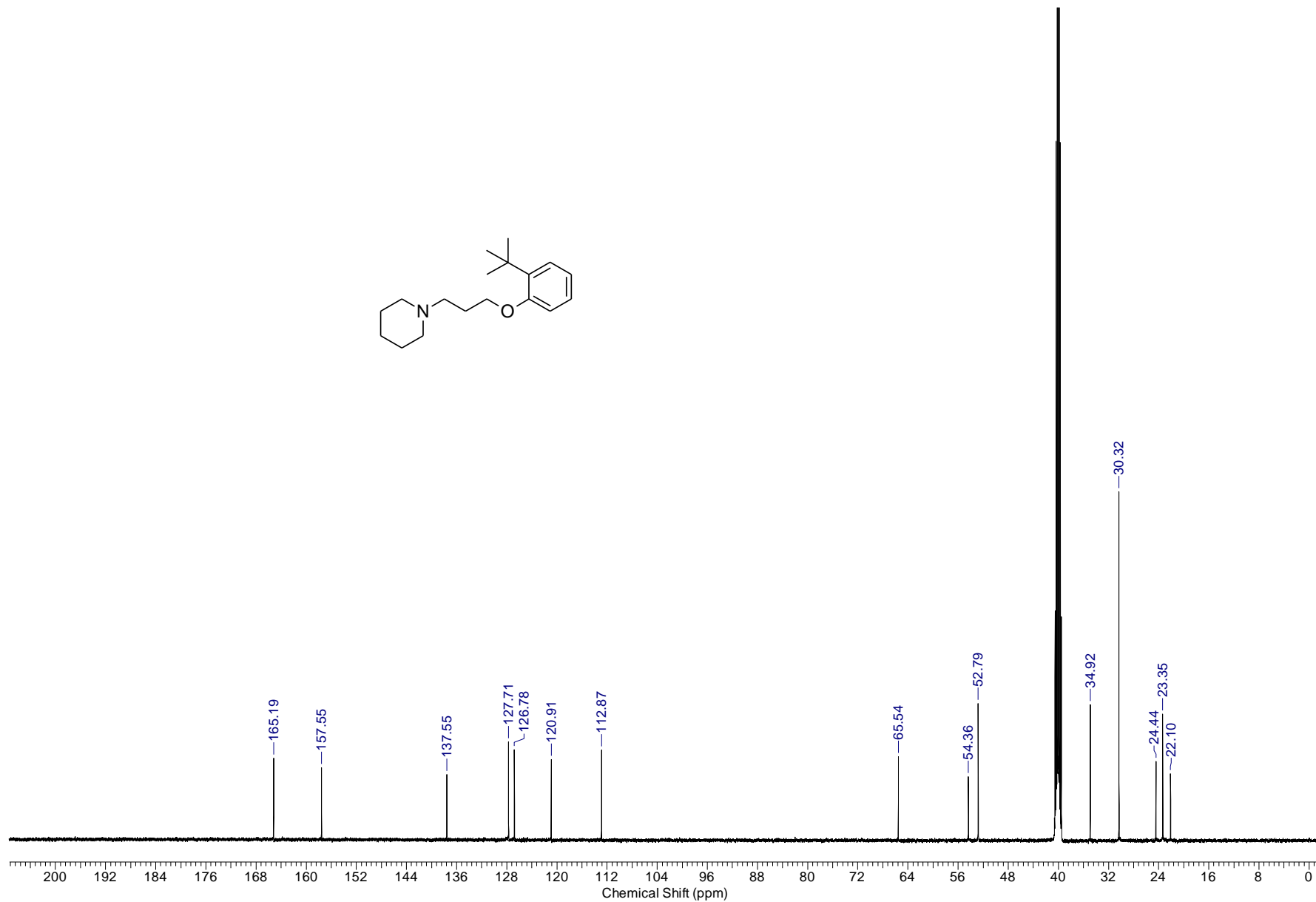
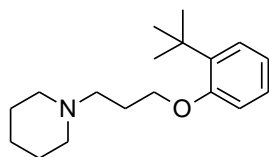
¹H NMR spectrum of 1-(3-(4-chlorophenoxy)propyl)piperidine hydrogen oxalate (23)



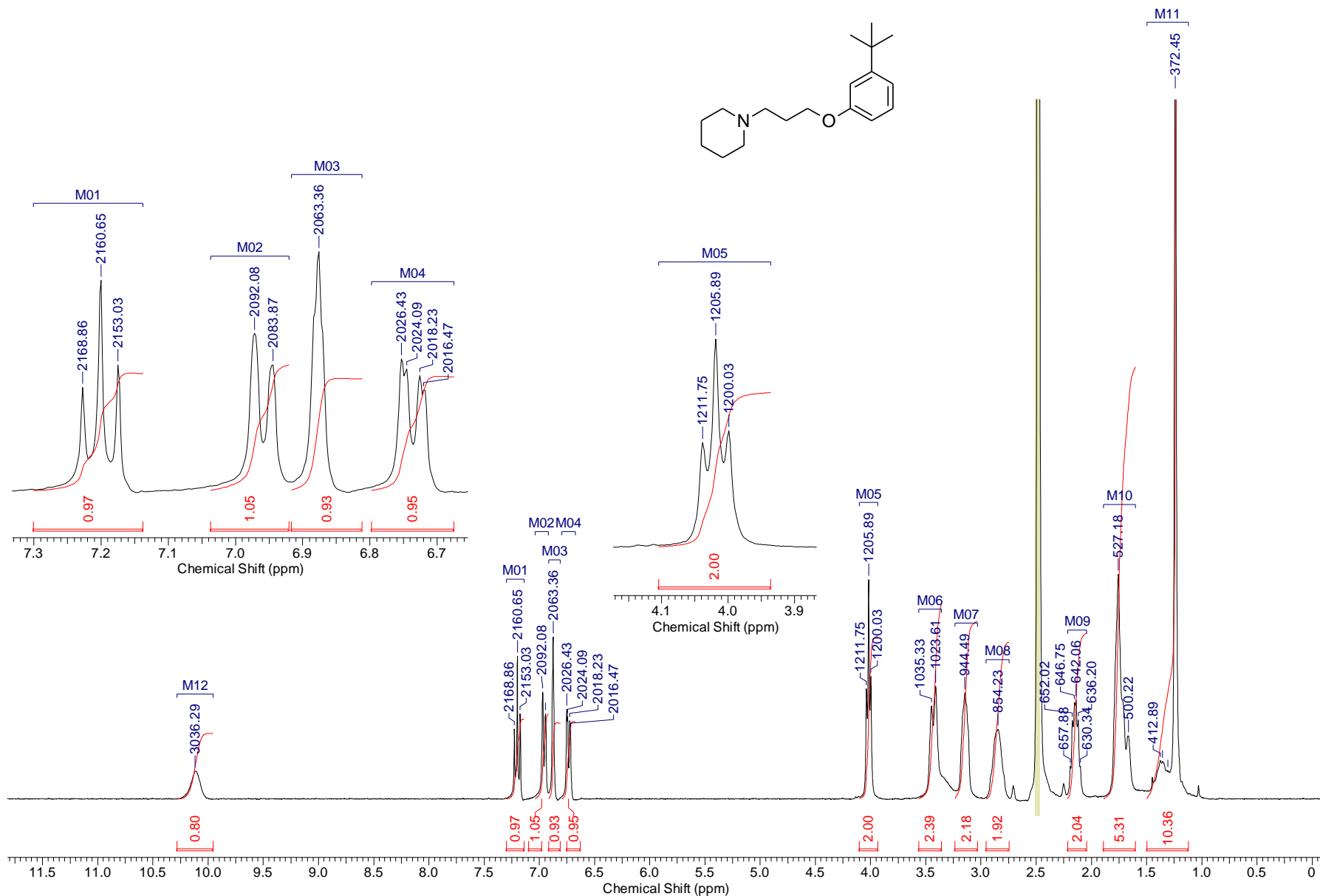
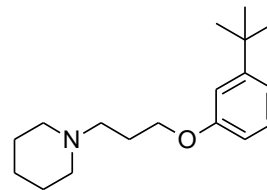
^{13}C NMR spectrum of 1-(3-(4-chlorophenoxy)propyl)piperidine hydrogen oxalate (**23**)



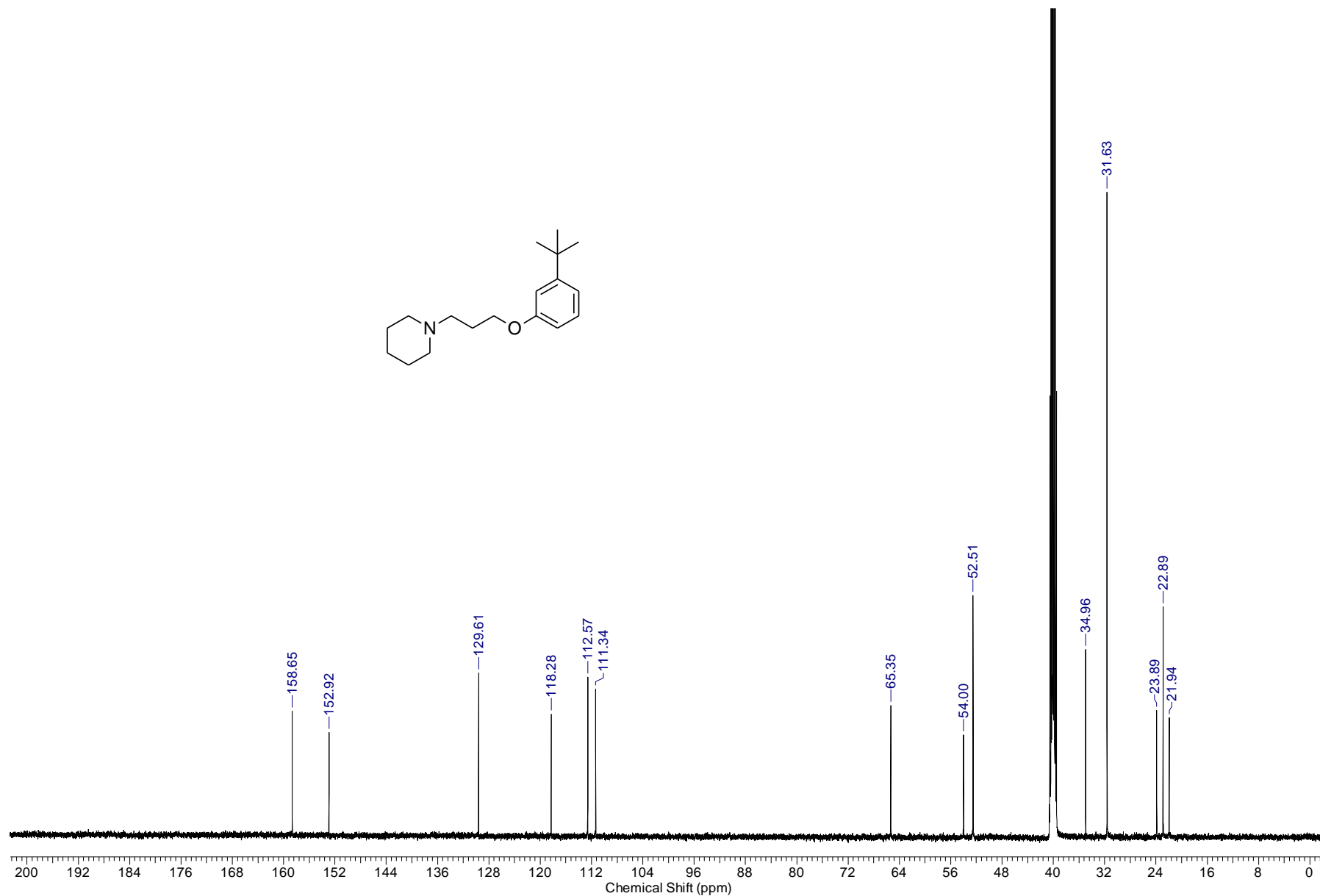
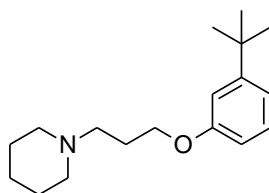
^1H NMR spectrum of 1-(3-(2-(*tert*-butyl)phenoxy)propyl)piperidine hydrogen oxalate (**24**)



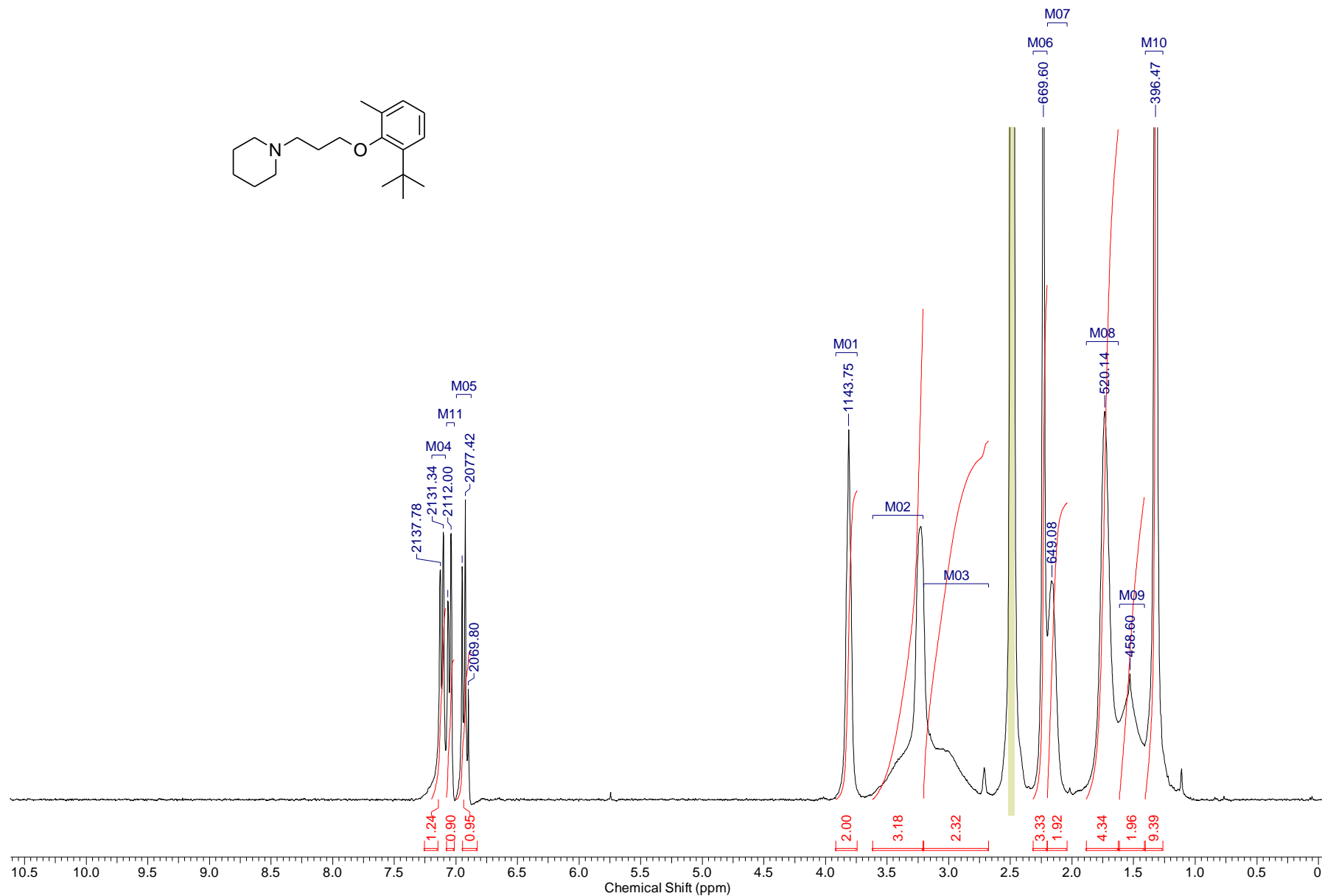
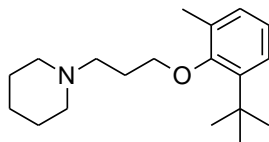
¹³C NMR spectrum of 1-(3-(2-(*tert*-butyl)phenoxy)propyl)piperidine hydrogen oxalate (24)



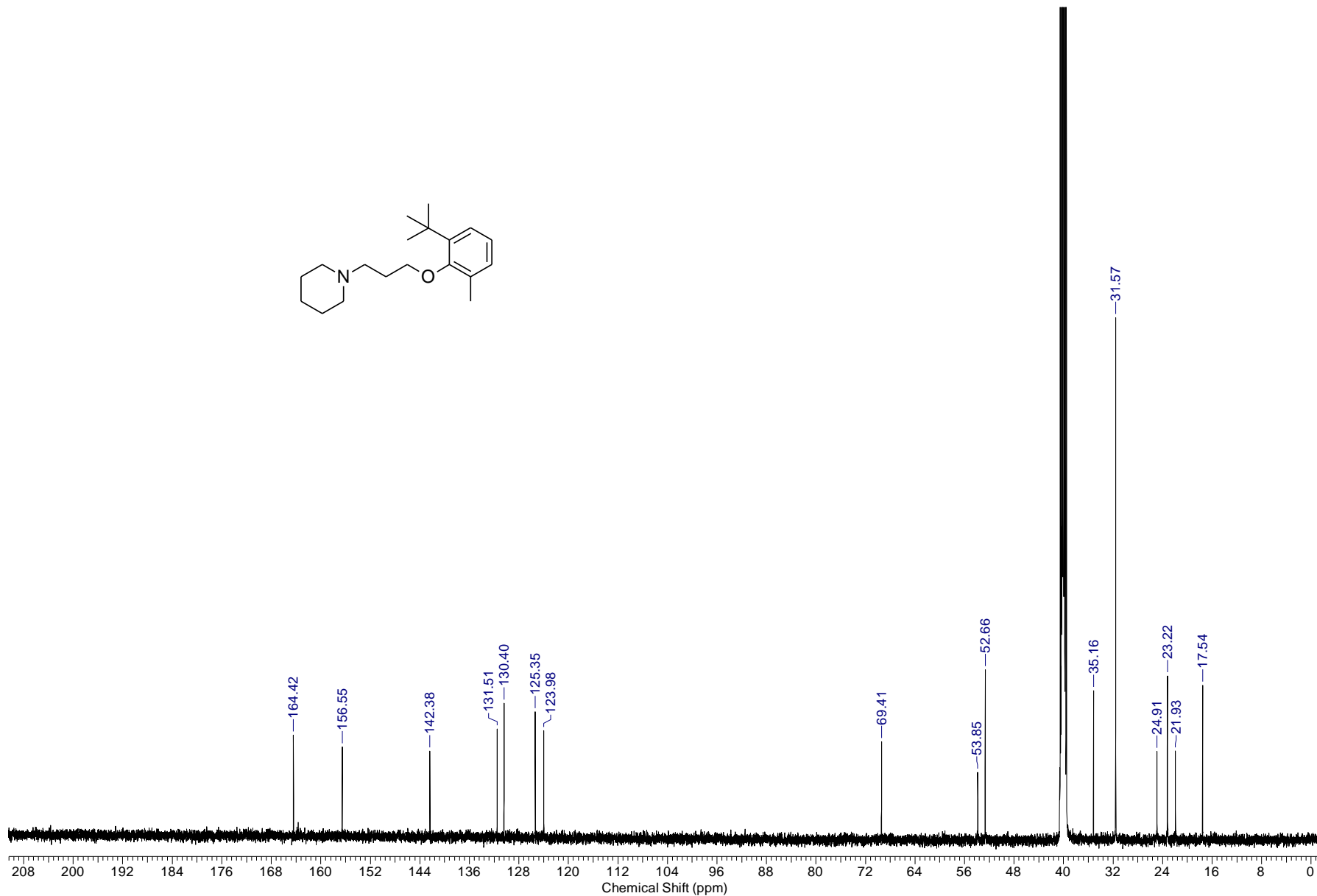
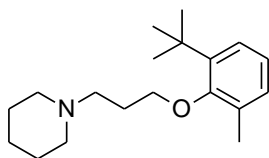
^1H NMR spectrum of 1-(3-(3-(*tert*-butyl)phenoxy)propyl)piperidine hydrogen chloride (**25**)



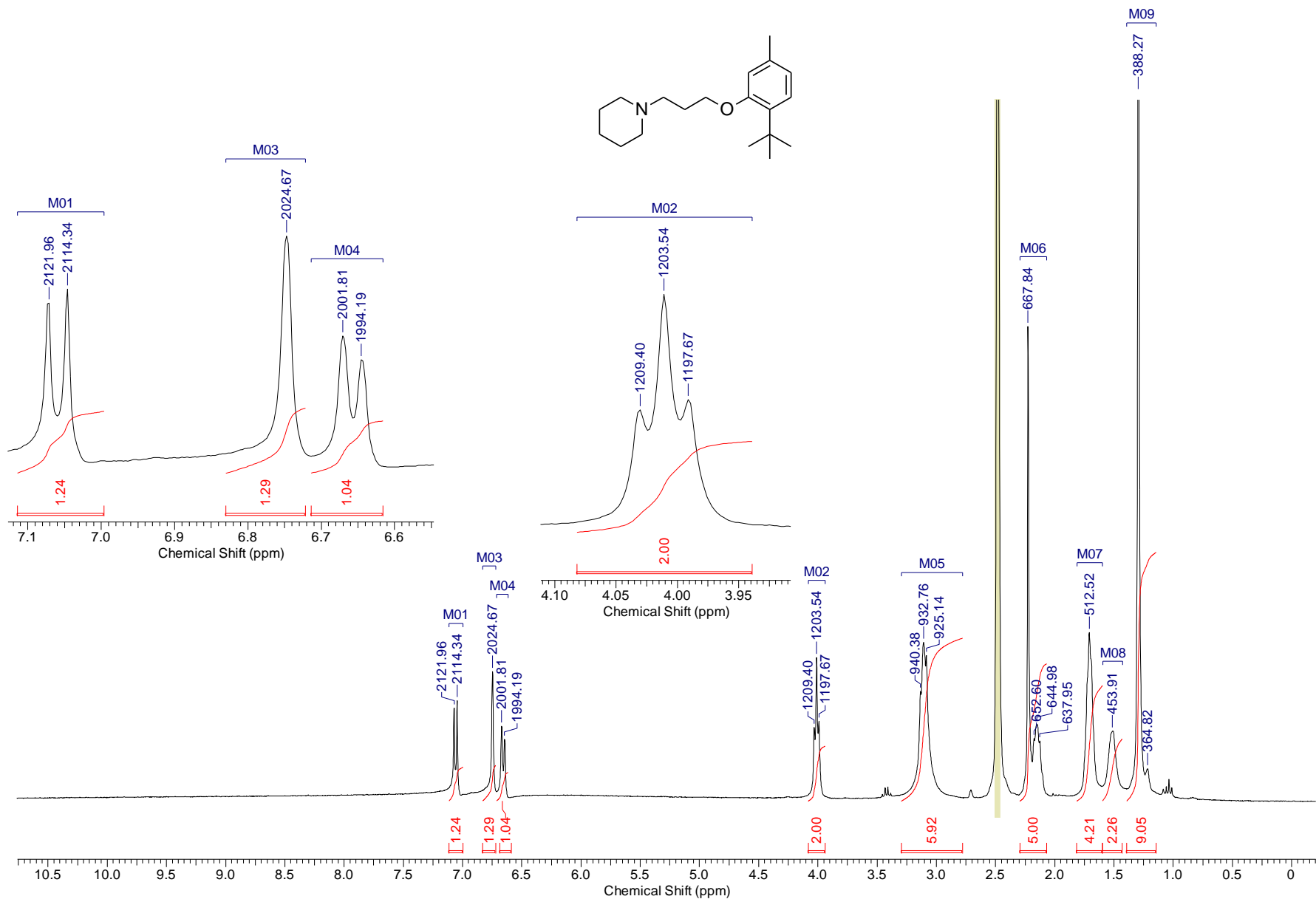
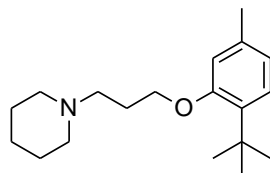
¹³C NMR spectrum of 1-(3-(3-(*tert*-butyl)phenoxy)propyl)piperidine hydrogen chloride (25)



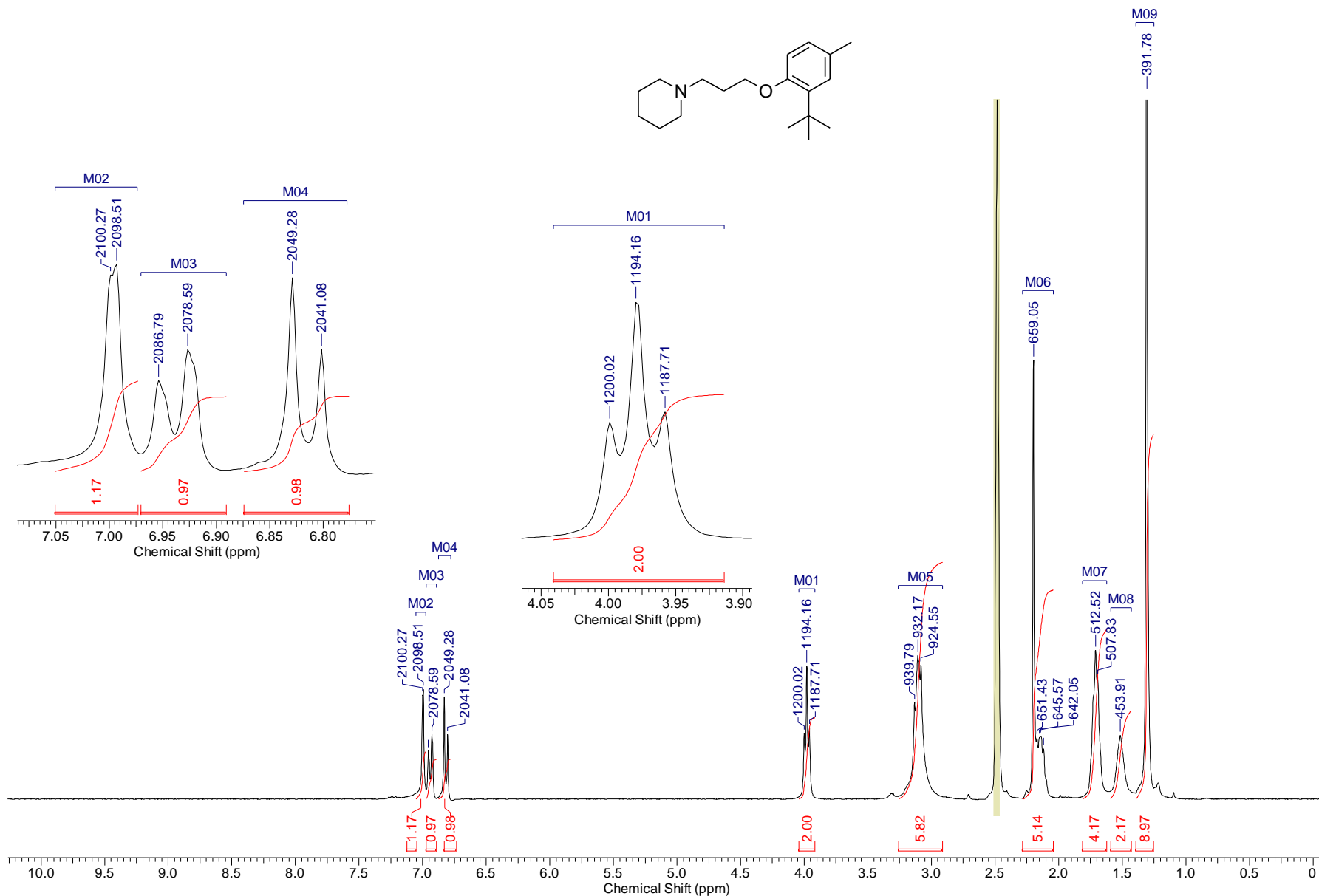
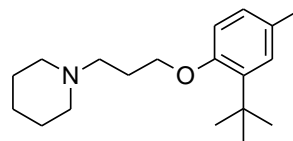
^1H NMR spectrum of 1-(3-(2-(*tert*-butyl)-6-methylphenoxy)propyl)piperidine hydrogen oxalate (**26**)



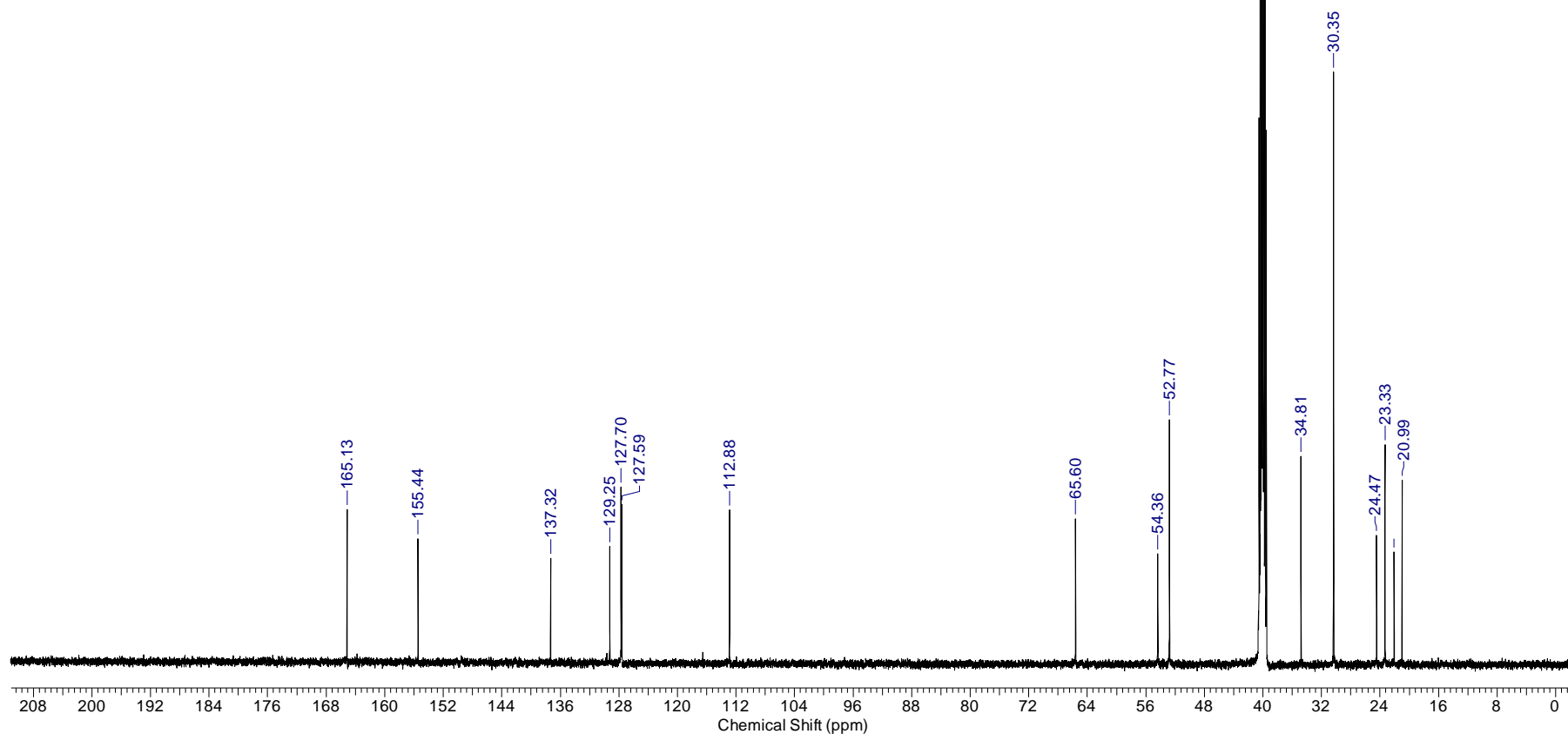
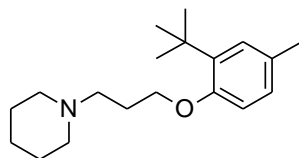
¹³C NMR spectrum of 1-(3-(2-(*tert*-butyl)-6-methylphenoxy)propyl)piperidine hydrogen oxalate (**26**)



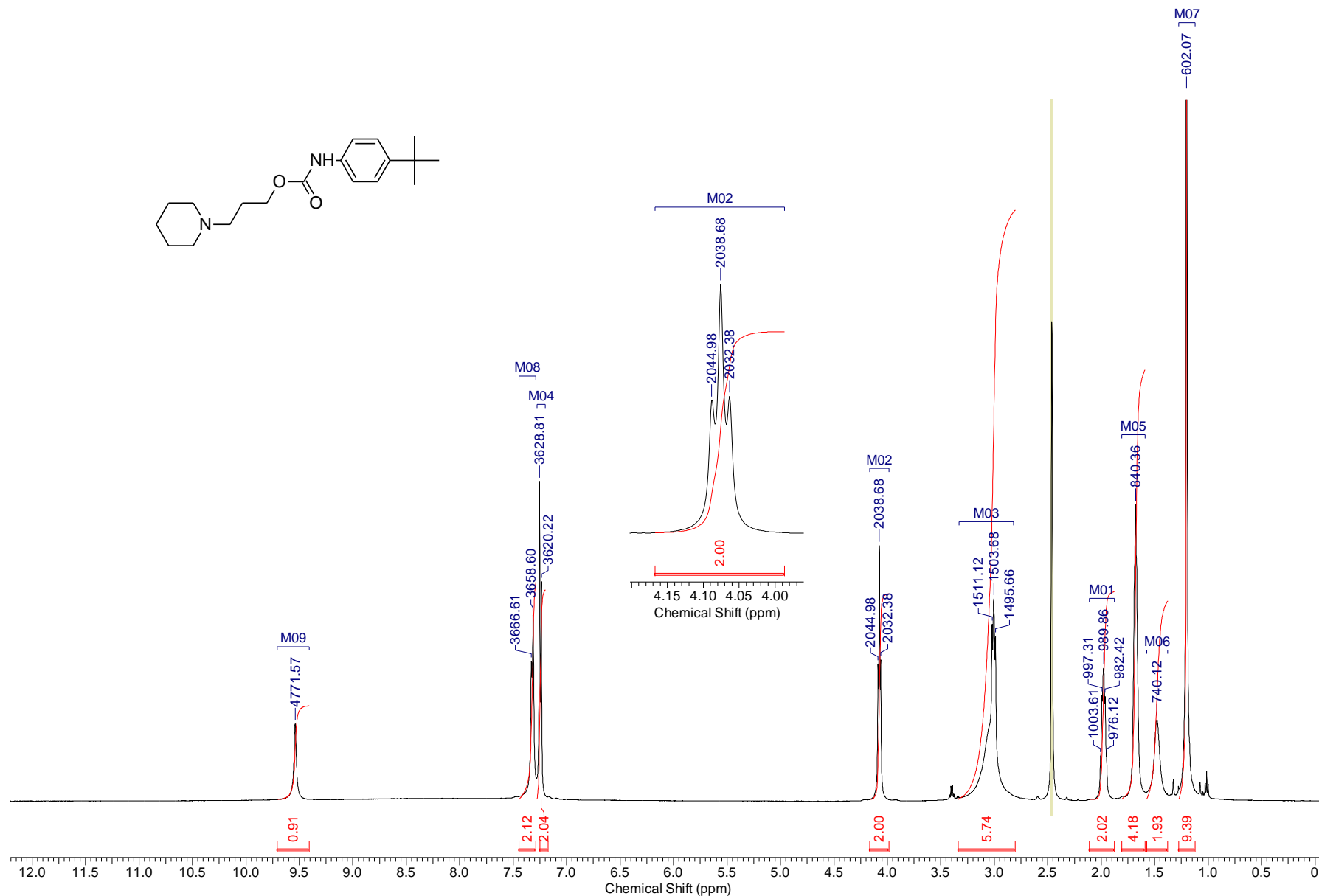
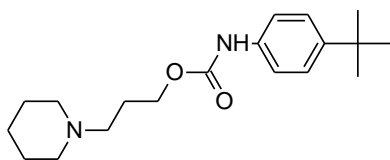
^1H NMR spectrum of 1-(3-(2-(*tert*-butyl)-5-methylphenoxy)propyl)piperidine hydrogen oxalate (**27**)



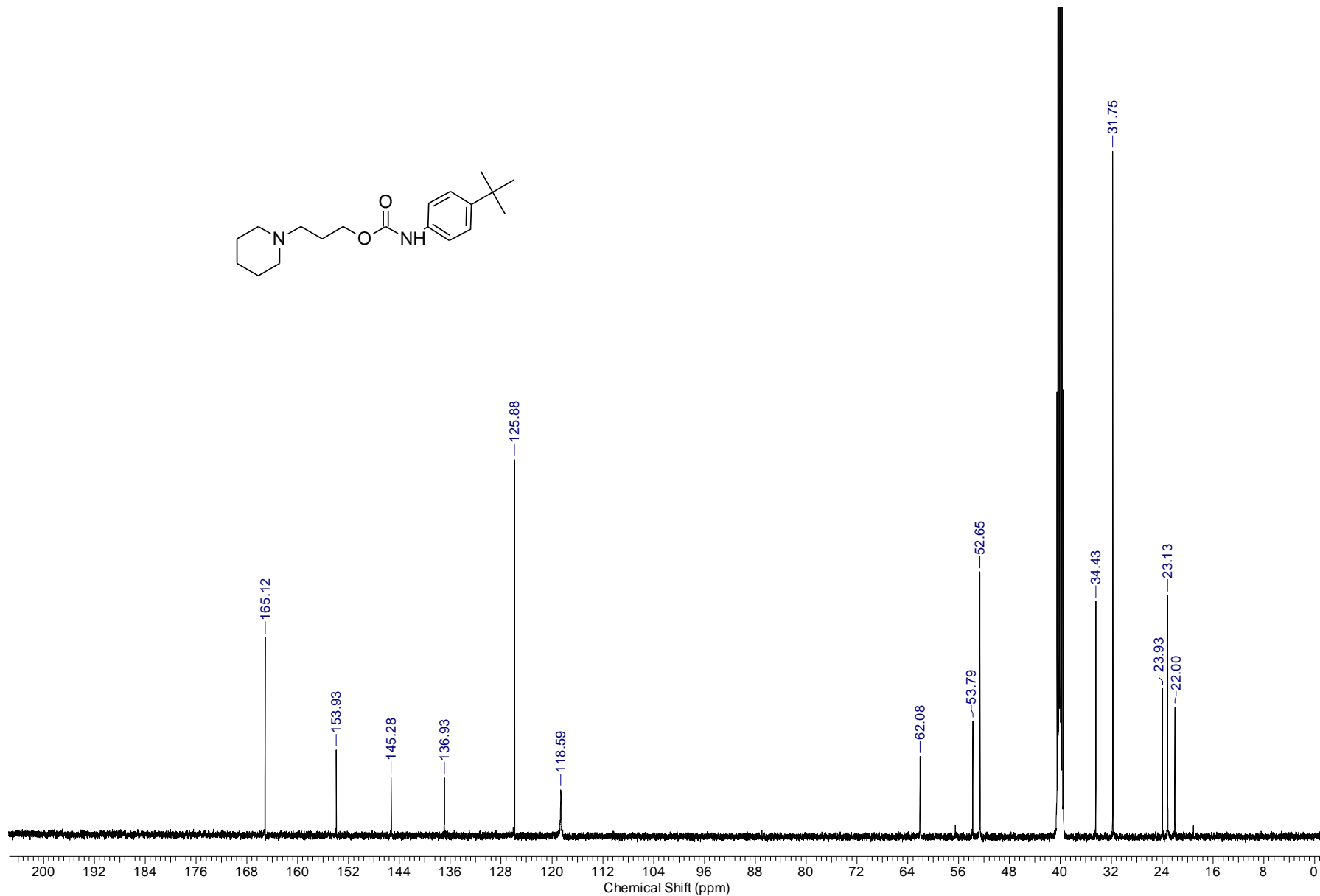
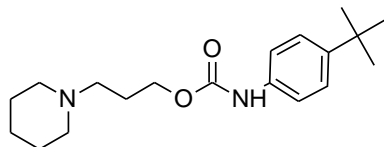
¹H NMR spectrum of 1-(3-(2-(*tert*-butyl)-4-methylphenoxy)propyl)piperidine hydrogen oxalate (**28**)



¹³C NMR spectrum of 1-(3-(2-(*tert*-butyl)-4-methylphenoxy)propyl)piperidine hydrogen oxalate (**28**)



^1H NMR spectrum of 3-(piperidin-1-yl)propyl (4-(*tert*-butyl)phenyl)carbamate hydrogen oxalate (**29**)



¹³C NMR spectrum of 3-(piperidin-1-yl)propyl (4-(*tert*-butyl)phenyl)carbamate hydrogen oxalate (**29**)