

Supplementary Material

Efficient diastereoselective synthesis of (1*R*,2*R*)-1-alkyl-1-phenyl-2-methylaminopropanes and study of their stereochemical aspects

Saravanan Rangan,^{a,b} S. Arul Antony,^b Abirami Kandhaswamy,^a
Hitesh Kumar Borkatte,^a and Tangirala Prakasam*^a

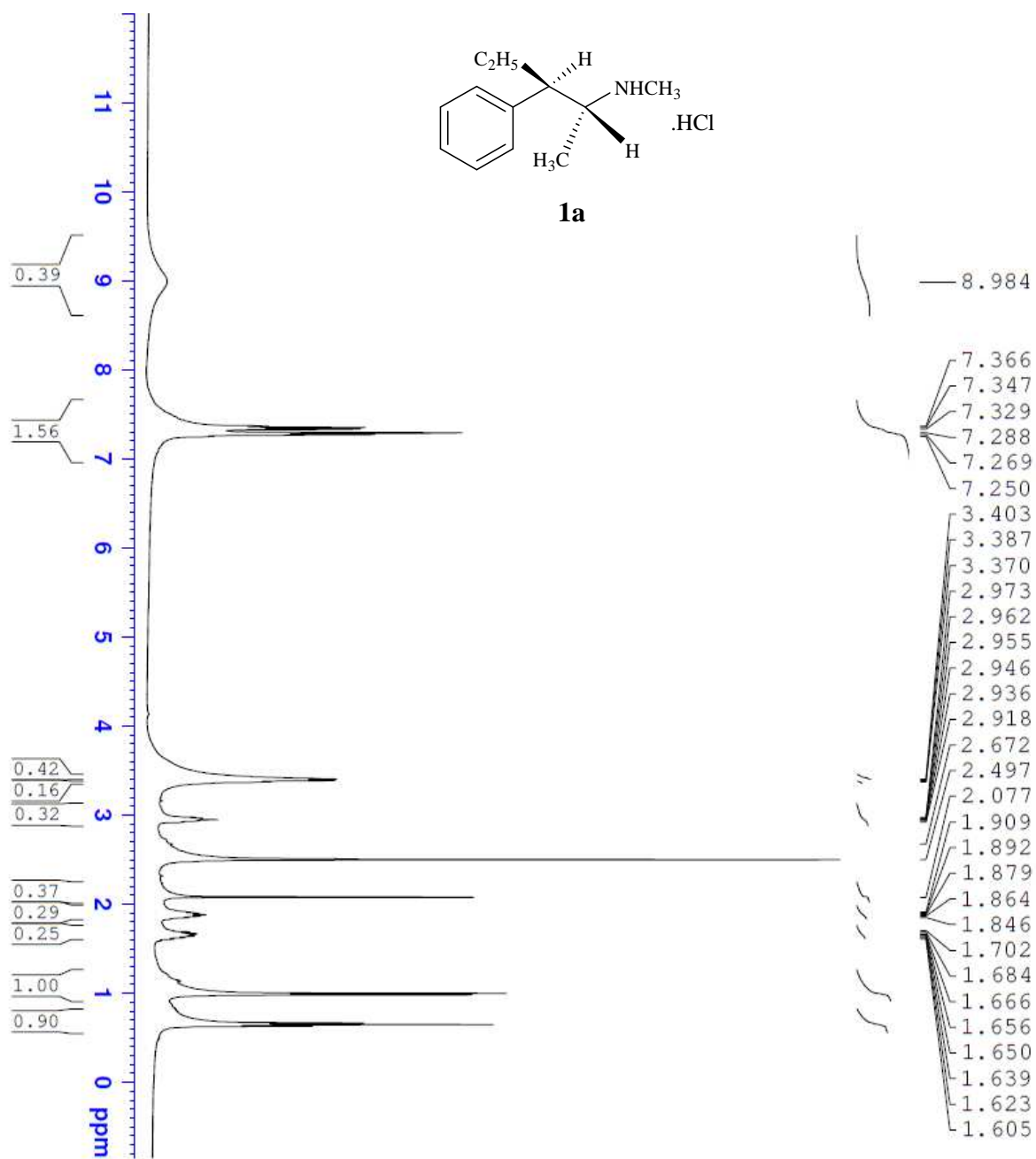
^a *Research and Development Centre, Malladi Drugs and Pharmaceuticals Ltd. No. 788/1,
Irulapalayam, Kuthambakkam, Chennai 600 124, India.*

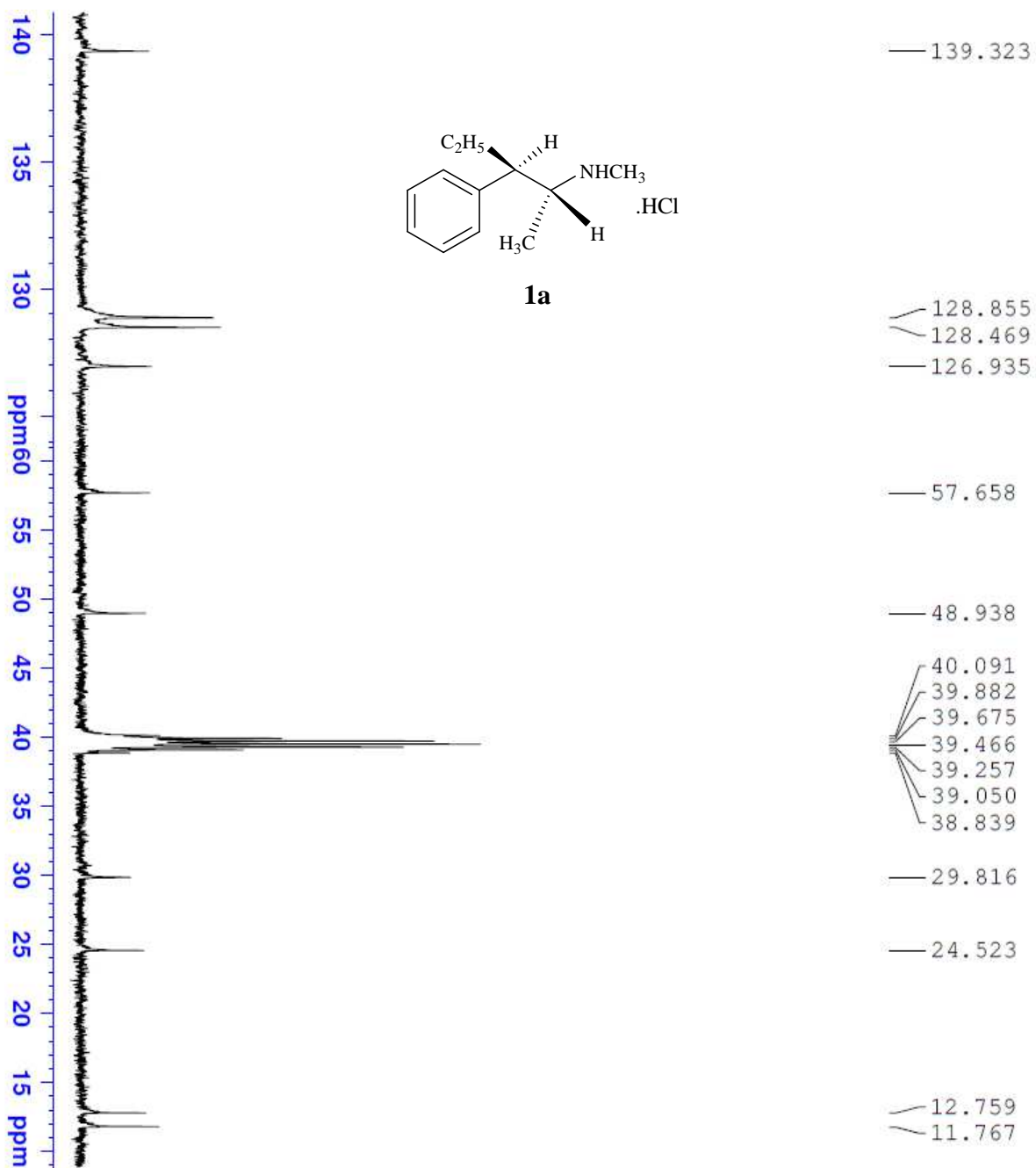
^b *PG and Research Department of Chemistry, Presidency College, Chennai 600 005, India.
E-mail: prakasam@malladi.co.in*

Table of contents

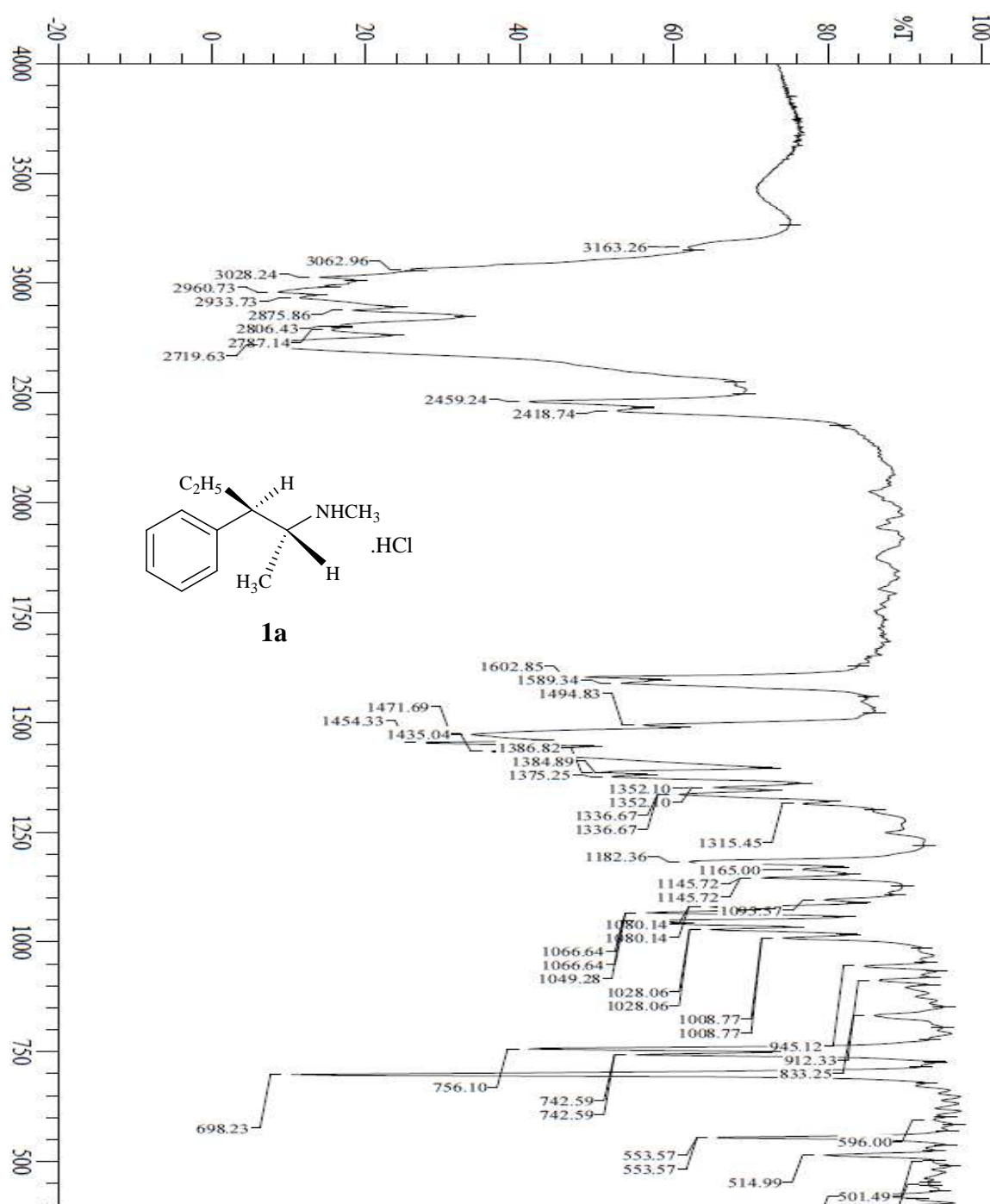
¹H NMR, ¹³C NMR, IR, Mass spectra of

1. 1-Ethyl-1-phenyl-2-methylaminopropane hydrochloride	S-2
2. 1-(1-Butyl)-1-phenyl-2-methylaminopropane hydrochloride	S-6
3. 1-Isopropyl-1-phenyl-2-methylaminopropane hydrochloride	S-10
4. 1-Cyclopentyl-1-phenyl-2-methylaminopropane	S-14
5. 1-Cyclohexyl-1-phenyl-2-methylaminopropane	S-18
6. 1-Benzyl-1-phenyl-2-methylaminopropane	S-22
7. 1-(2-phenylethyl)-1-phenyl-2-methylaminopropane	S-26

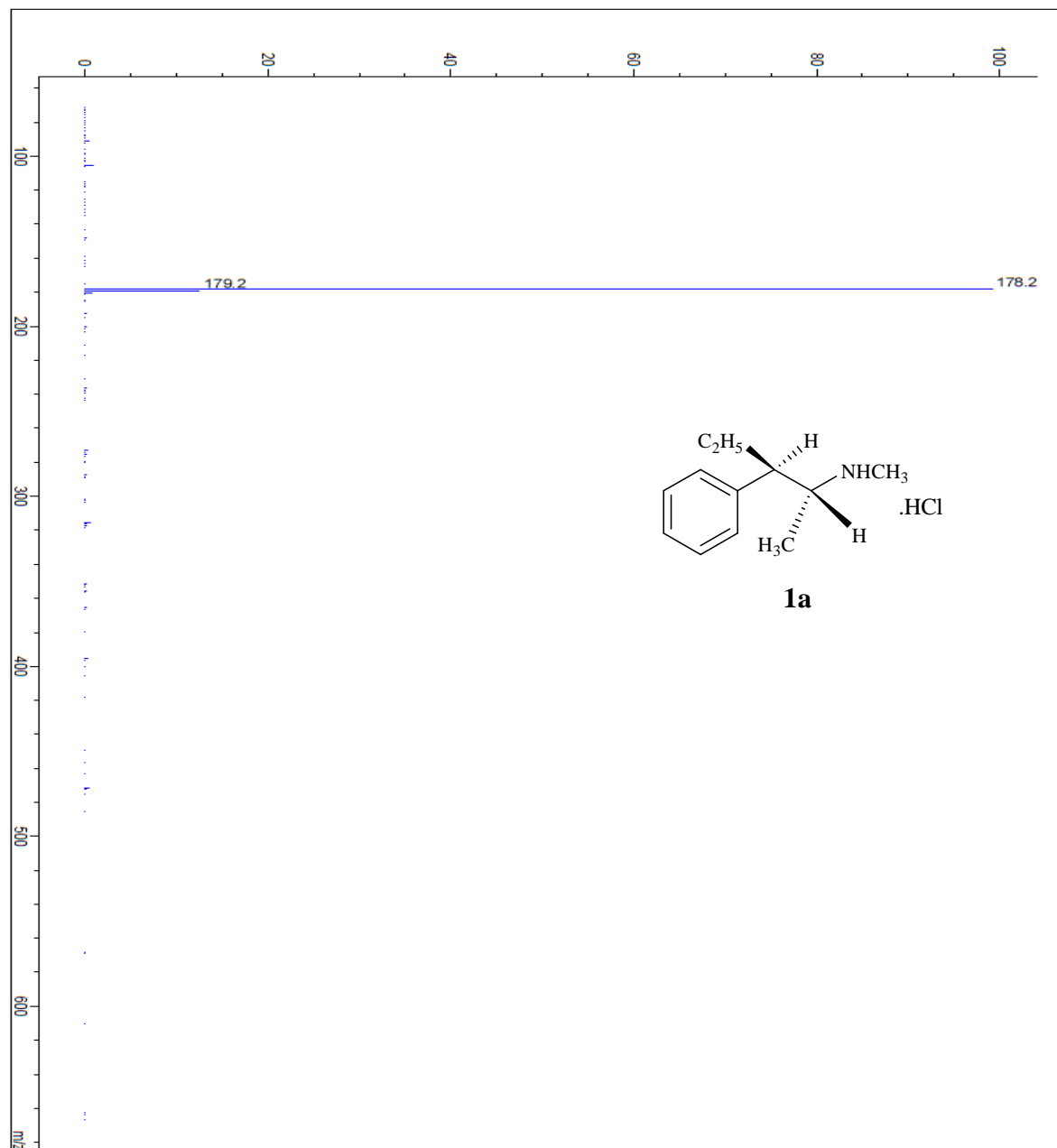
1-Ethyl-1-phenyl-2-methylaminopropane hydrochloride (Compound 1a) ^1H NMR (DMSO- d_6 , 400 MHz) ^{13}C NMR (DMSO- d_6 , 100 MHz)

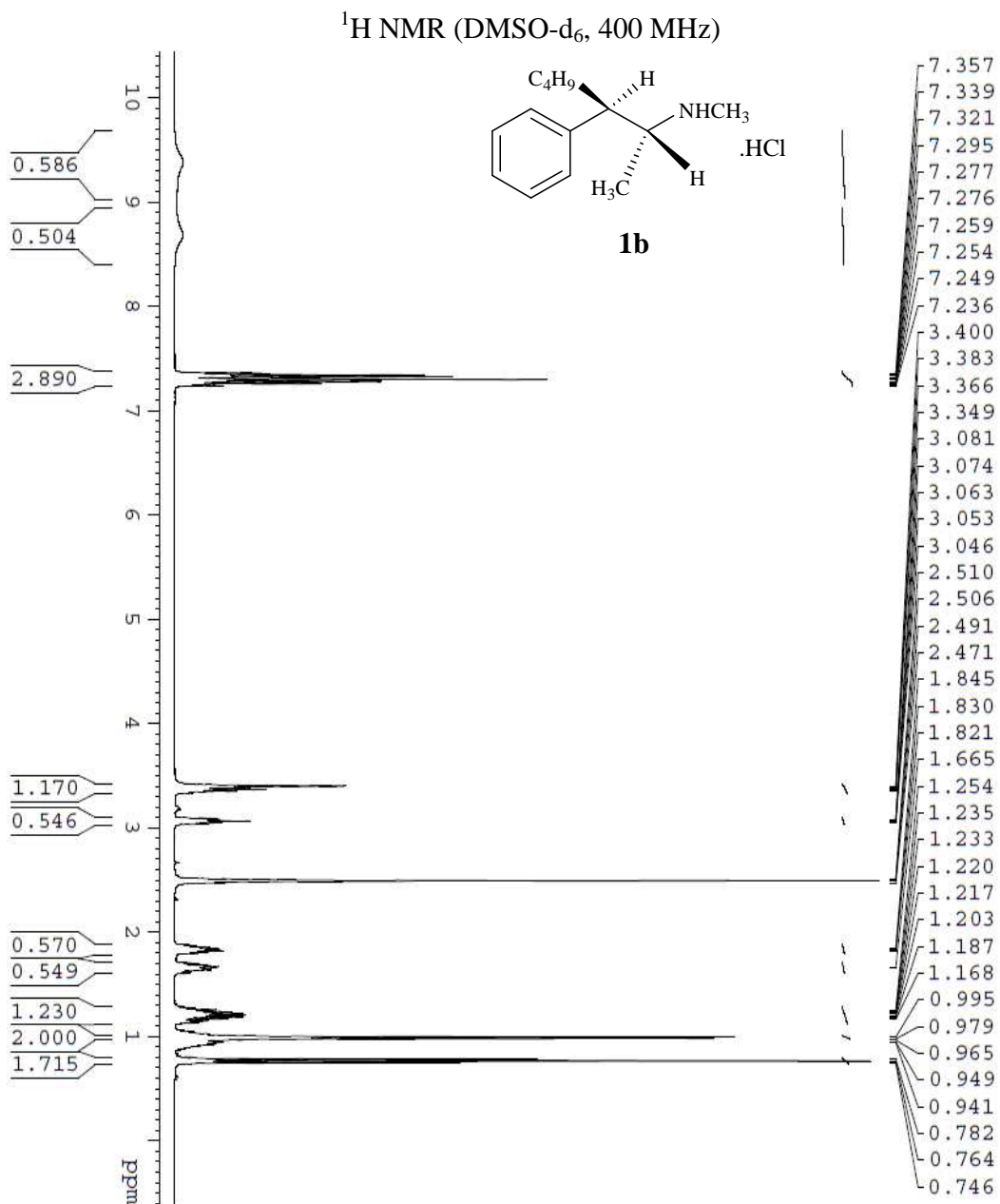


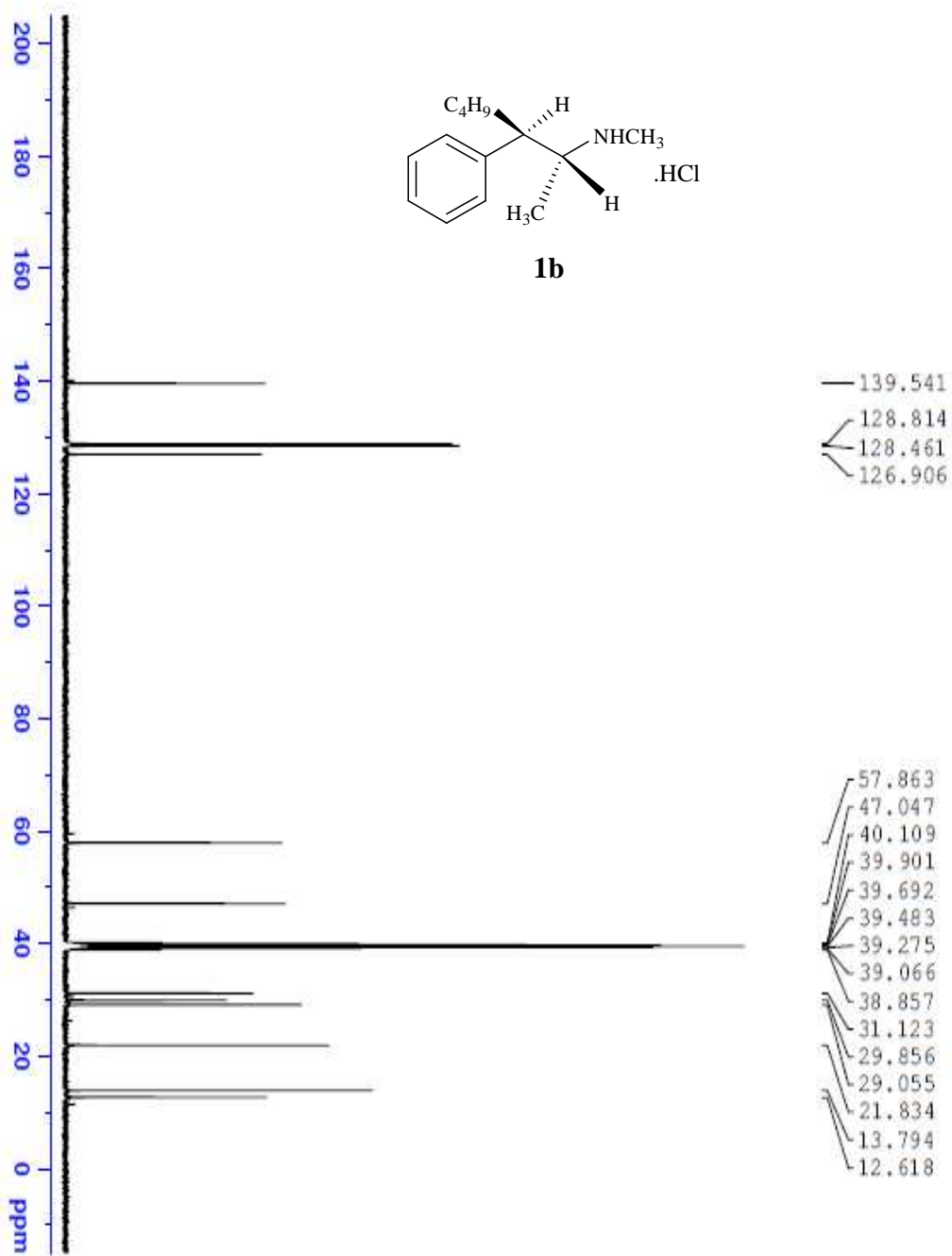
IR spectrum (KBr cm⁻¹):

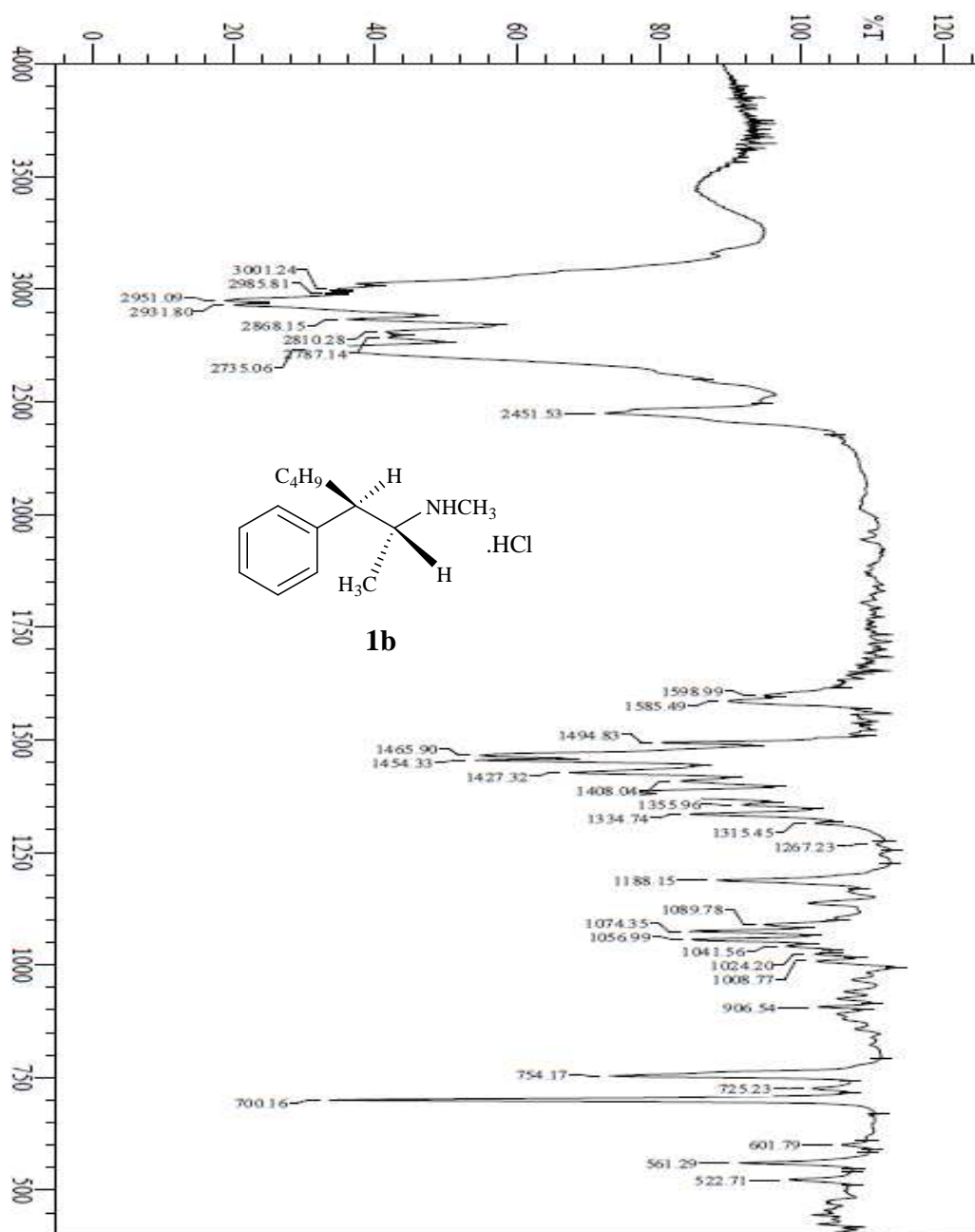


Mass spectrum (ESI, (+)-mode)

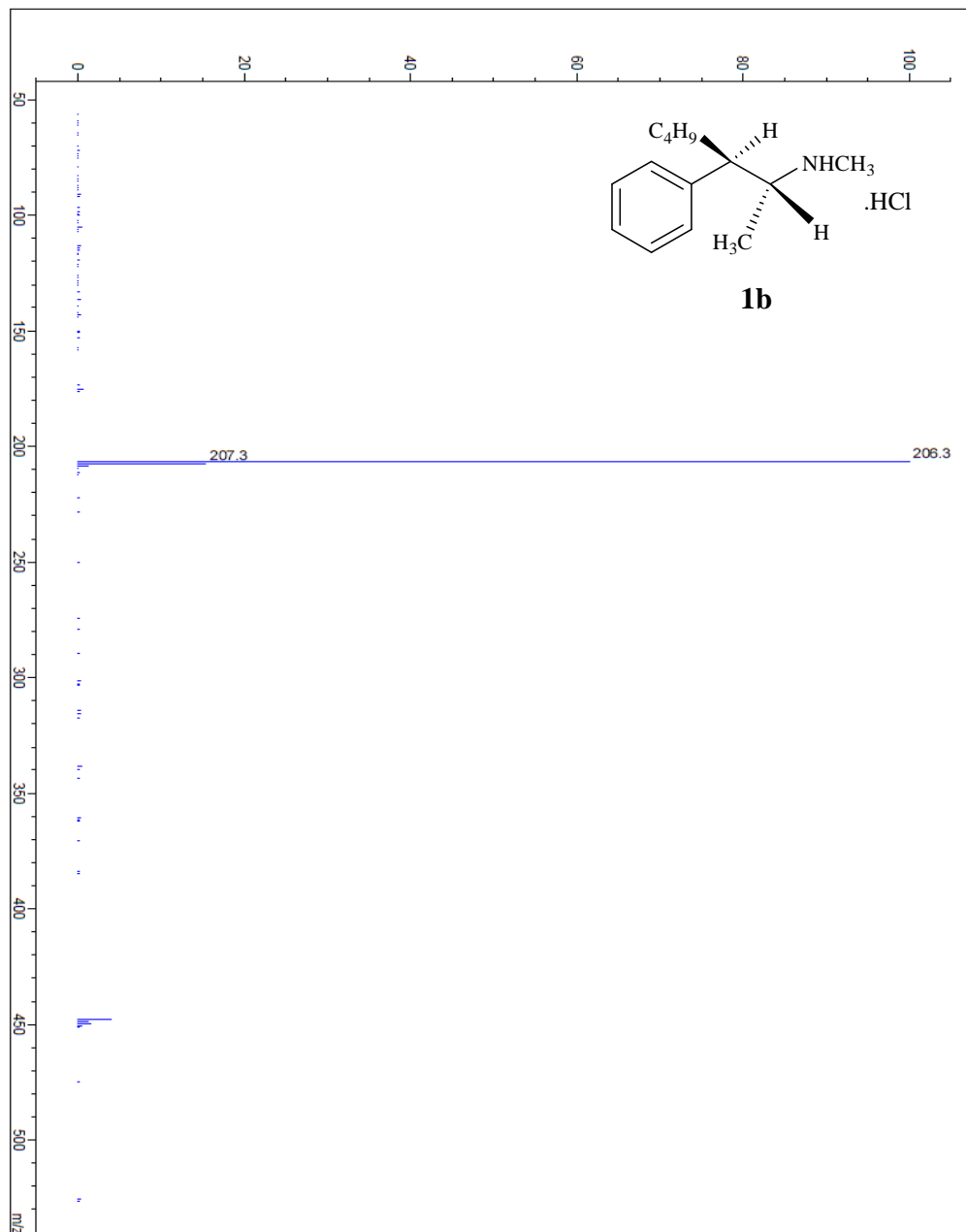


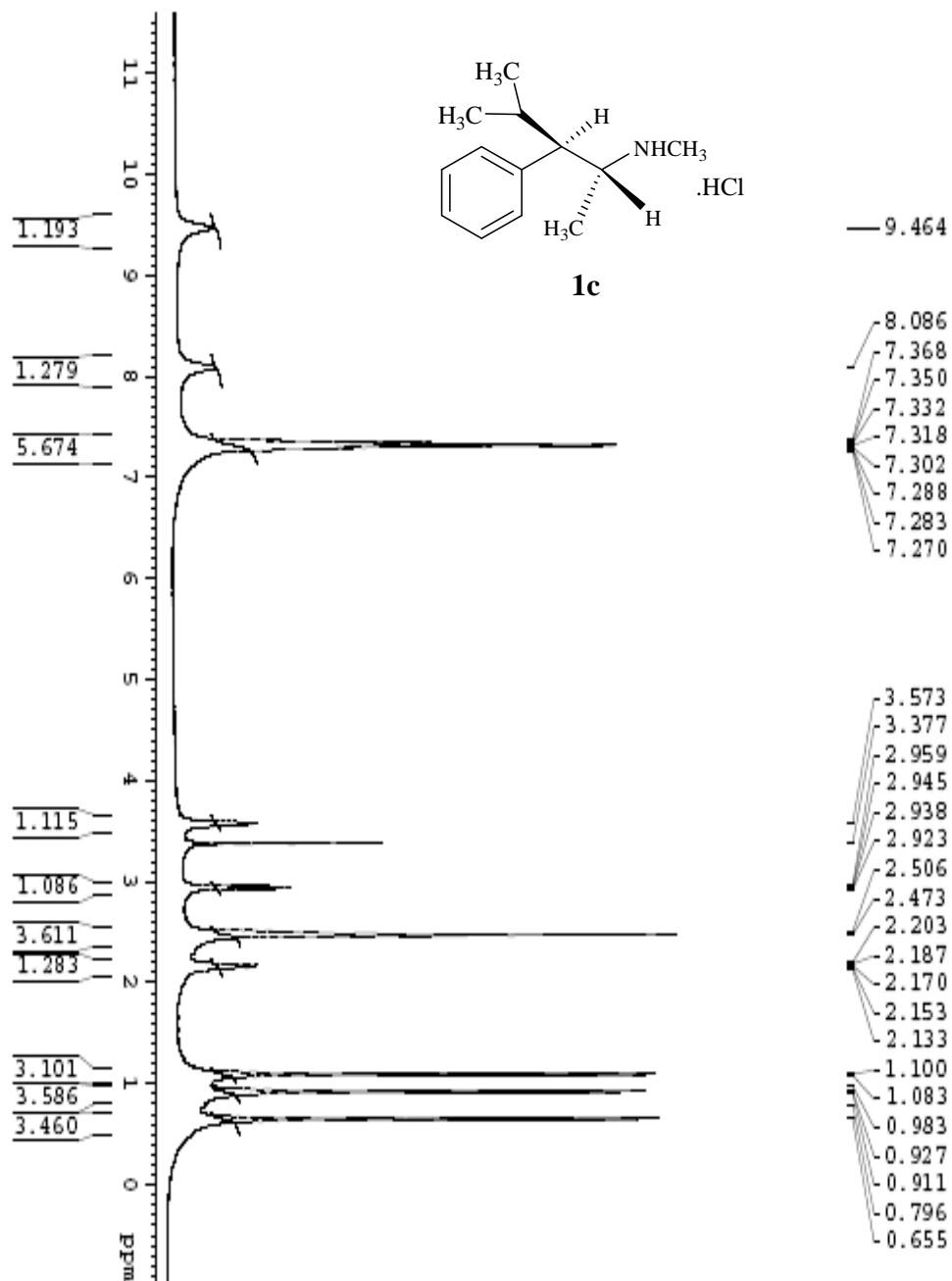
1-(1-Butyl)-1-phenyl-2-methylaminopropane hydrochloride (Compound 1b).

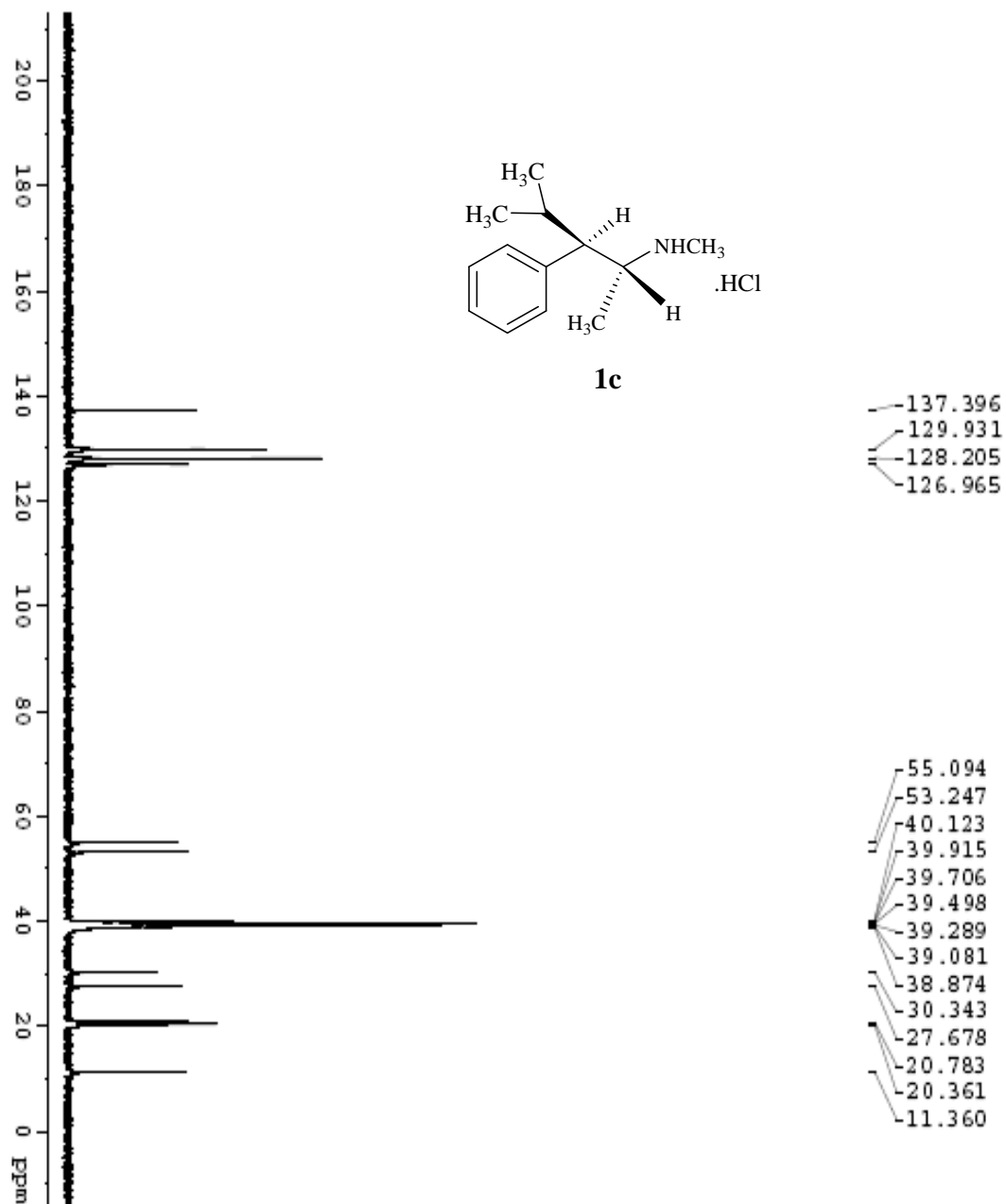
^{13}C NMR (DMSO- d_6 , 100 MHz)

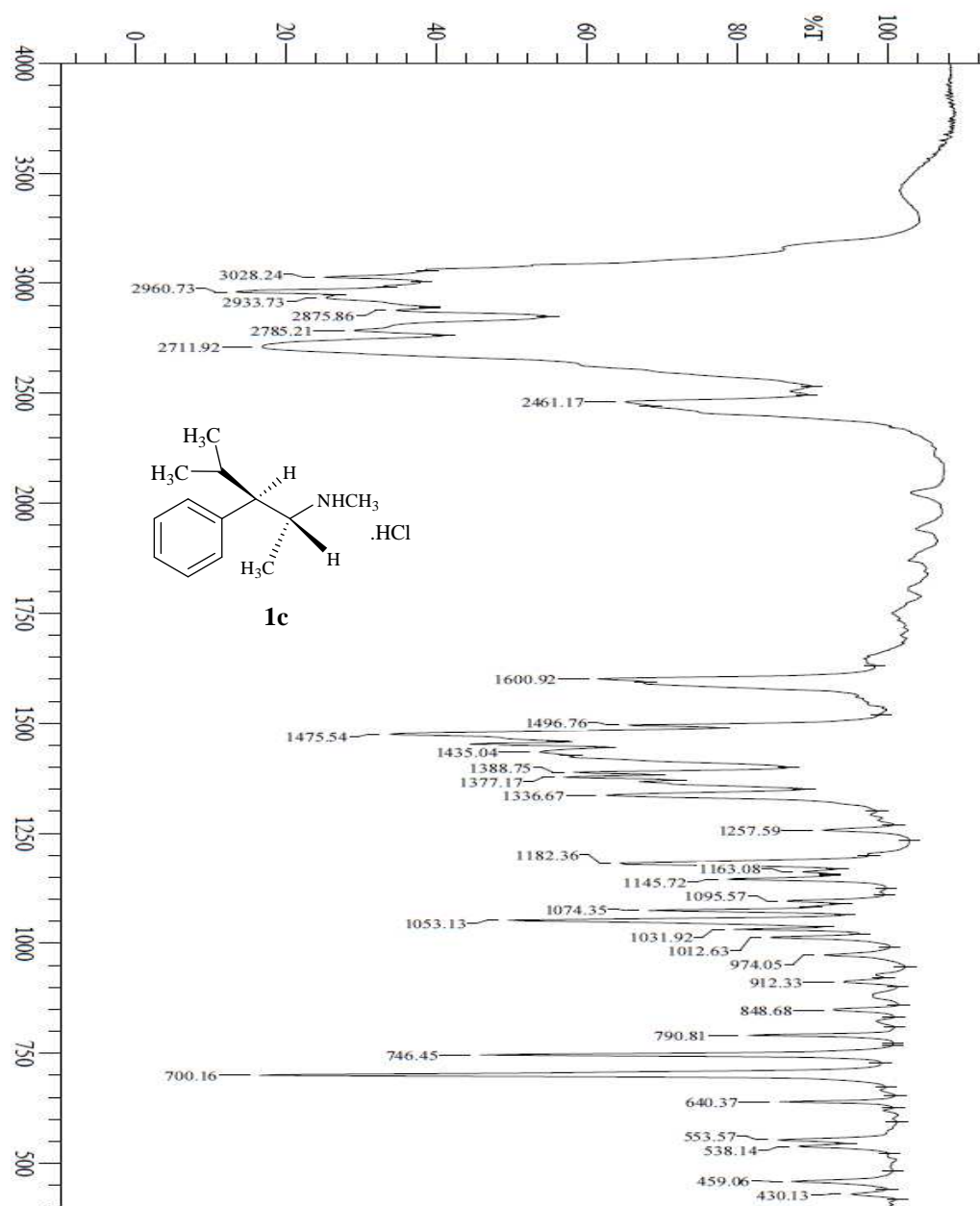
IR spectrum (KBr cm^{-1})

Mass spectrum (ESI, (+)-mode)

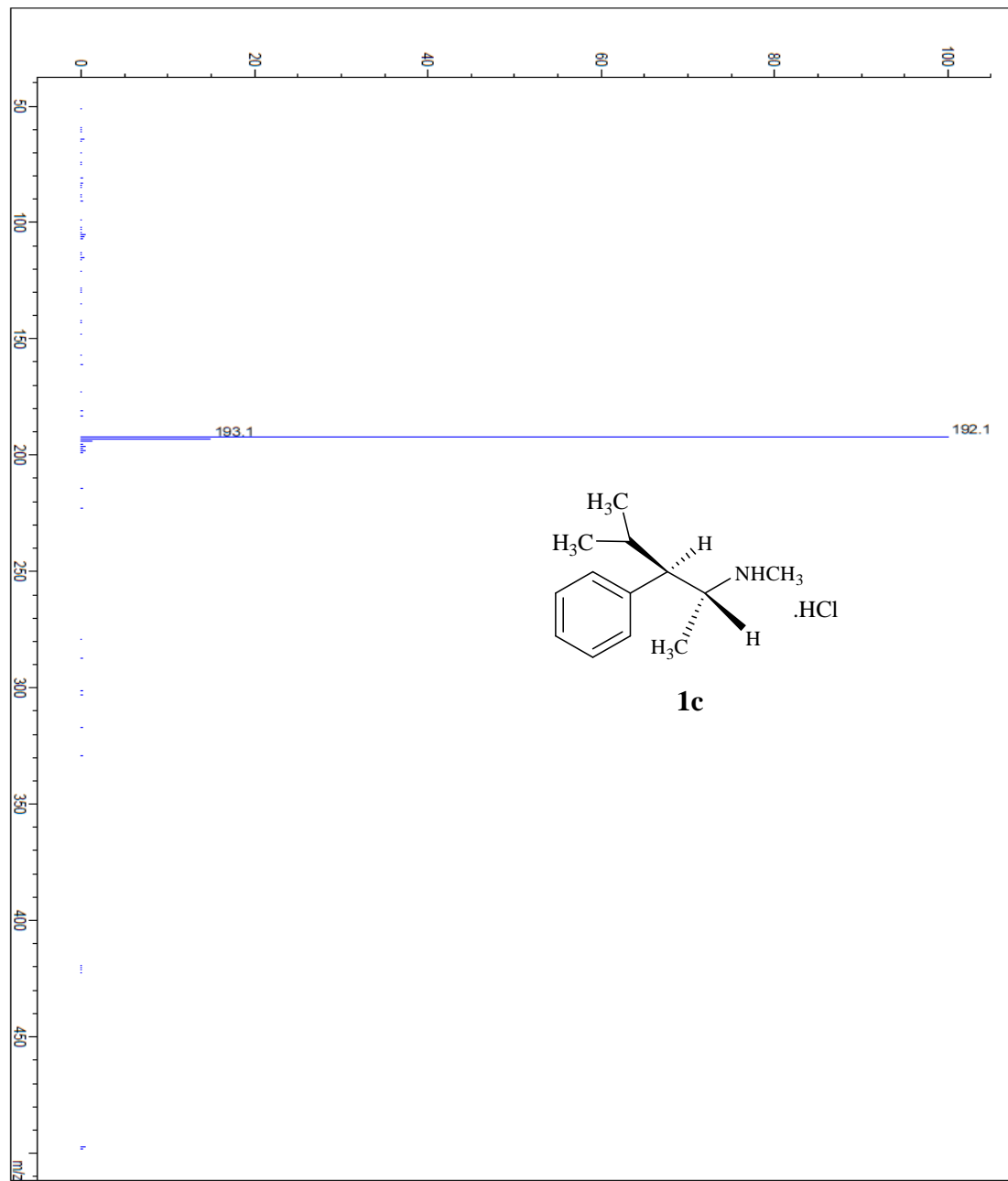


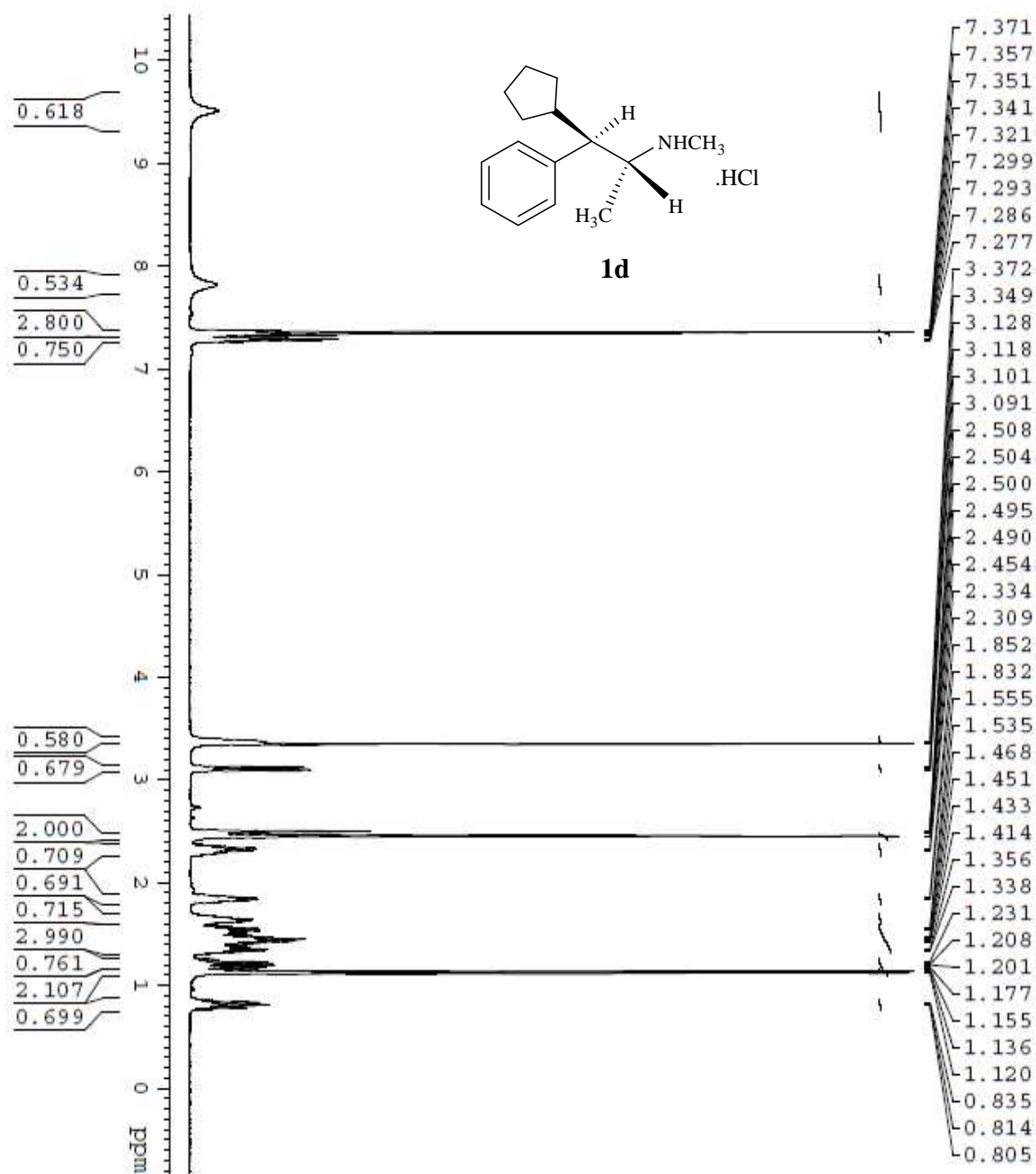
1-Isopropyl-1-phenyl-2-methylaminopropane hydrochloride (Compound 5c). ^1H NMR (DMSO- d_6 , 400 MHz)

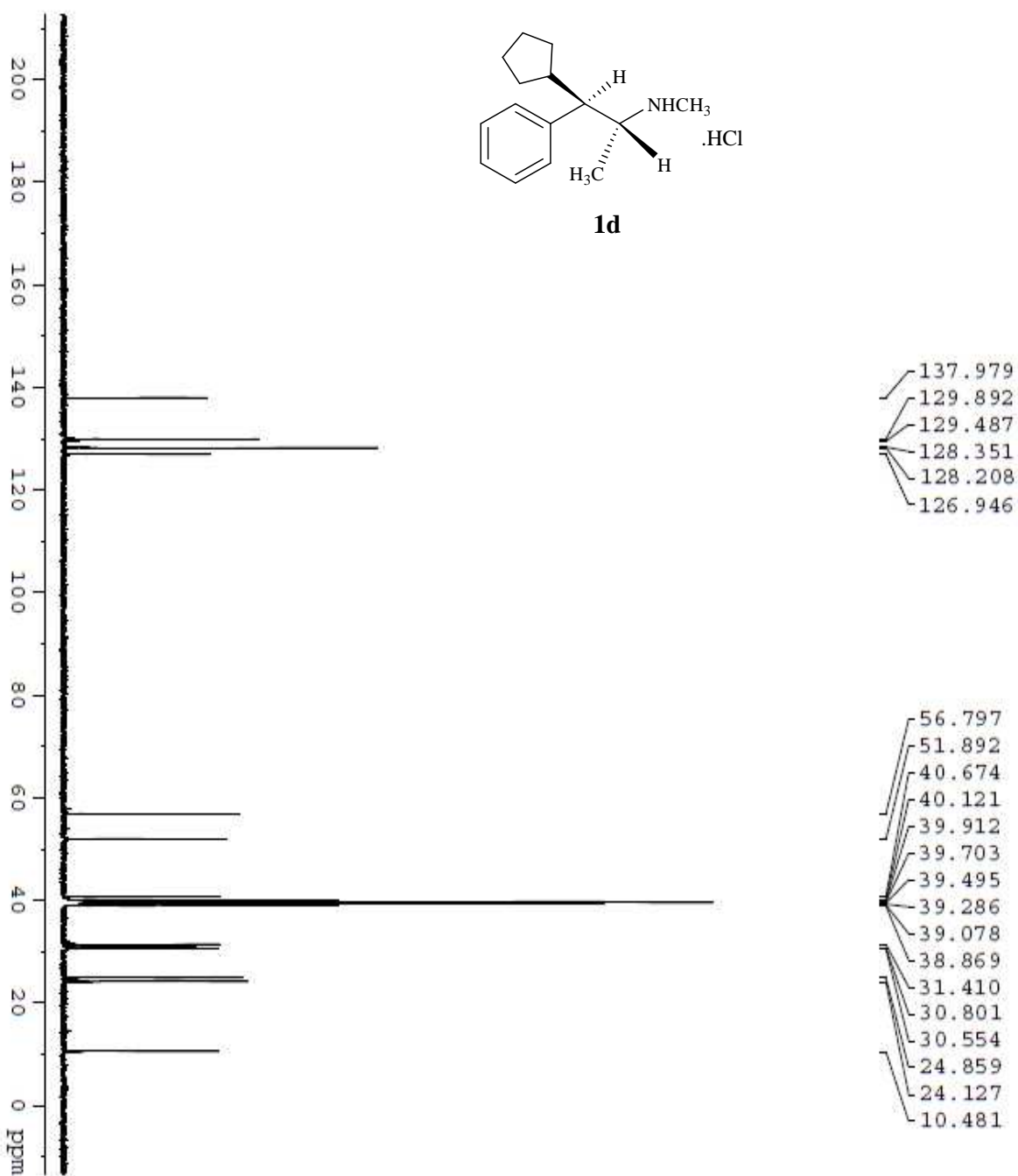
^{13}C NMR (DMSO- d_6 , 100 MHz)

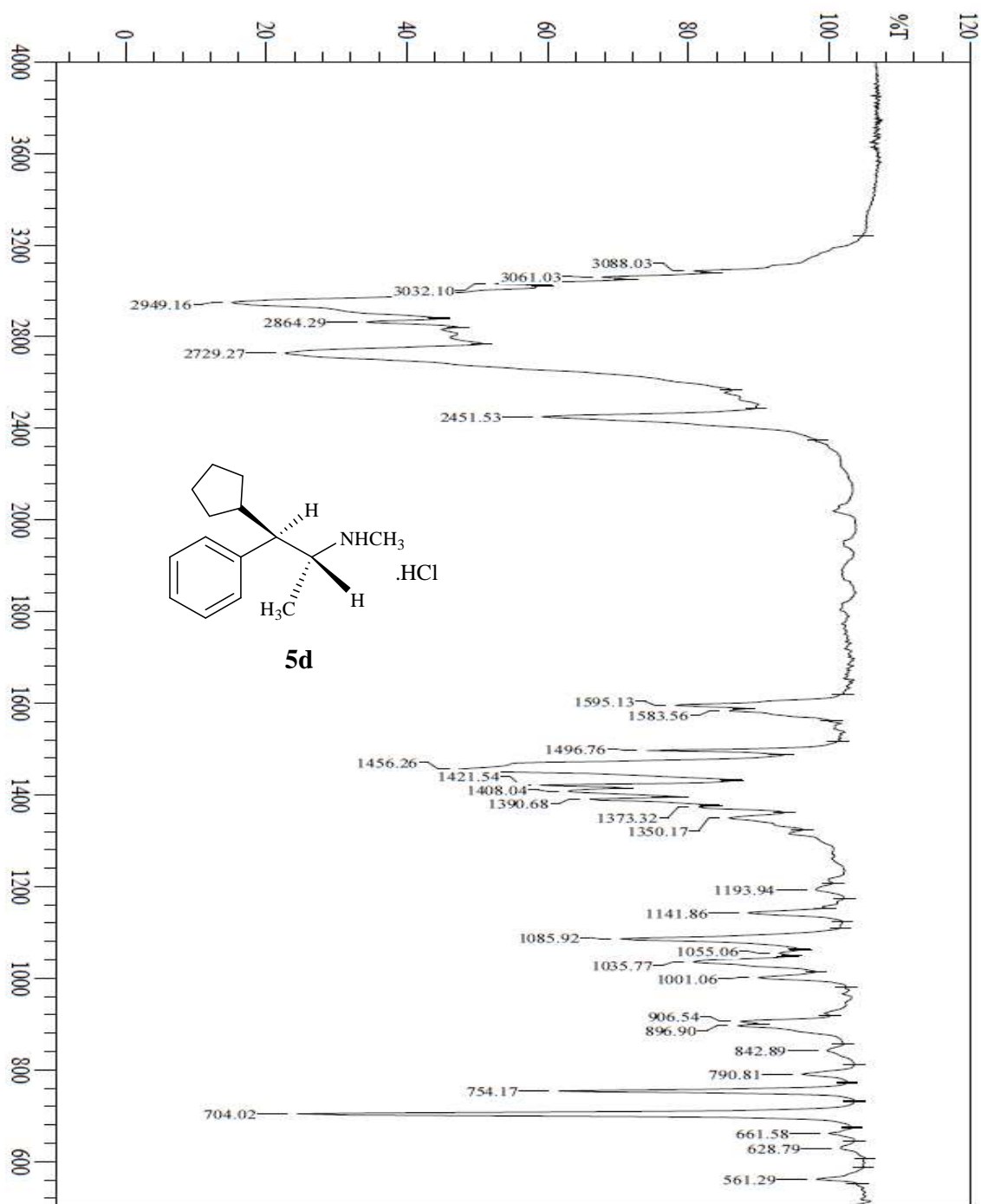
IR spectrum (KBr cm^{-1})

Mass spectrum (ESI, (+)-mode)

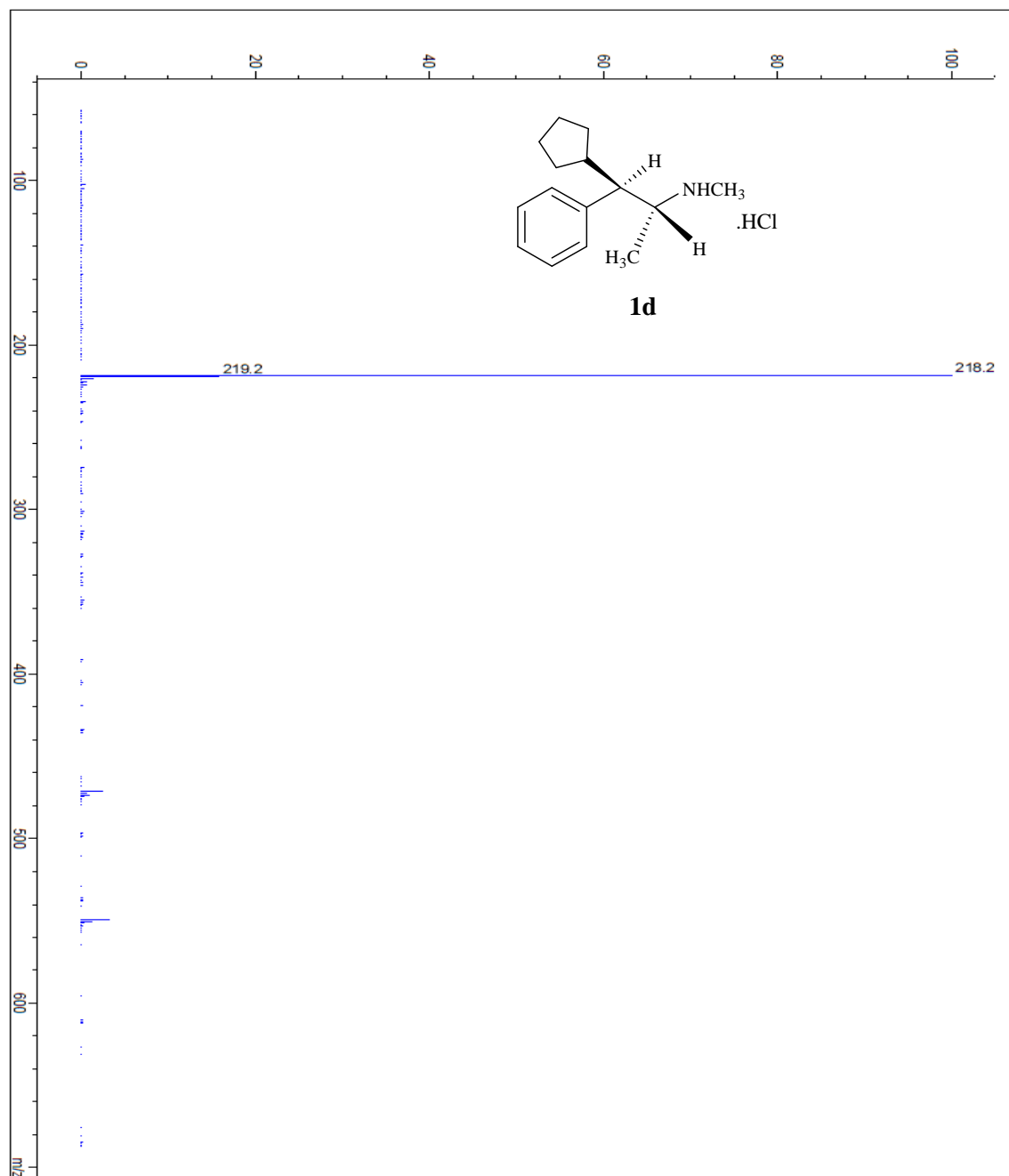


1-Cyclopentyl-1-phenyl-2-methylaminopropane (Compound 1d). ^1H NMR (DMSO- d_6 , 400 MHz)

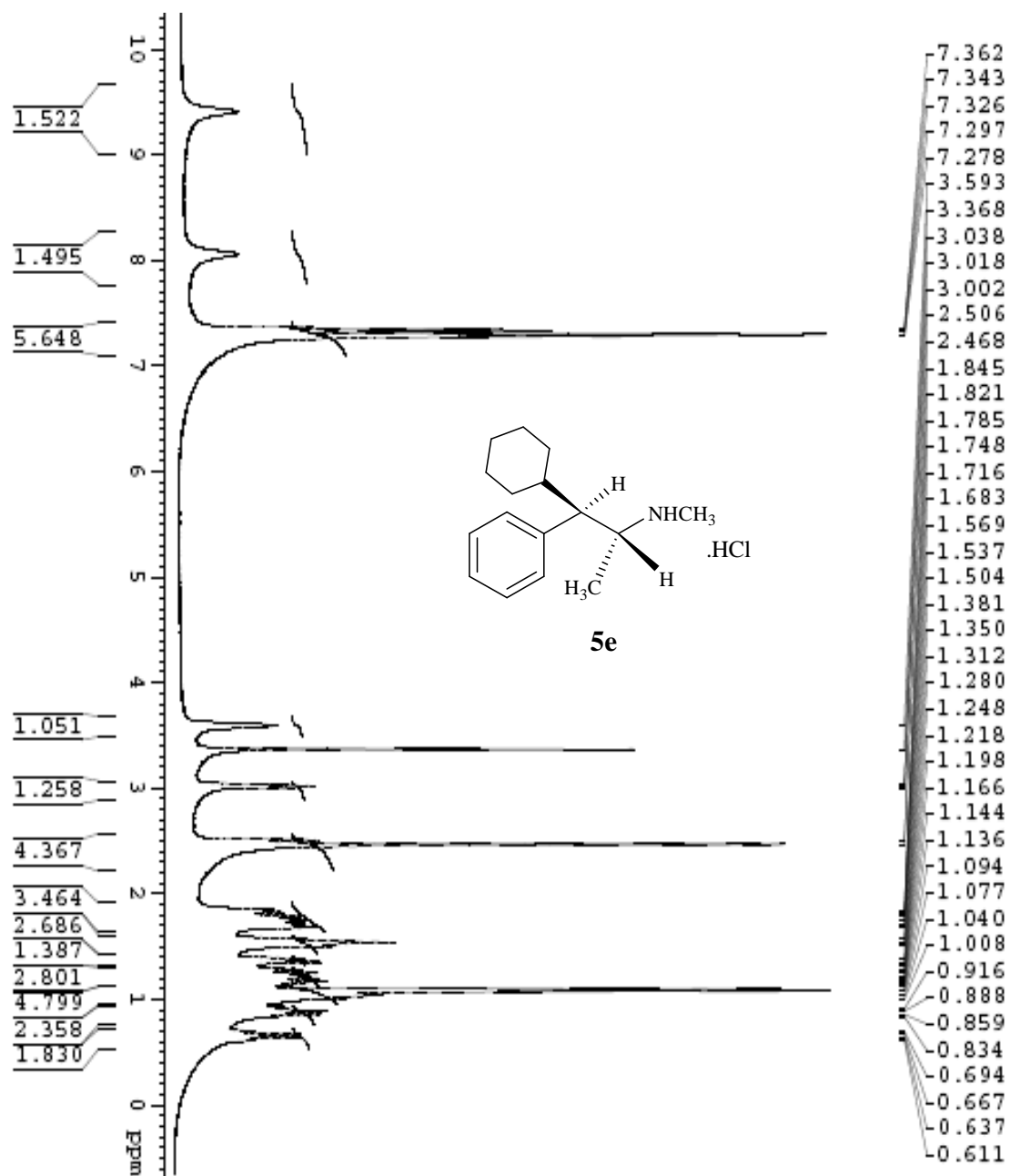
^{13}C NMR (DMSO- d_6 , 100 MHz)

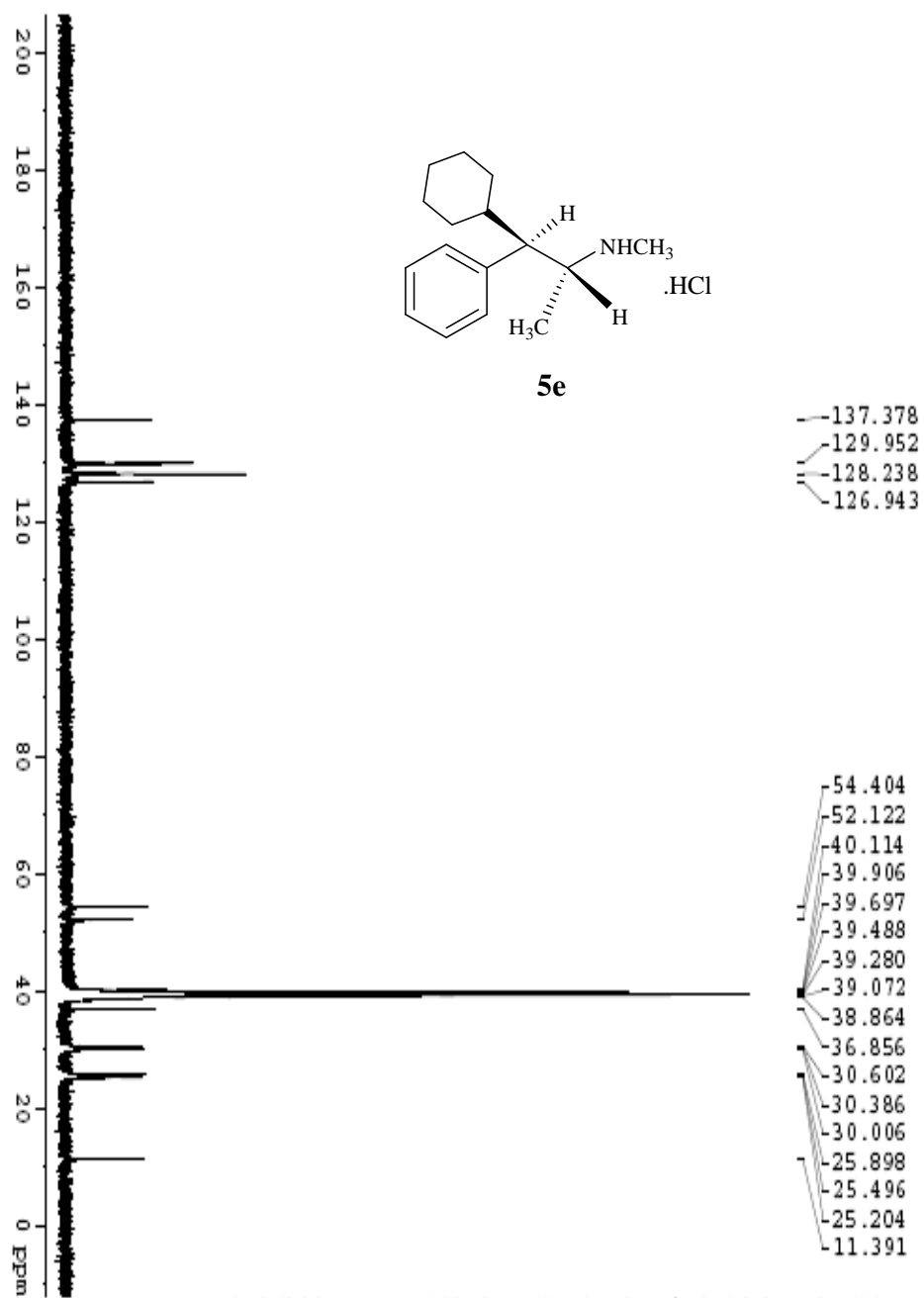
IR spectrum (KBr cm^{-1})

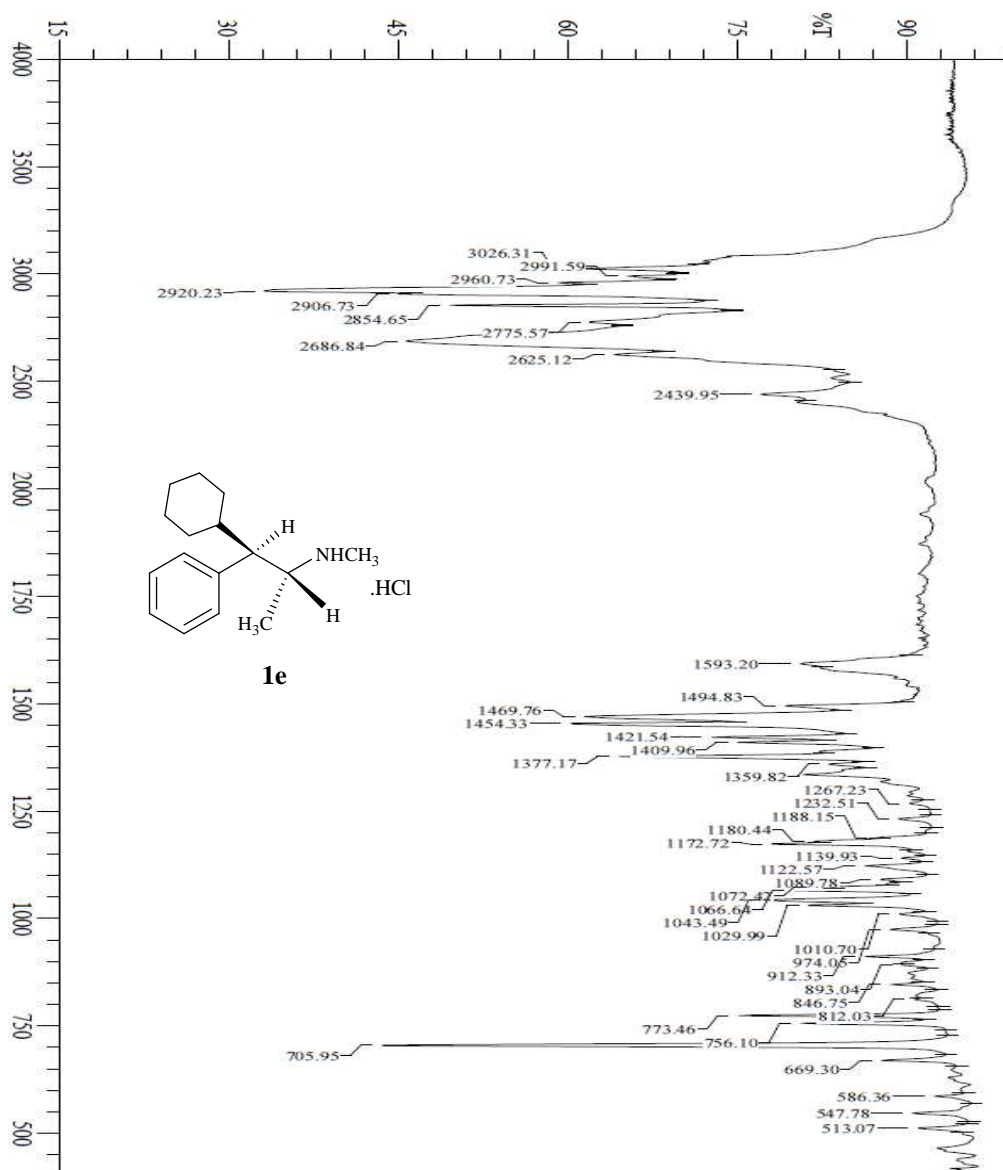
Mass spectrum (ESI, (+)-mode)



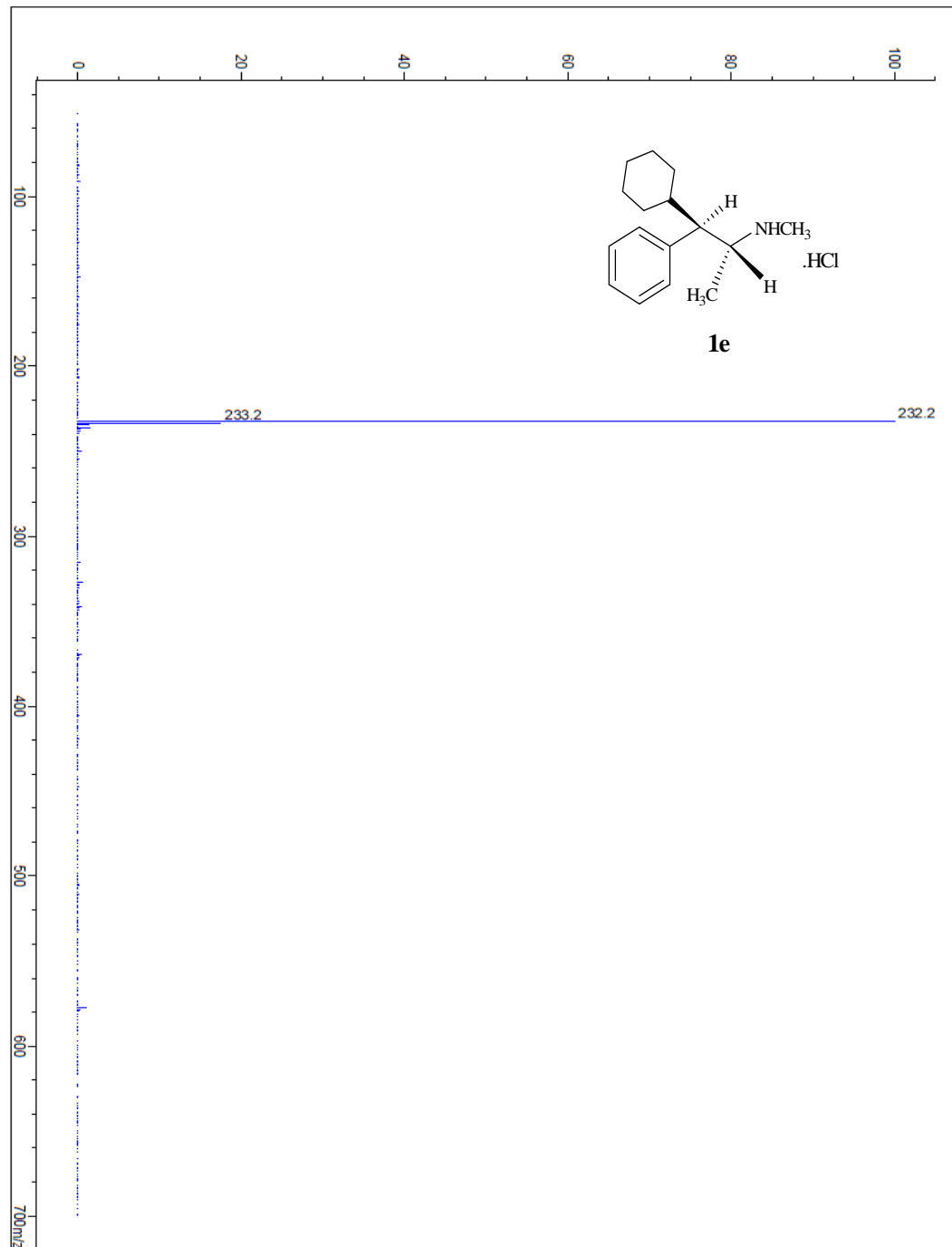
1-Cyclohexyl-1-phenyl-2-methylaminopropane (Compound 1e)

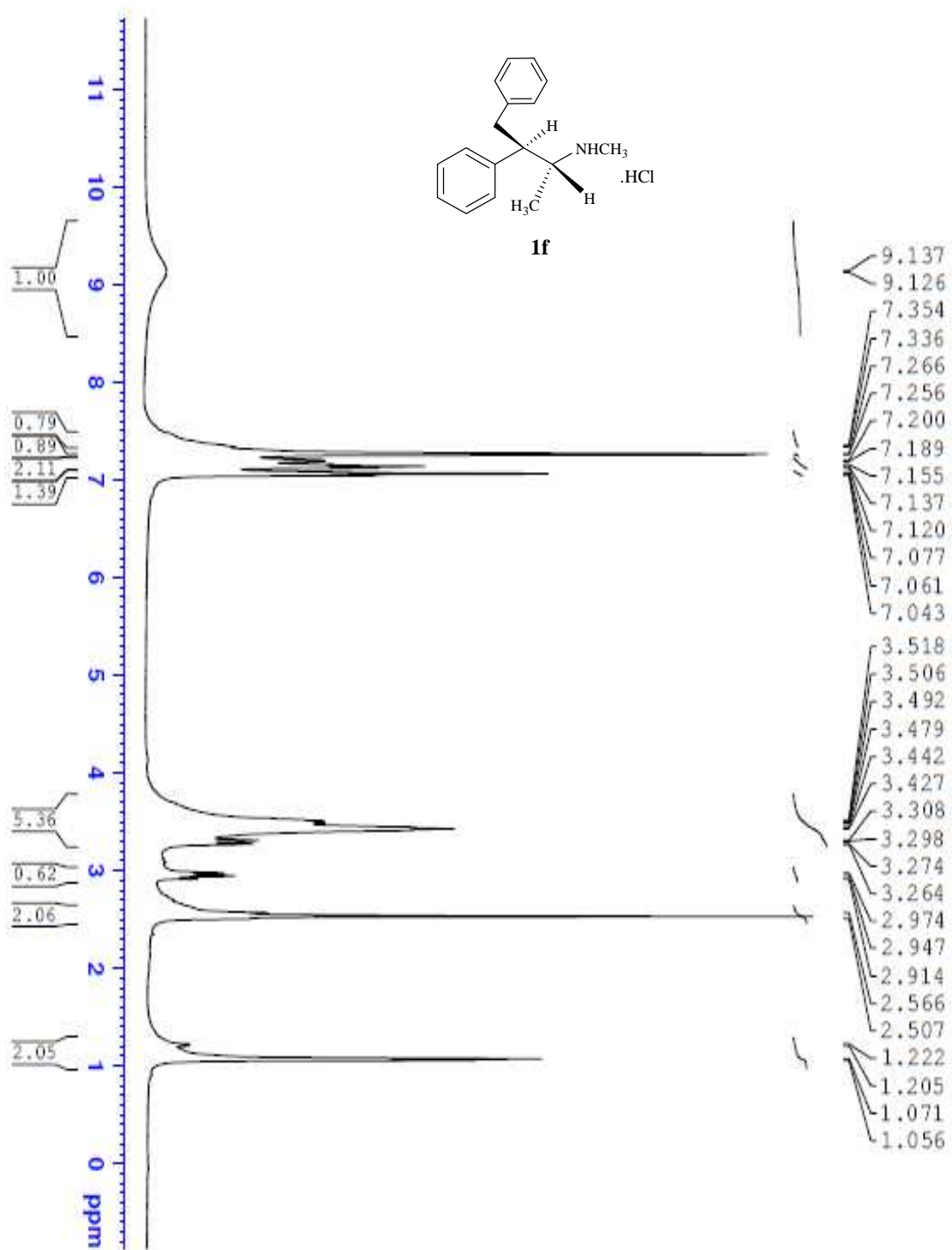
 ^1H NMR (DMSO- d_6 , 400 MHz)

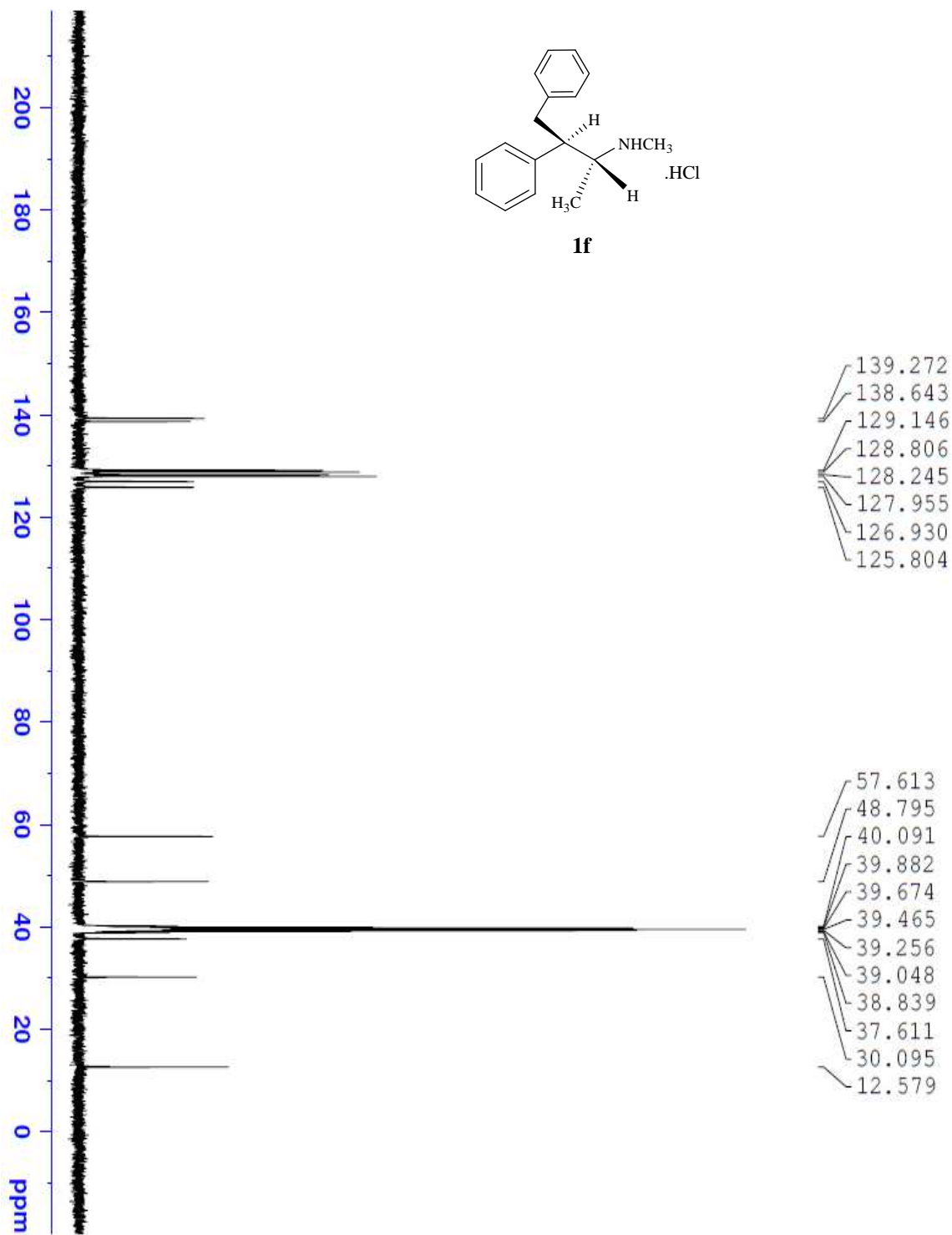
^{13}C NMR (DMSO- d_6 , 100 MHz)

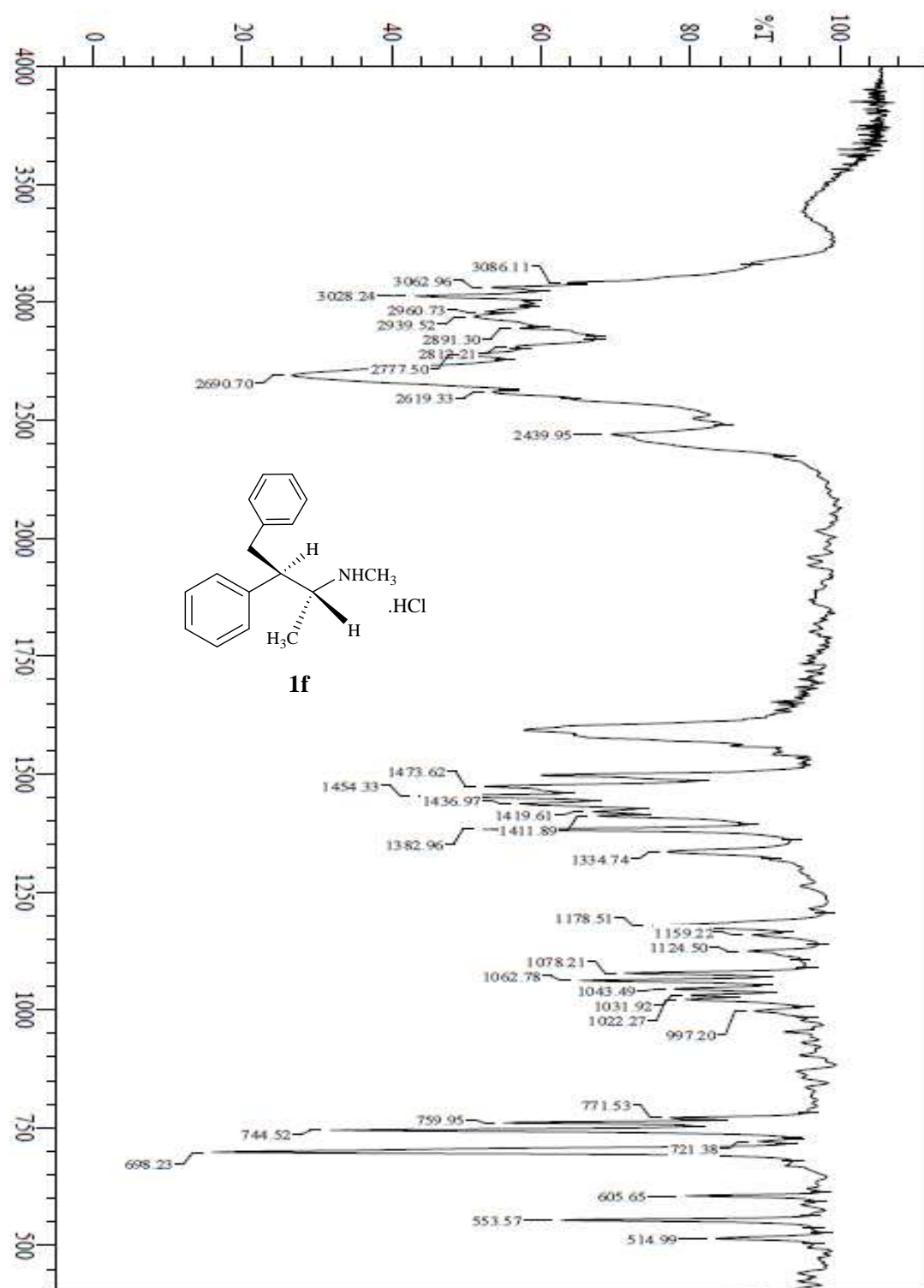
IR spectrum (KBr cm^{-1})

Mass spectrum (ESI, (+)-mode)

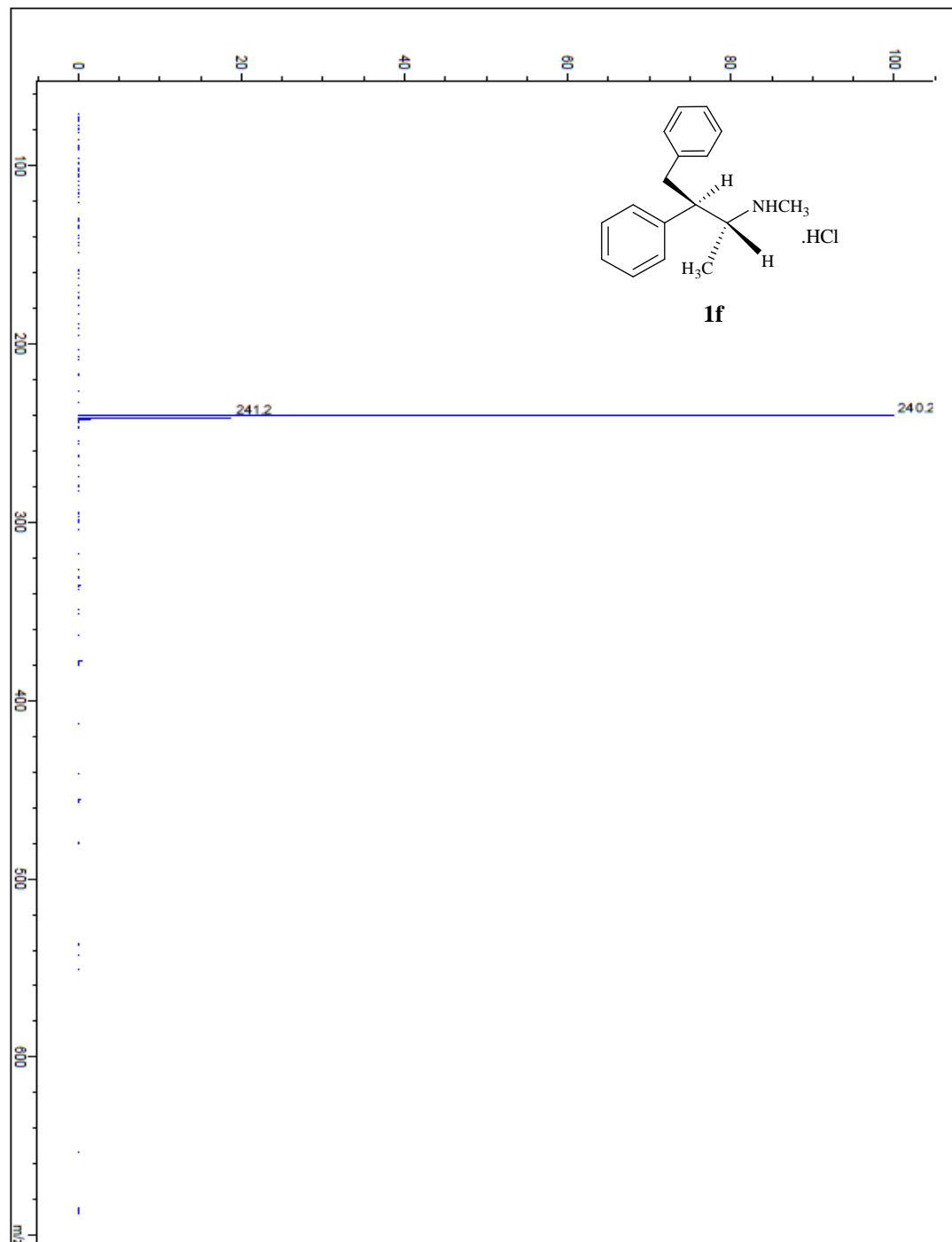


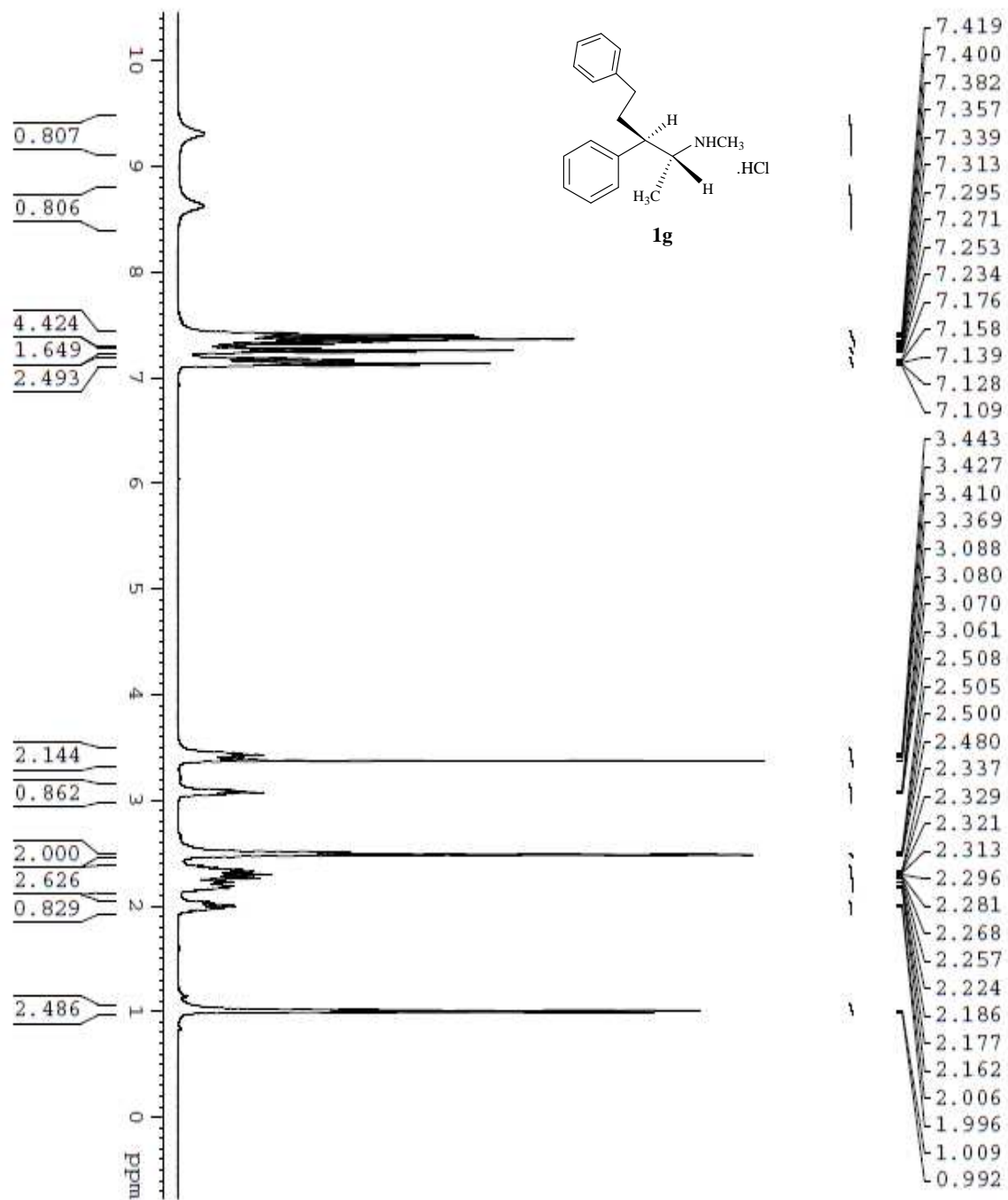
1-Benzyl-1-phenyl-2-methylaminopropane (Compound 1f) ^1H NMR (DMSO- d_6 , 400 MHz)

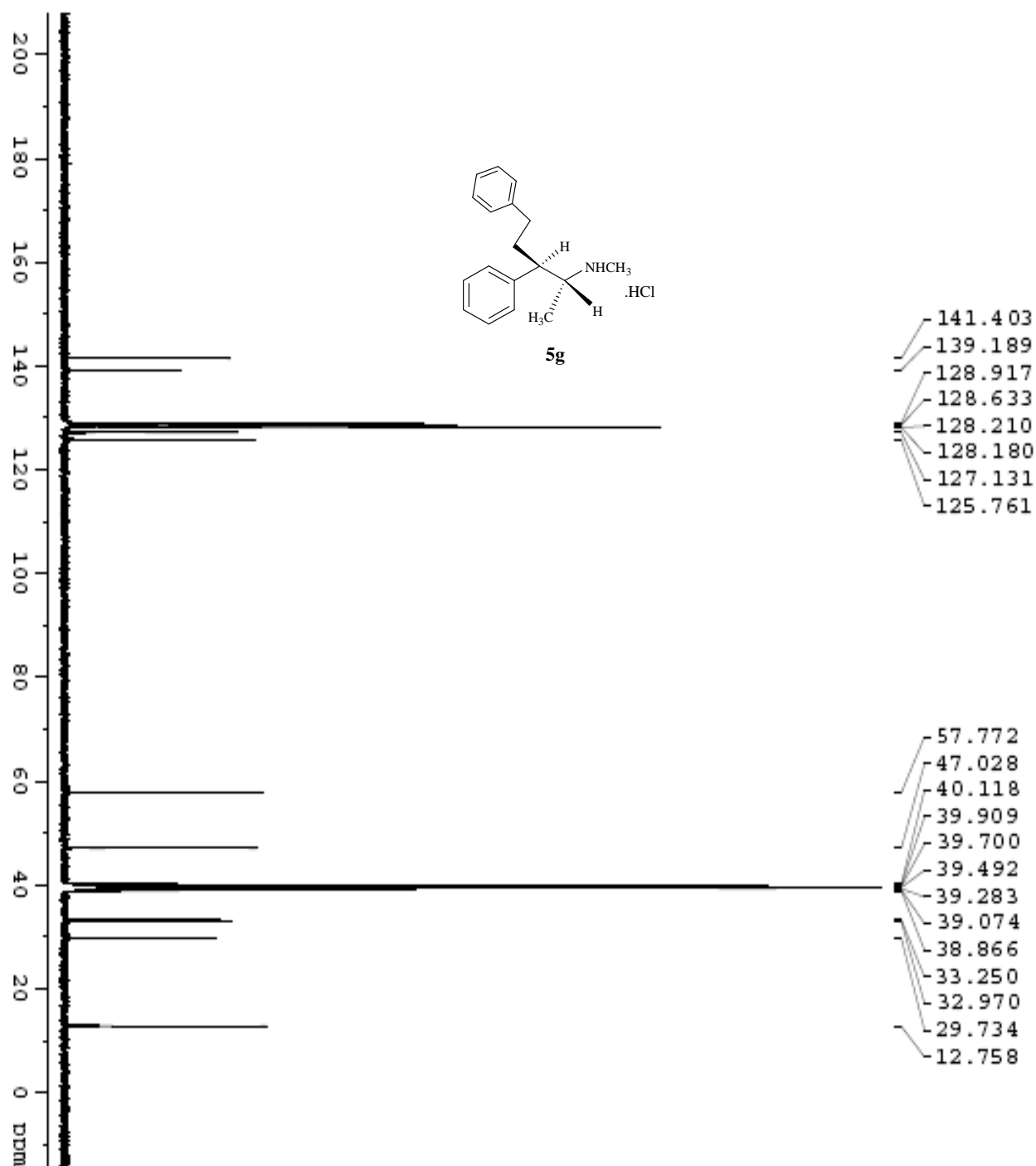
^{13}C NMR (DMSO- d_6 , 100 MHz)

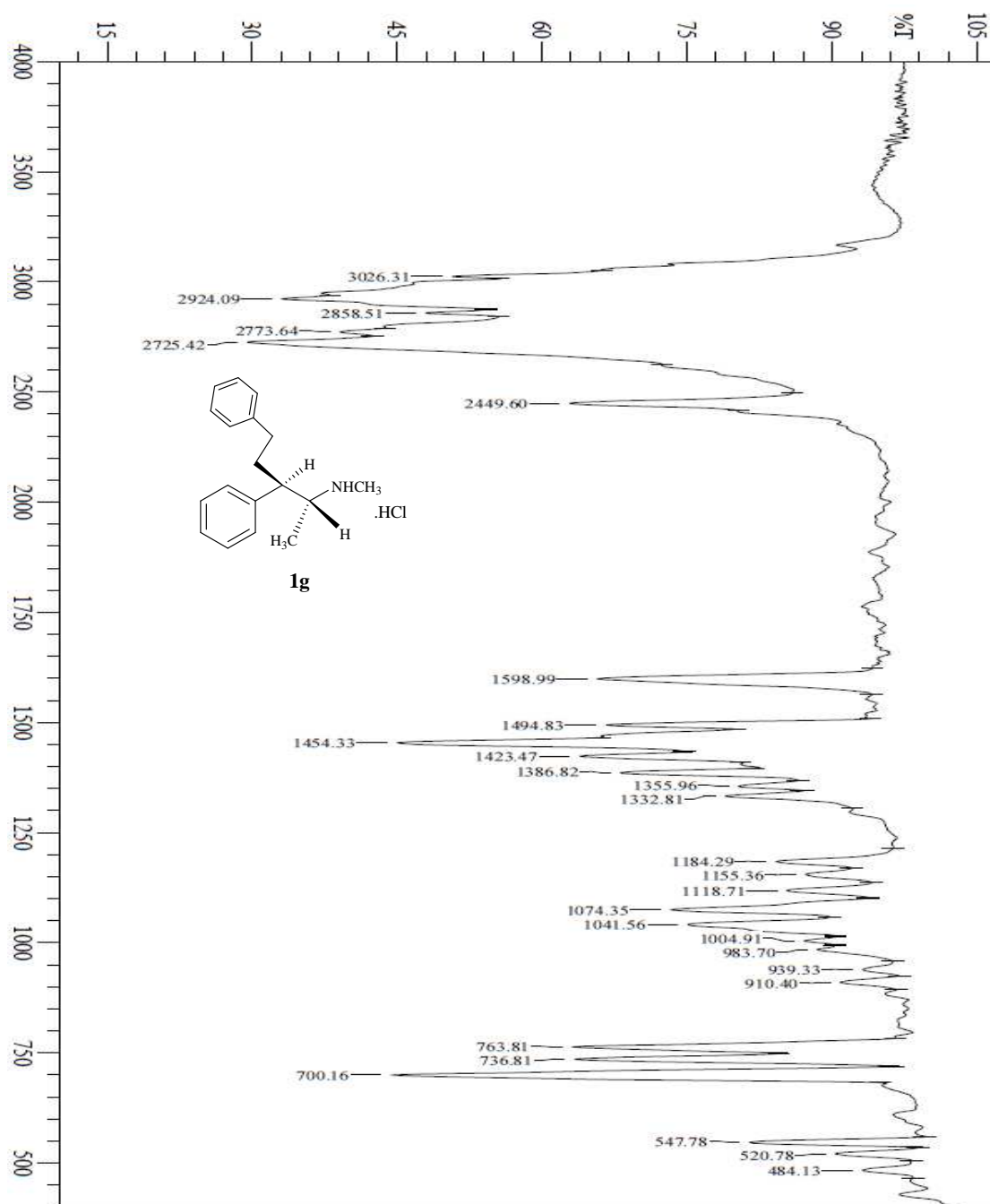
IR spectrum (KBr cm^{-1})

Mass spectrum (ESI, (+)-mode)



1-(2-phenylethyl)-1-phenyl-2-methylaminopropane (Compound 1g). ^1H NMR (DMSO- d_6 , 400 MHz)

^{13}C NMR (DMSO- d_6 , 100 MHz)

IR spectrum (KBr cm^{-1})

Mass spectrum (ESI, (+)-mode)

