

Supplementary information

Coordination features of bis(*N*-Heterocyclic carbenes) and bis(oxazolines) with 1,3-alkylidene-2,4,6-trimethylbenzene spacers. Synthesis of the ligands and Silver and Palladium complexes.

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Fig S1. Mass spectrum of **17**

Fig S2. Mass spectrum of **17**, pattern of [PdClBiscarbene]⁺

Fig S3. ¹³C{¹H} spectrum of **17** in CDCl₃

Fig S4. Expansion of ¹³C{¹H} spectrum of **17** in CDCl₃

Fig S5. Mass spectrum of **18**

Fig S6. Mass spectrum of **19a**

Fig S7. Mass spectrum of **19a**. Detail of [M-Cl]⁺

Fig S8. Mass spectrum of **19a**. Calculated [M-Cl]⁺

Fig S9. Proton NMR spectrum of **19a** in CDCl₃ (400 MHz)

Fig S10. ¹³C{¹H} spectrum of **19a** in CDCl₃

Fig S11. Proton NMR spectrum of **19b** in CDCl₃ (400 MHz)

Fig S12. ¹³C{¹H} spectrum of **19b** in CDCl₃

Fig S13. Mass spectrum of **20b**

Fig S14. Mass spectrum of **20b**. Detail of [M+H]²⁺

Fig S15. Mass spectrum of **20b**. Pattern of [M+H]²⁺

Fig S16. Full assignation of the Proton spectrum of **19a**

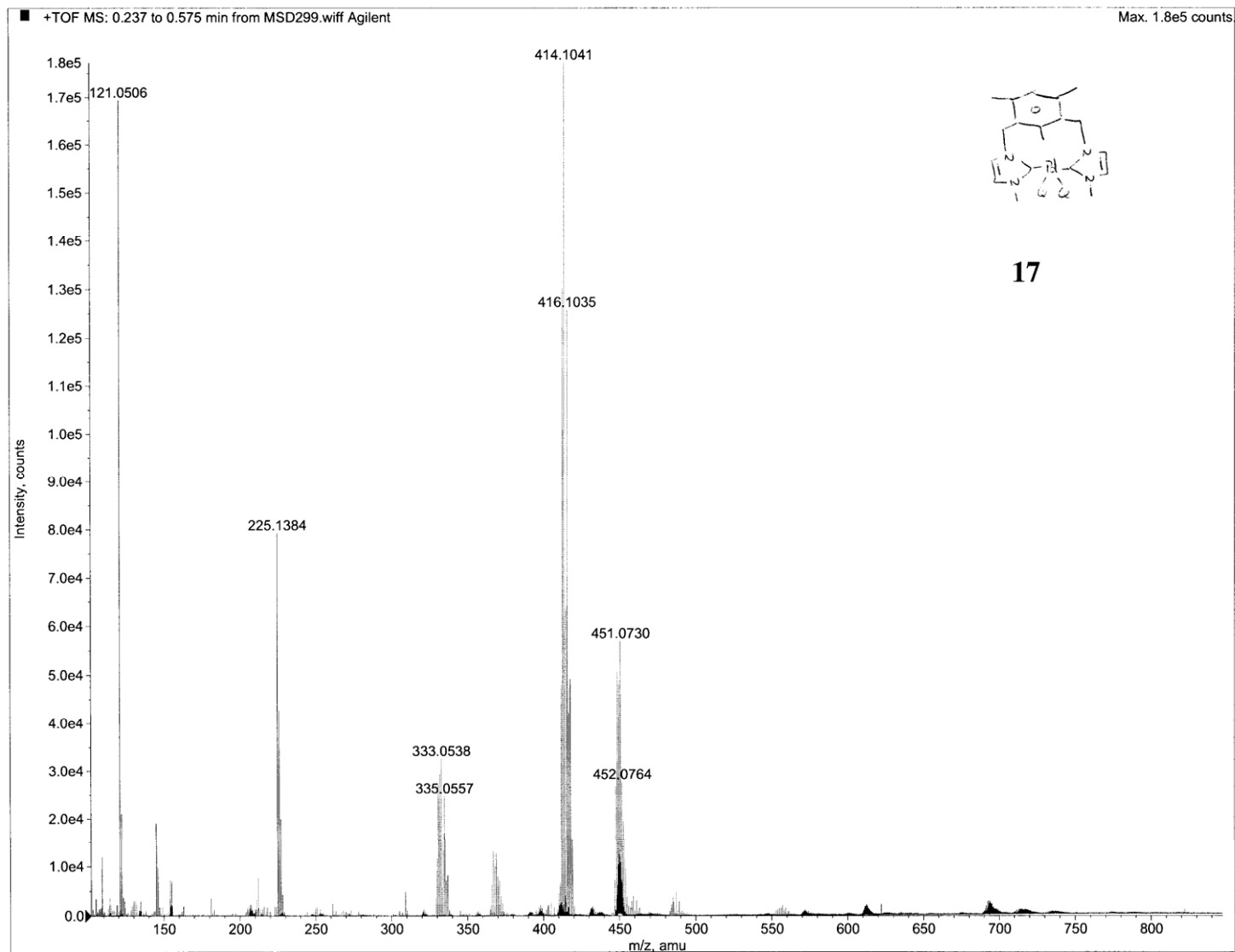


Fig S1. Mass spectrum of **17**

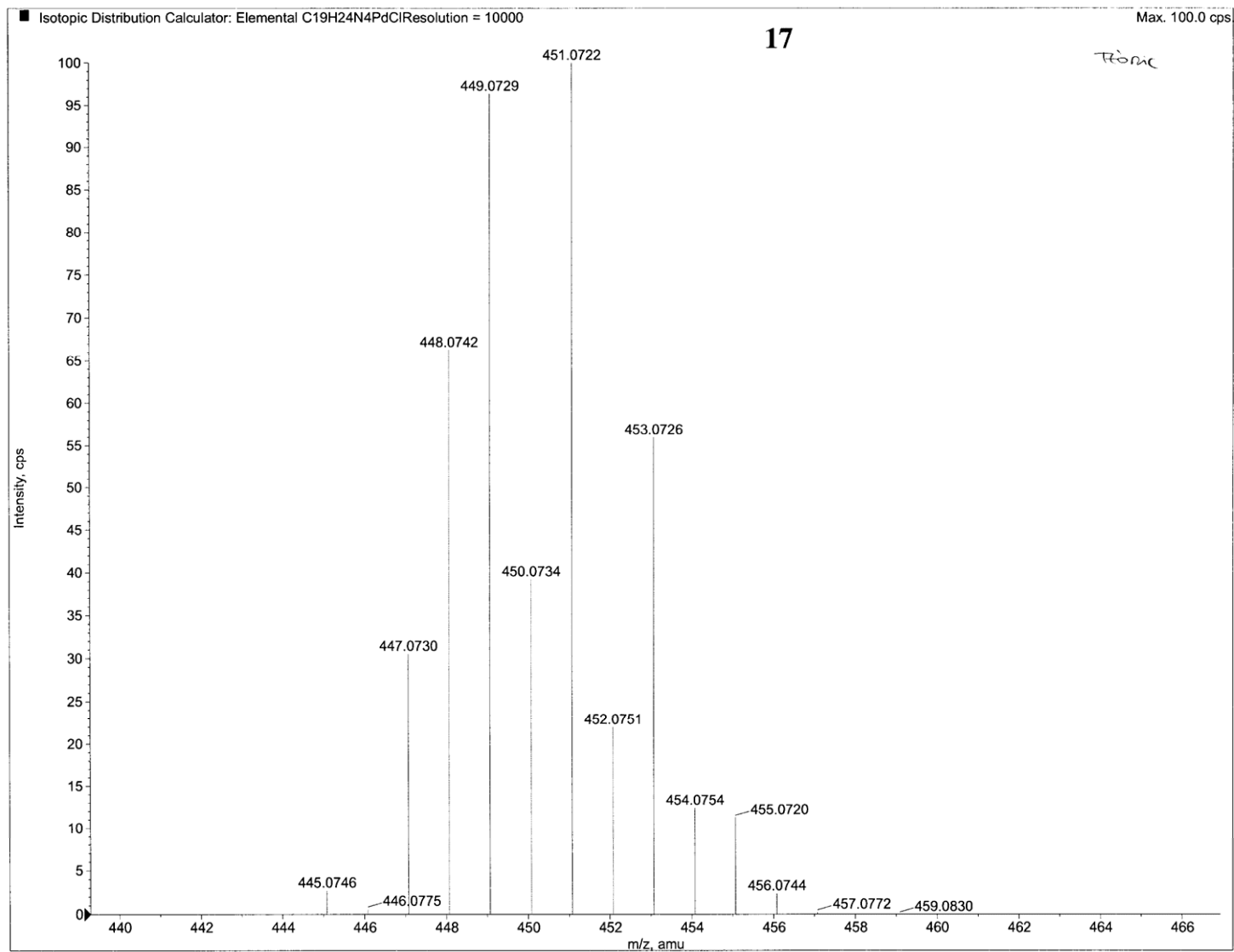


Fig S2. Mass spectrum of **17**, pattern of [PdClBiscarbene]⁺

C13 / s2pu1 / Mercury-400_qui
cdc13/Temp: 25C / N reg: M40007-100107180321
Usuari: q12 / Mostra: c1m196
Nom: CRISTINA LOPEZ MOSQUERA
Data:11/01/07 / Sist automatic

Pulse Sequence: s2pu1

17

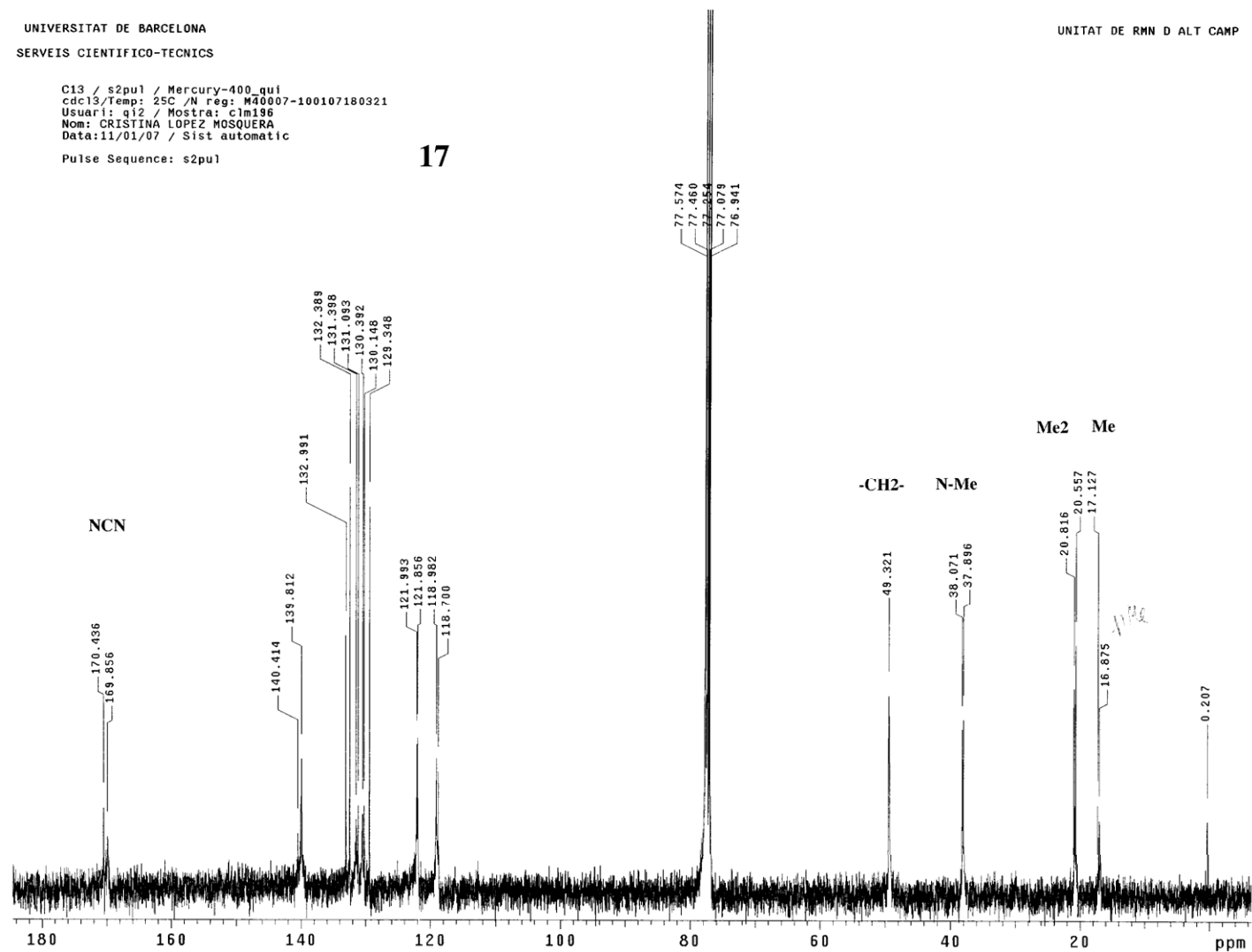


Fig S3. $^{13}\text{C}\{^1\text{H}\}$ spectrum of 17 in CDCl_3

C13 / s2pu1 / Mercury-400_qui
cdcl3/Temp: 25C /N reg: M40007-100107180321
Usuari: q12 / Mostra: c1m196
Nom: CRISTINA LOPEZ MOSQUERA
Data:11/01/07 / Sist automatic

Pulse Sequence: s2pu1

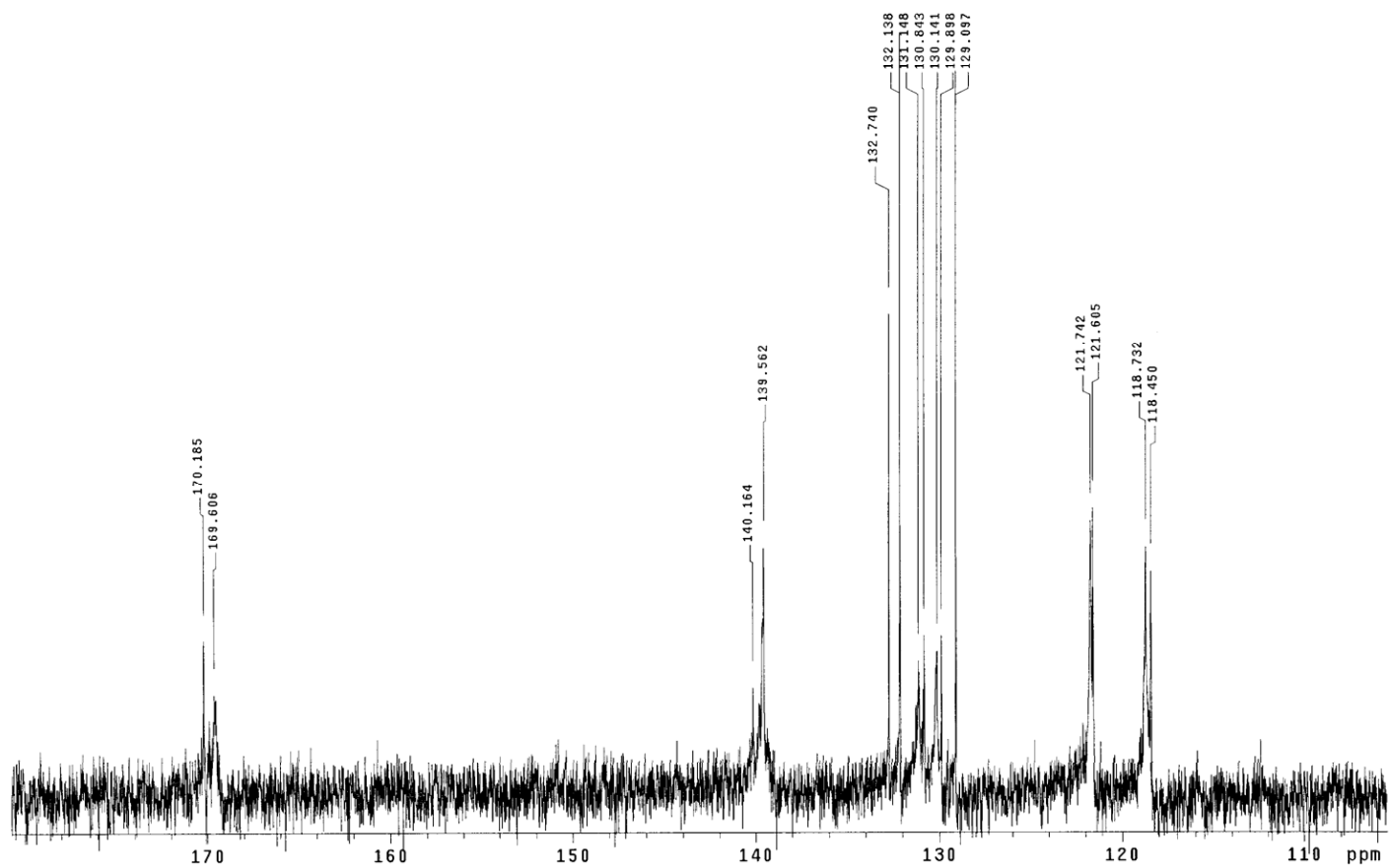


Fig S4. Expansion of $^{13}\text{C}\{^1\text{H}\}$ spectrum of **17** in CDCl_3

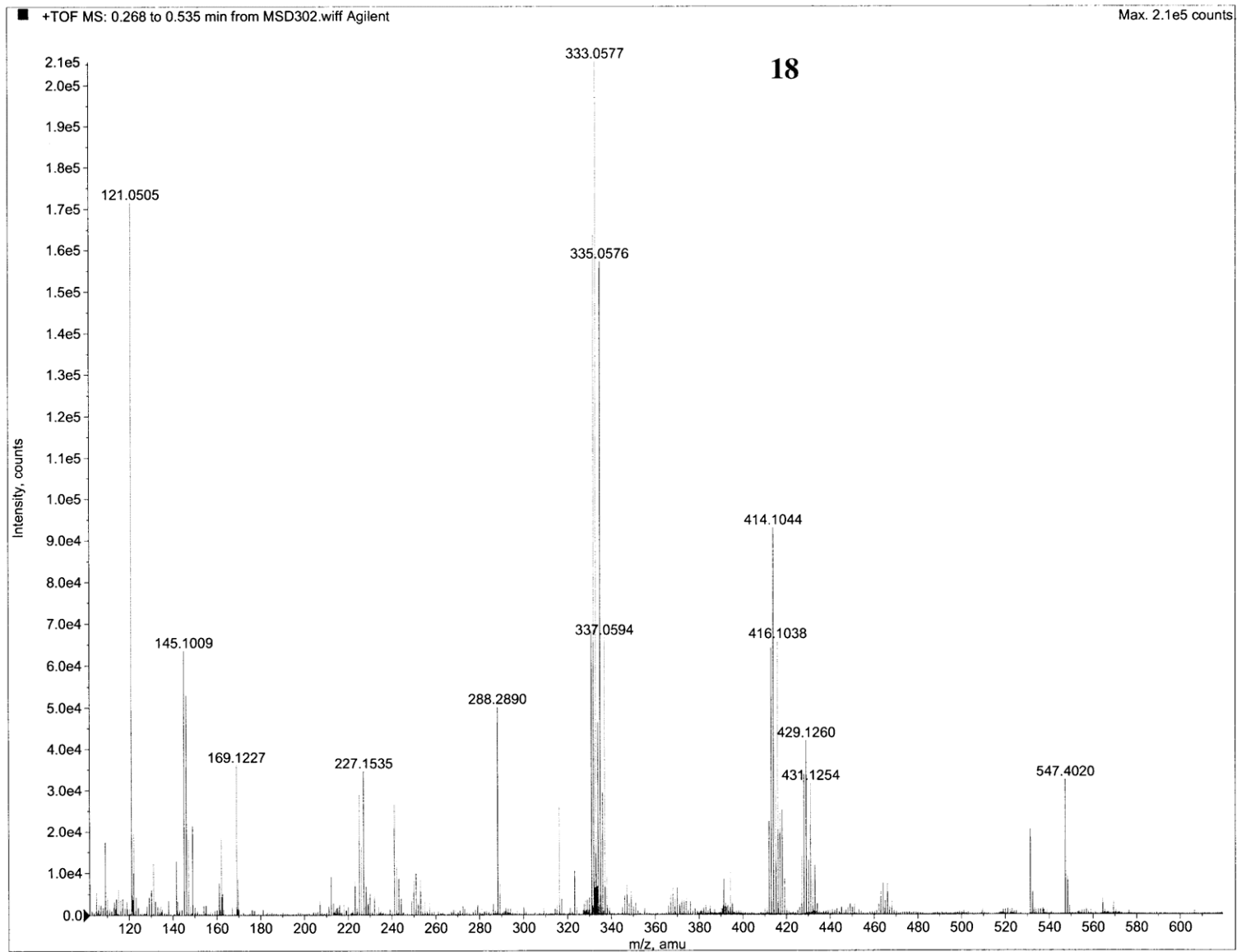


Fig S5. Mass spectrum of **18**

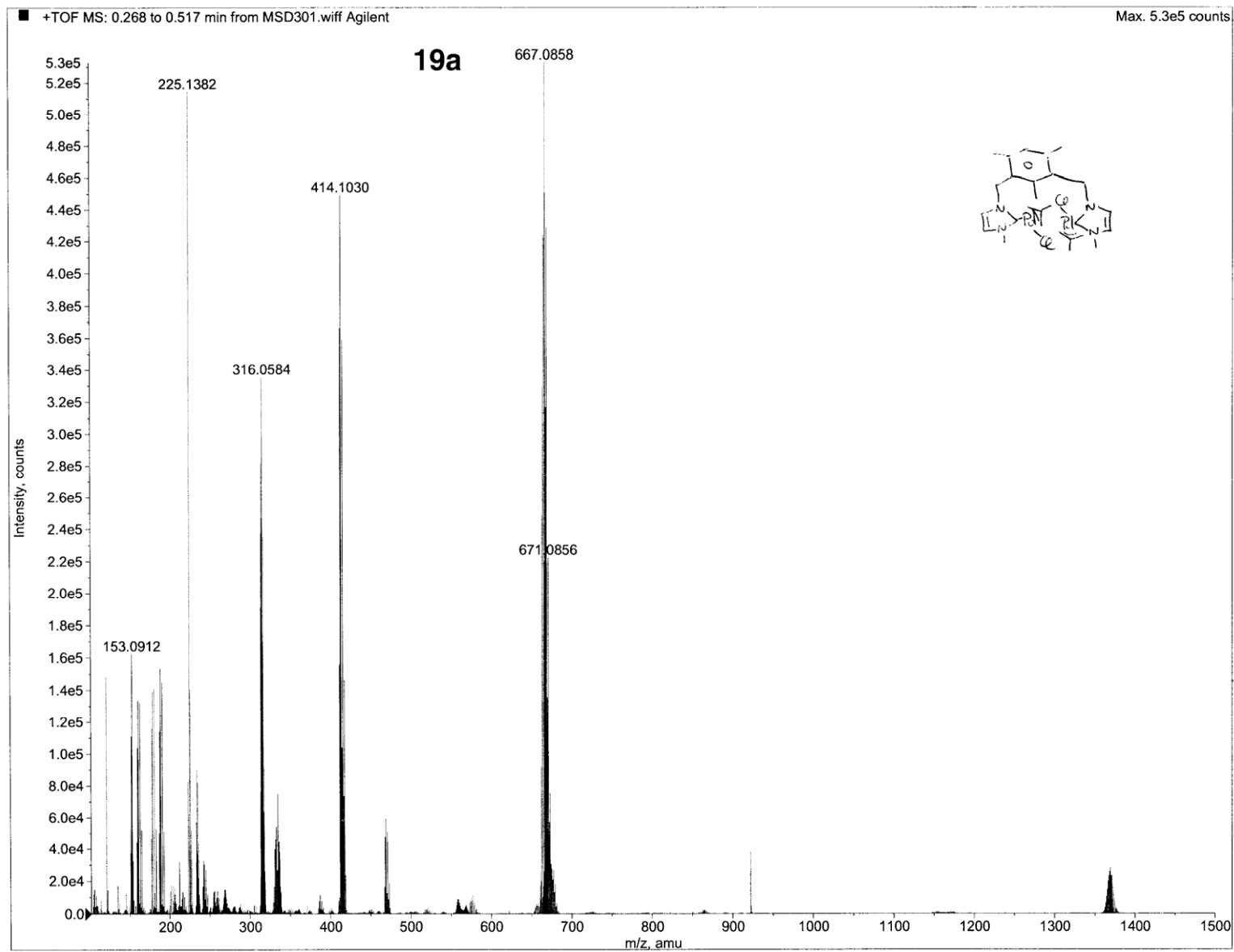


Fig S6. Mass spectrum of **19a**

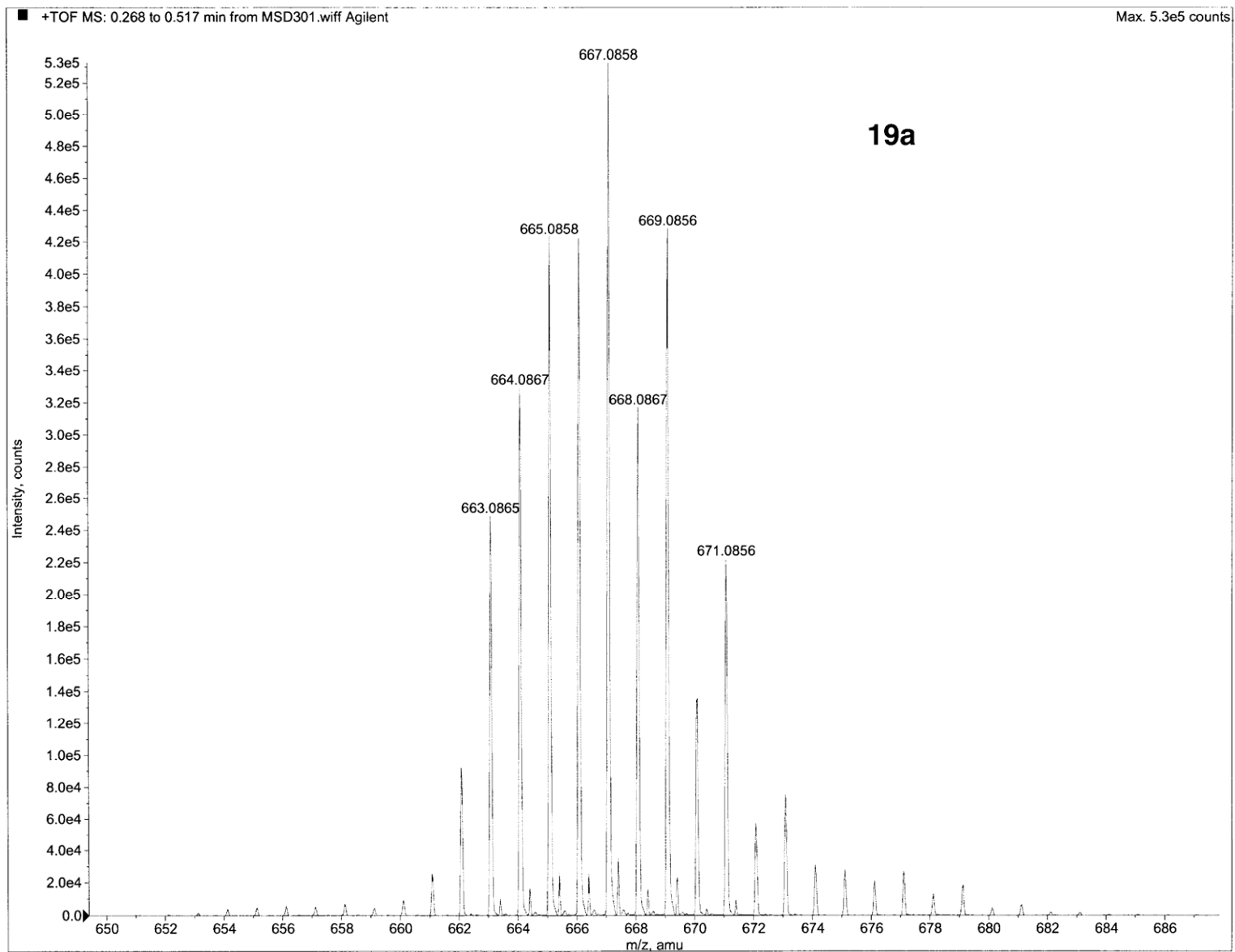


Fig S7. Mass spectrum of **19a**. Detail of $[M-Cl]^+$

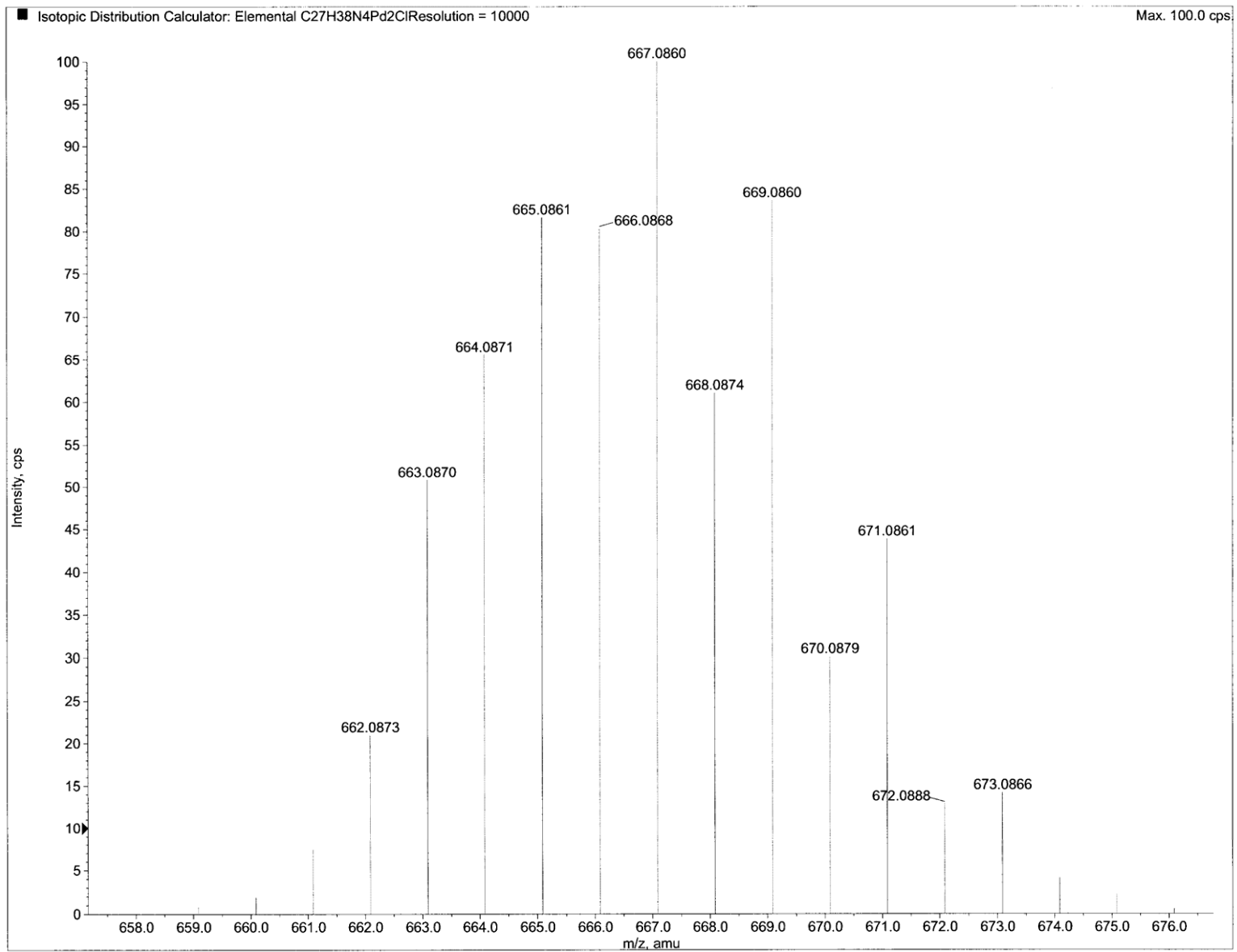


Fig S8. Mass spectrum of **19a**. Calculated $[M-Cl]^+$

C₂₇H₃₈N₄Pd₂Cl

H1 / s2pu1 / Mercury-400-qui
cdc13/Temp: 25C /N reg: M40006-041206160940
Usuari: g12 / Mostra: c1m206
Nom: ROSARIO AZNAR GARCIA
Data: 04/12/06 / Sist automatic
Pulse Sequence: s2pu1

19a

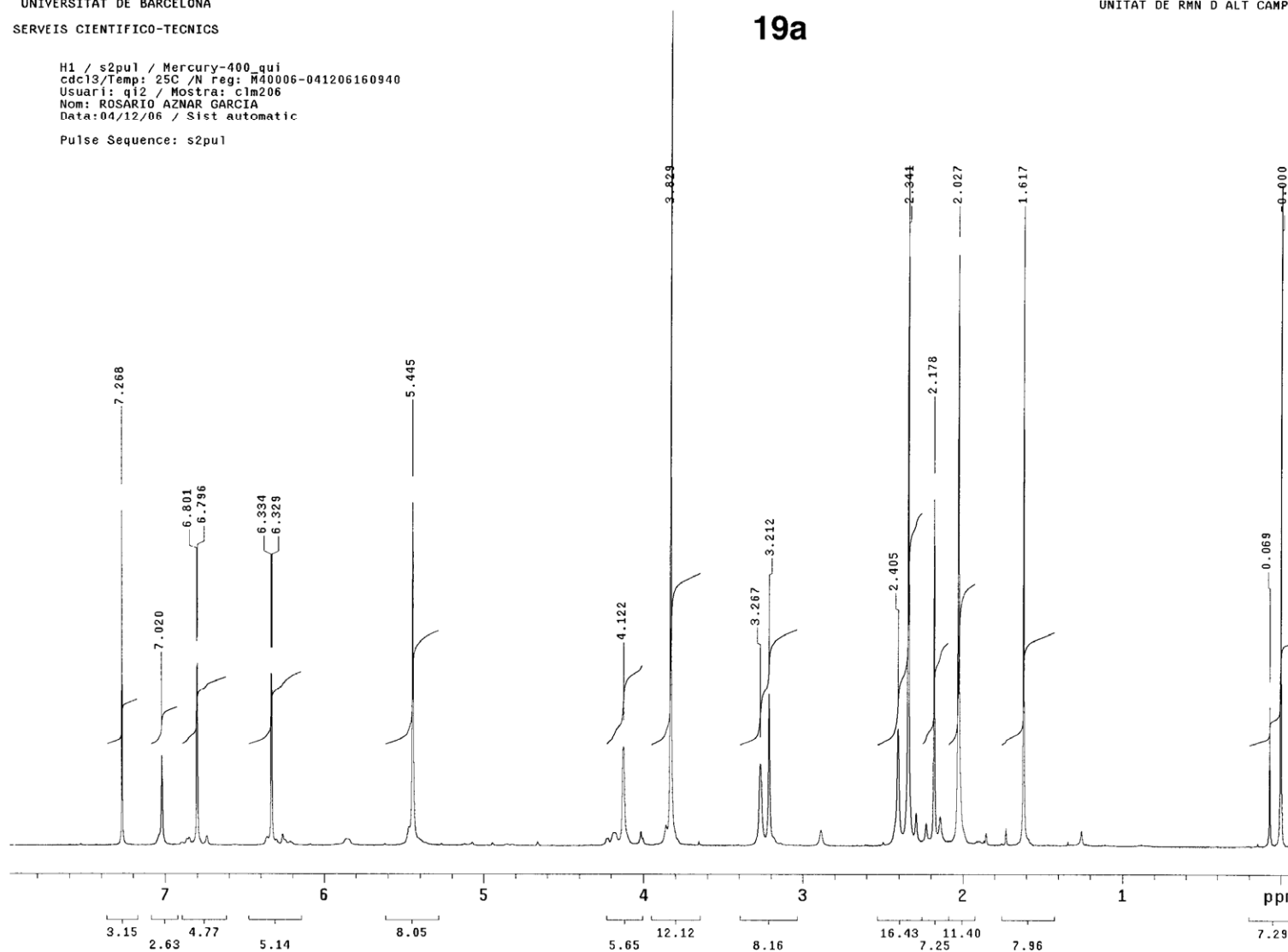


Fig S9. Proton NMR spectrum of **19a** in CDCl_3 (400 MHz)

C13 / s2pu1 / Mercury-400_gui
cdcl3/Temp: 25C /N reg: M40006-051206181244
Usuari: q12 / Mostra: c1m206concen
Nom: FERNANDO FERNANDEZ ROMERO
Data:06/12/06 / Sist automatic
Pulse Sequence: s2pu1

19a

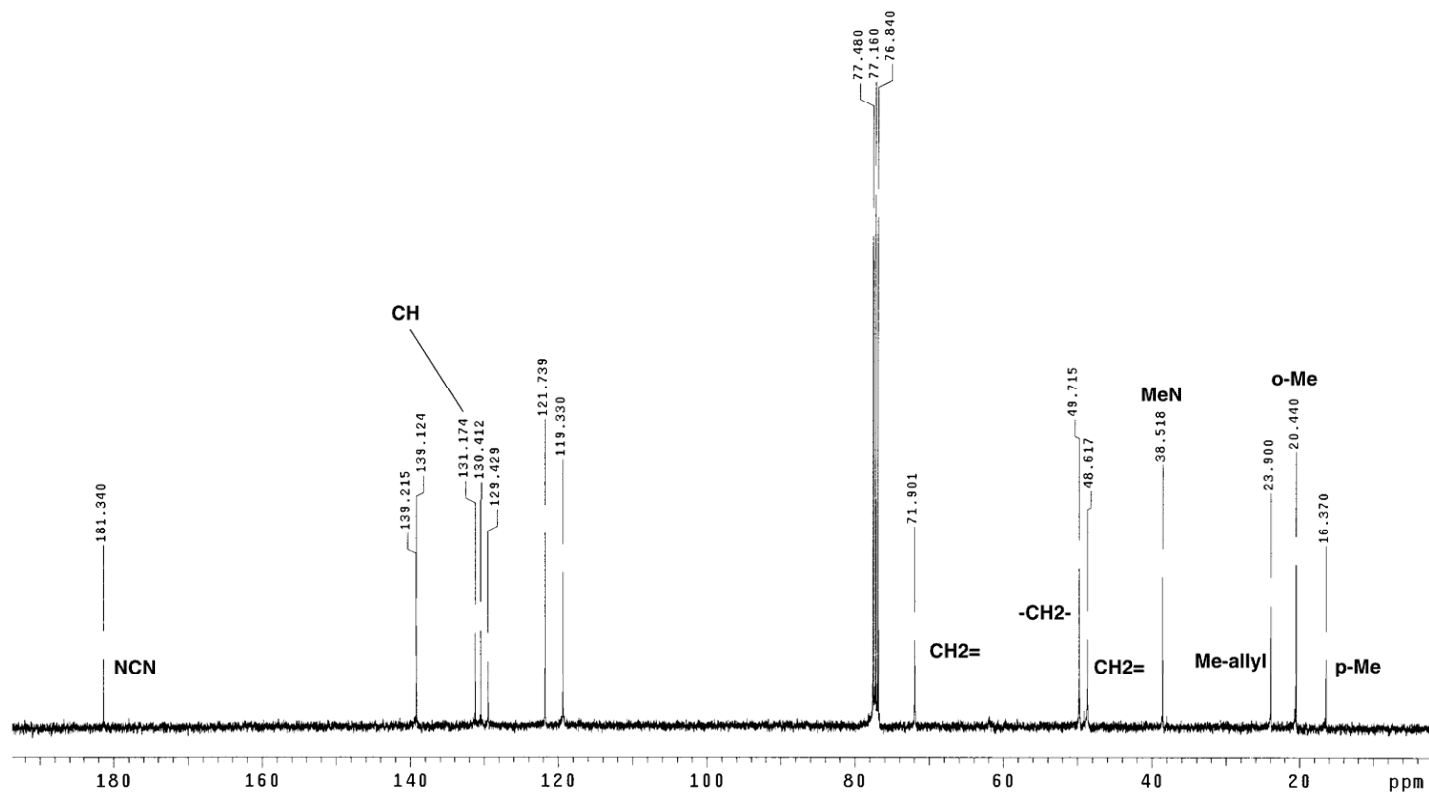


Fig S10. $^{13}\text{C}\{^1\text{H}\}$ spectrum of **19a** in CDCl_3

H1 / s2pu1 / Mercury-400 qui
cdc13/Temp: 25C /N reg: M40007-160207162724
Usuari: q12 / Mostra: c1m564
Nom: CRISTINA LOPEZ MOSQUERA
Data:16/02/07 / Sist automatic
Pulse Sequence: s2pu1

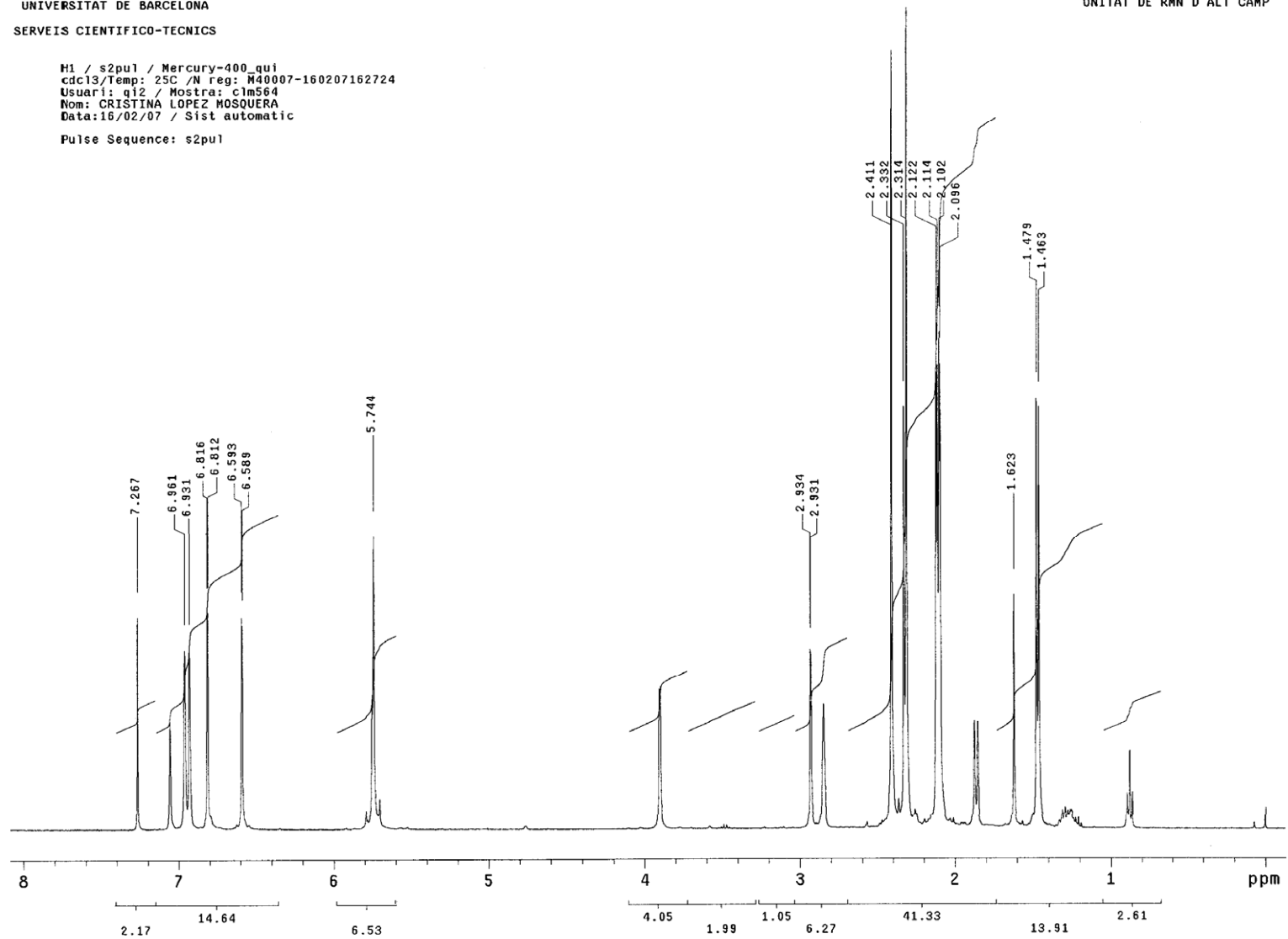


Fig S11. Proton NMR spectrum of **19b** in CDCl₃ (400 MHz)

C13 / s2pu1 / Mercury-400_gui
cdcl3/Temp: 25C /N req: M40007-160207162724
Usuari: q12 / Mostra: c1m564
Nom: CRISTINA LOPEZ MOSQUERA
Data:16/02/07 / Sist automatic
Pulse Sequence: s2pu1

19b

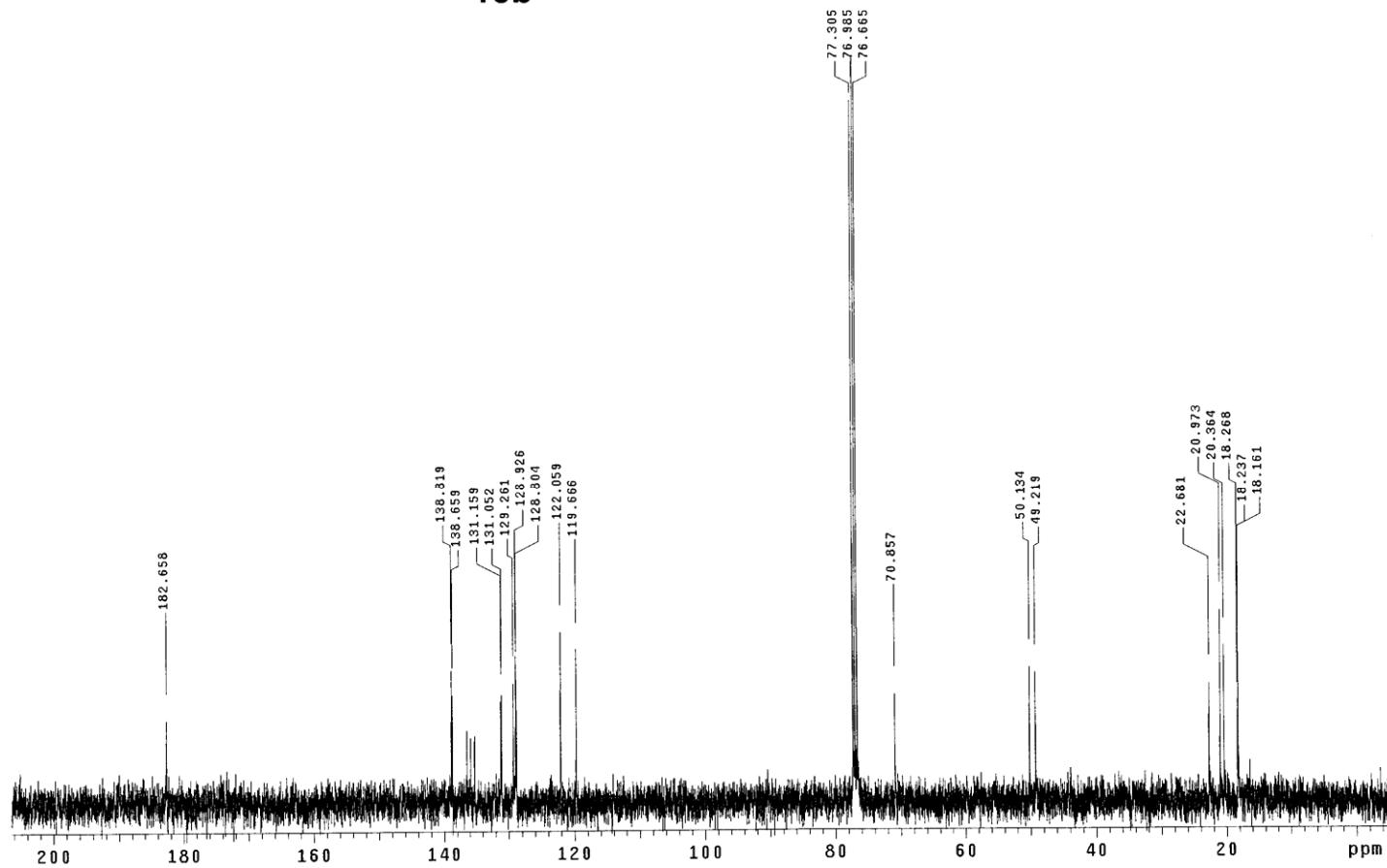


Fig S12. $^{13}\text{C}\{^1\text{H}\}$ spectrum of **19b** in CDCl_3

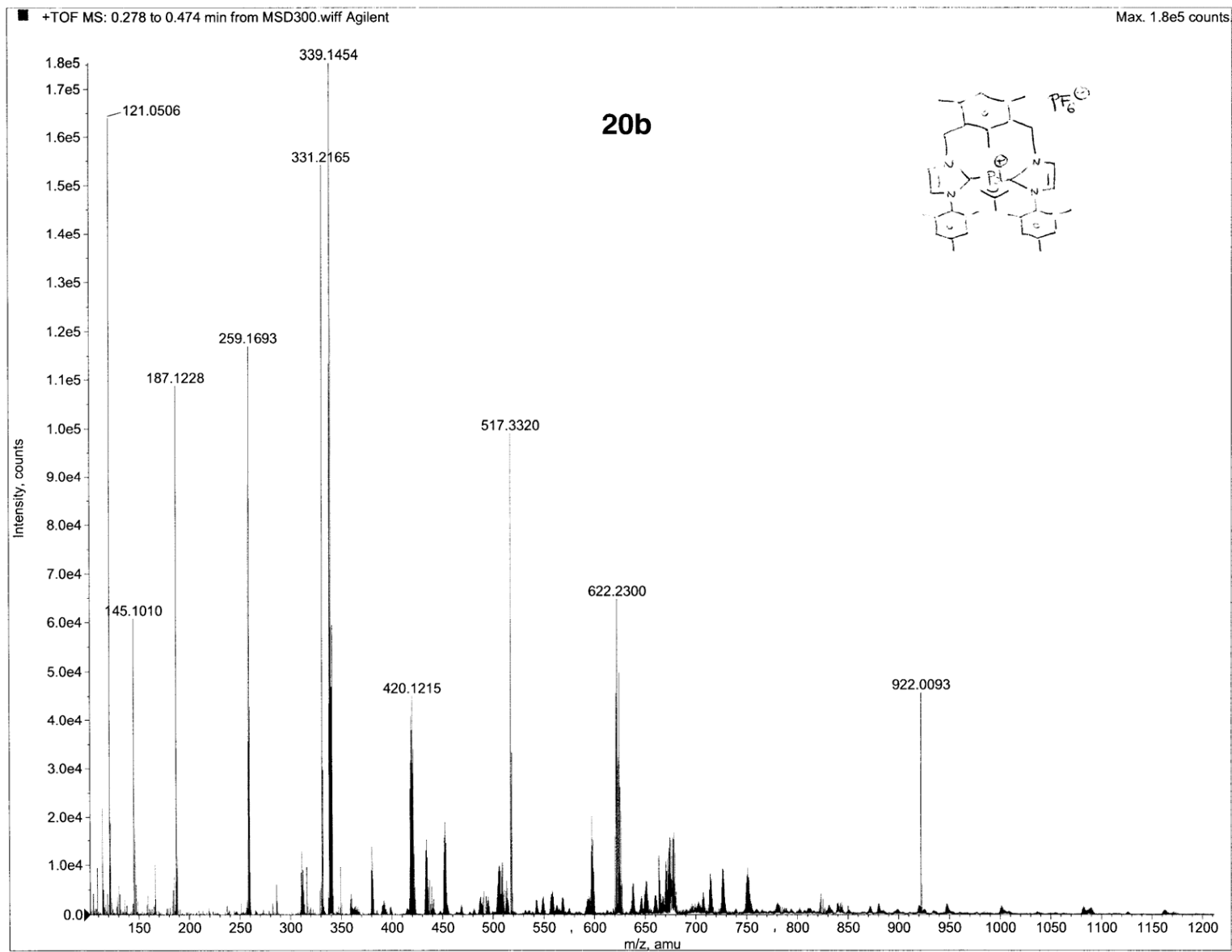


Fig S13. Mass spectrum of **20b**

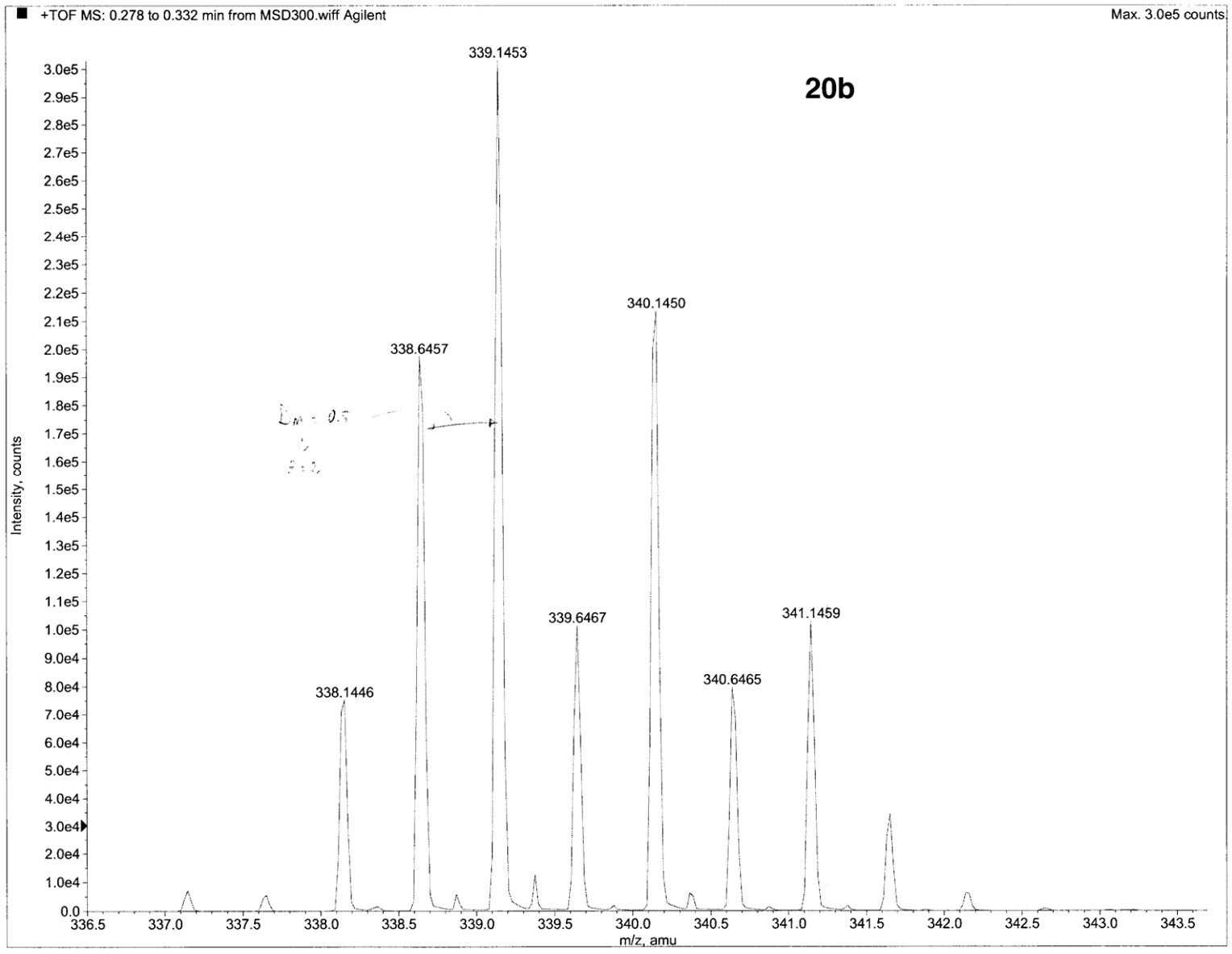


Fig S14. Mass spectrum of **20b**. Detail of $[M+H]^{2+}$

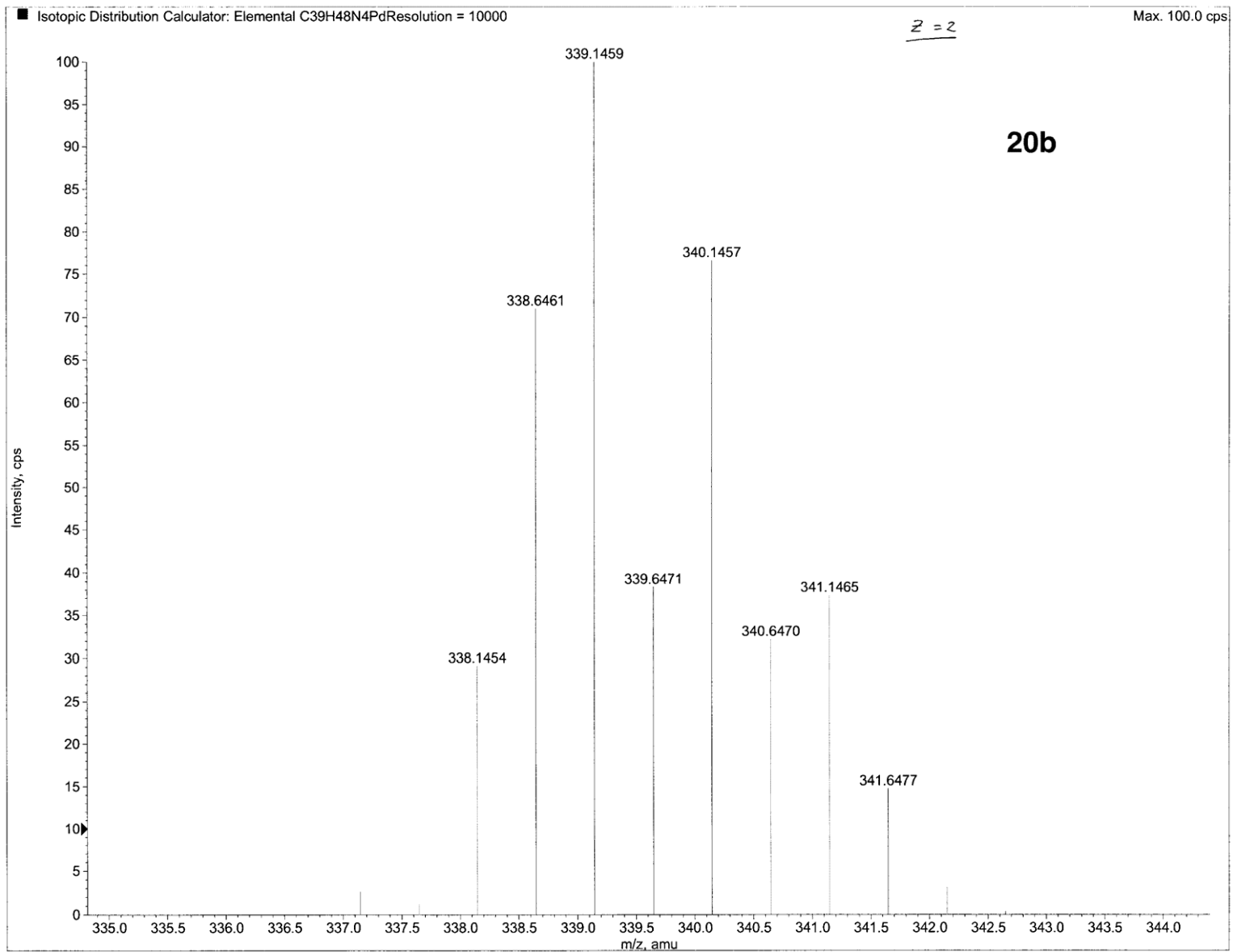


Fig S15. Mass spectrum of **20b**. Pattern of $[M+H]^{2+}$

C₃₉H₄₈N₄Pd

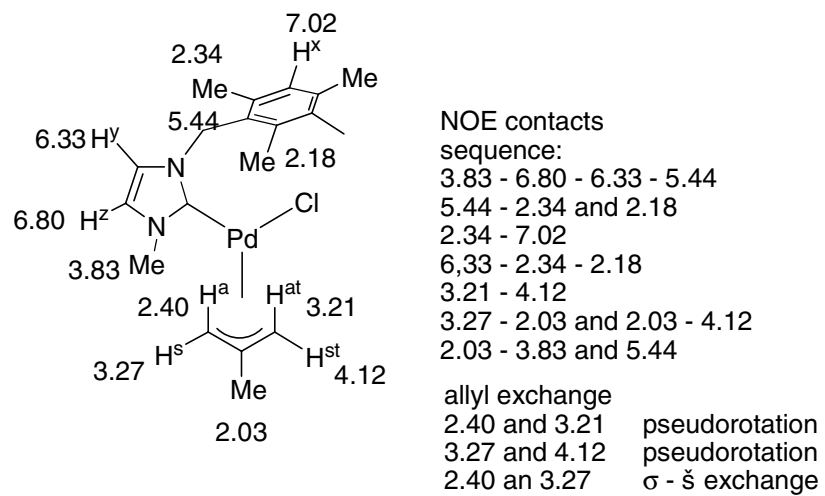


Fig S16. Full assignment of the Proton spectrum of **19a**