

Supporting Information

Relevant Analysis to the Productivity in Selective Synthesis of

Dibenzo[*g,p*]chrysene Derivatives

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Tetsuo Iwasawa*

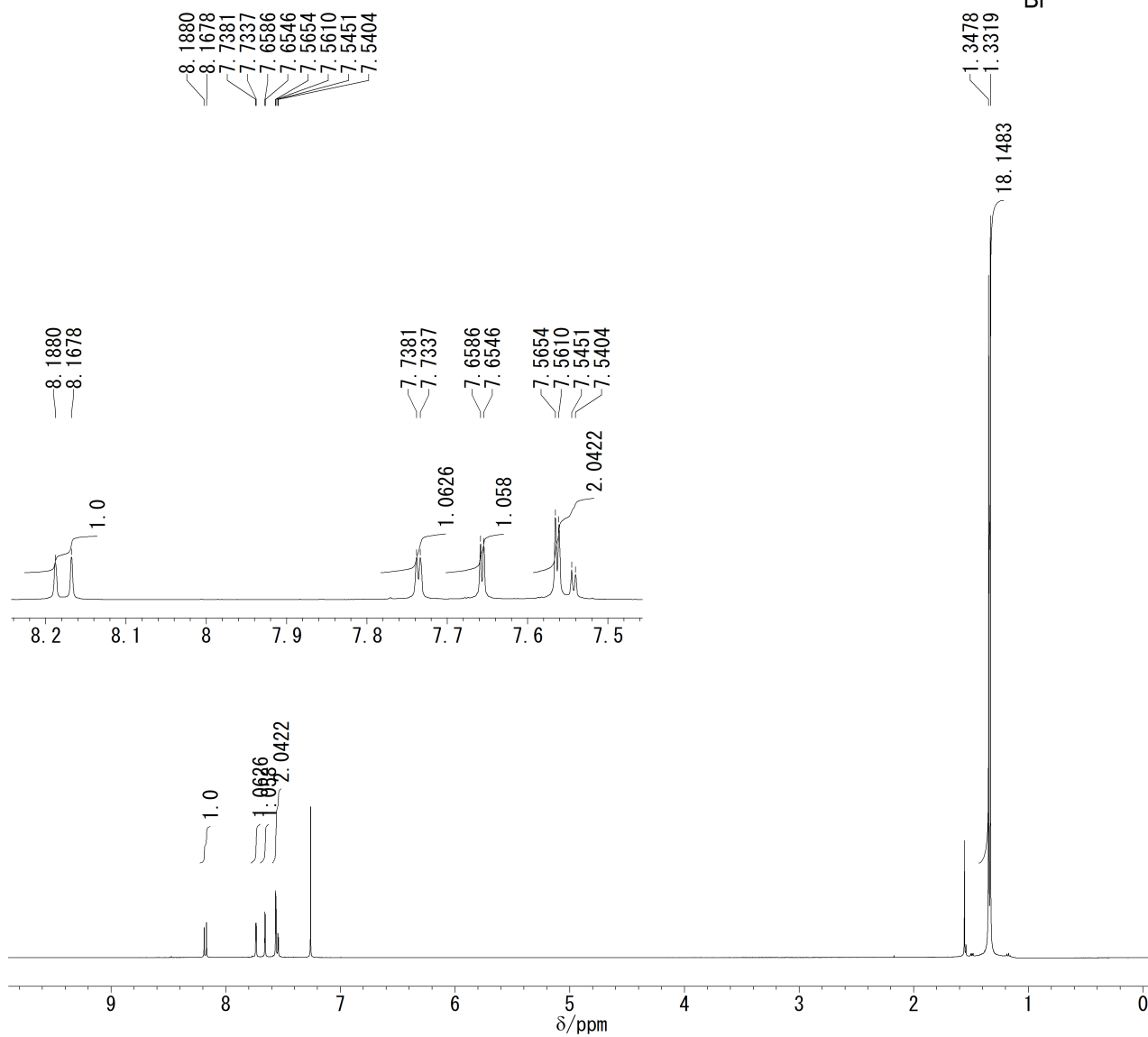
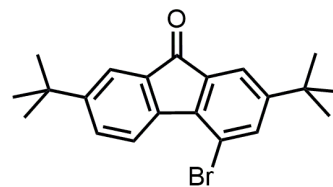
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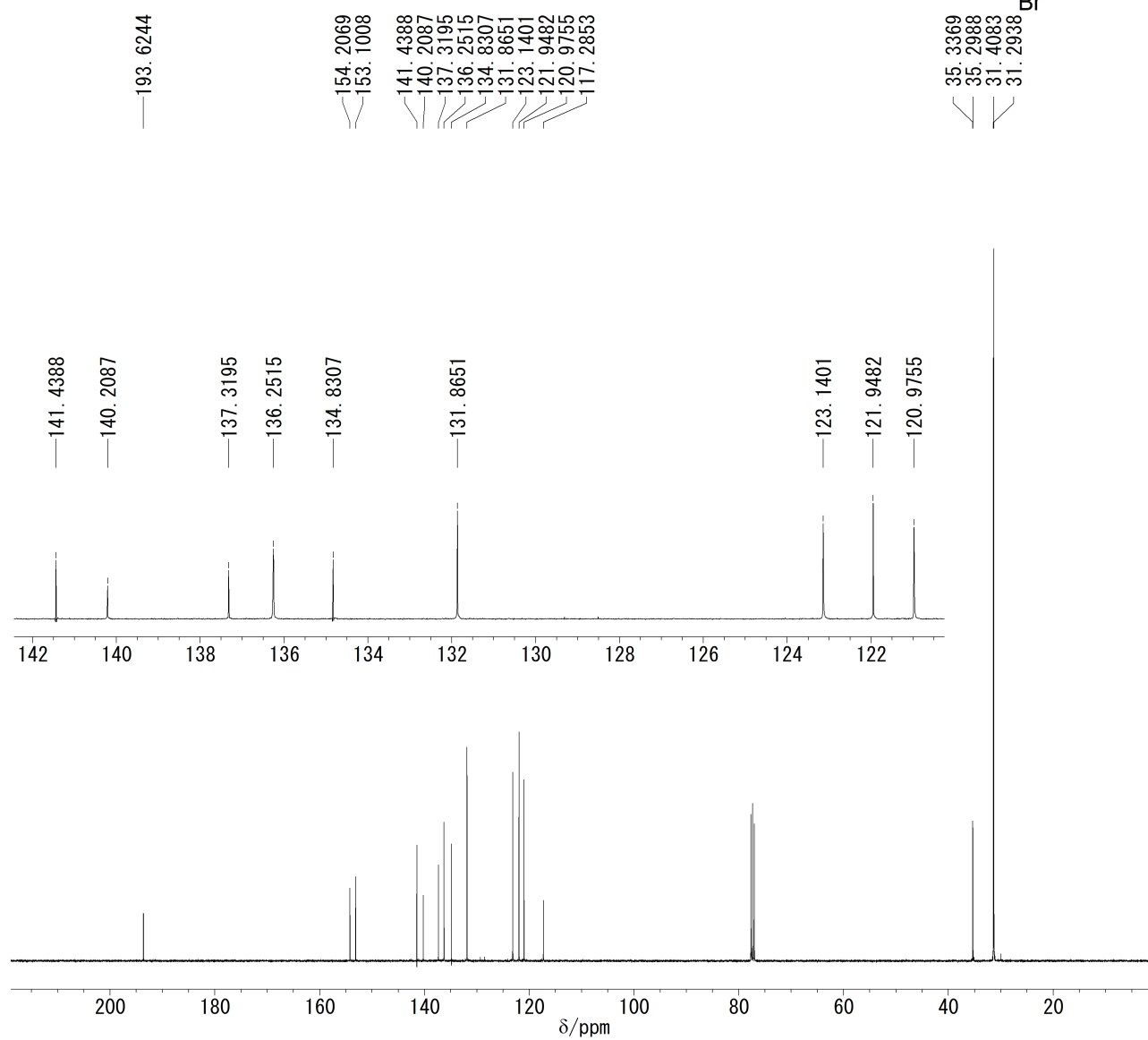
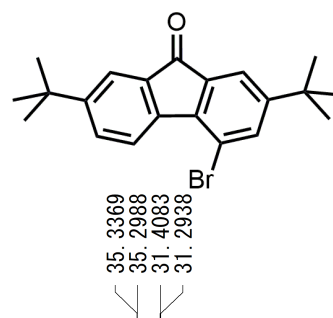
Contents

1. ^1H NMR and ^{13}C NMR spectra for all new compounds of **1**, **2**, **3**, *iso-3*, **4**, *iso-4*, **6**, *iso-6*, **8**, *iso-8*, **9**, *iso-9*, **10**, and *iso-10*.
2. ^1H NMR spectrum of mixtures of **5**/*iso-5* with molar ratios of 46:54 in Scheme 3 (a).
3. ^1H NMR spectrum of mixtures of **5**/*iso-5* with molar ratios of 20:80 in Scheme 4 (a).
4. ^1H NMR spectrum of mixtures of **5**/*iso-5* with molar ratios of 75:25 in Scheme 4 (b).

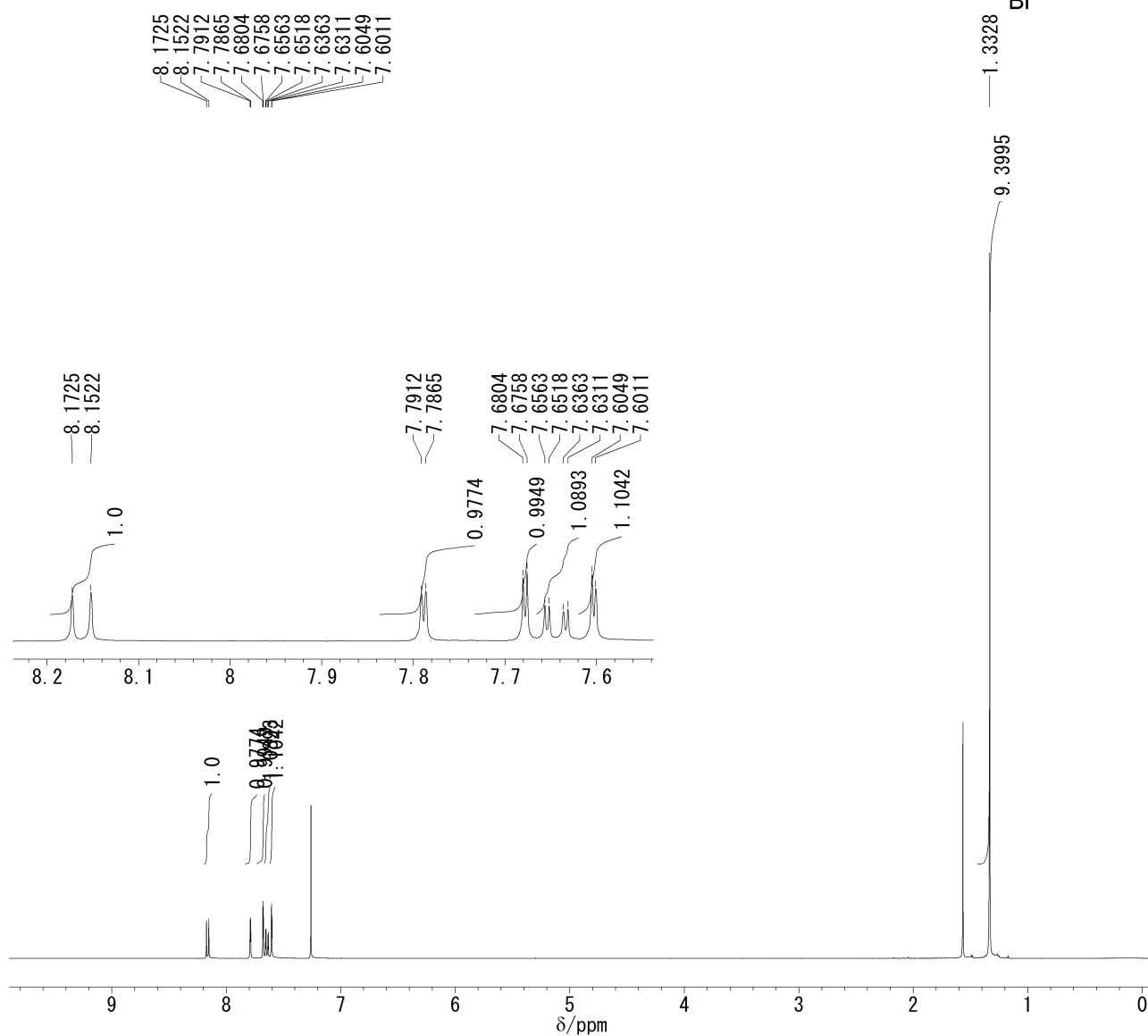
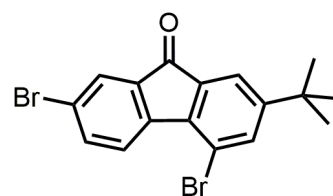
Compound **1** (^1H NMR spectrum in CDCl_3).



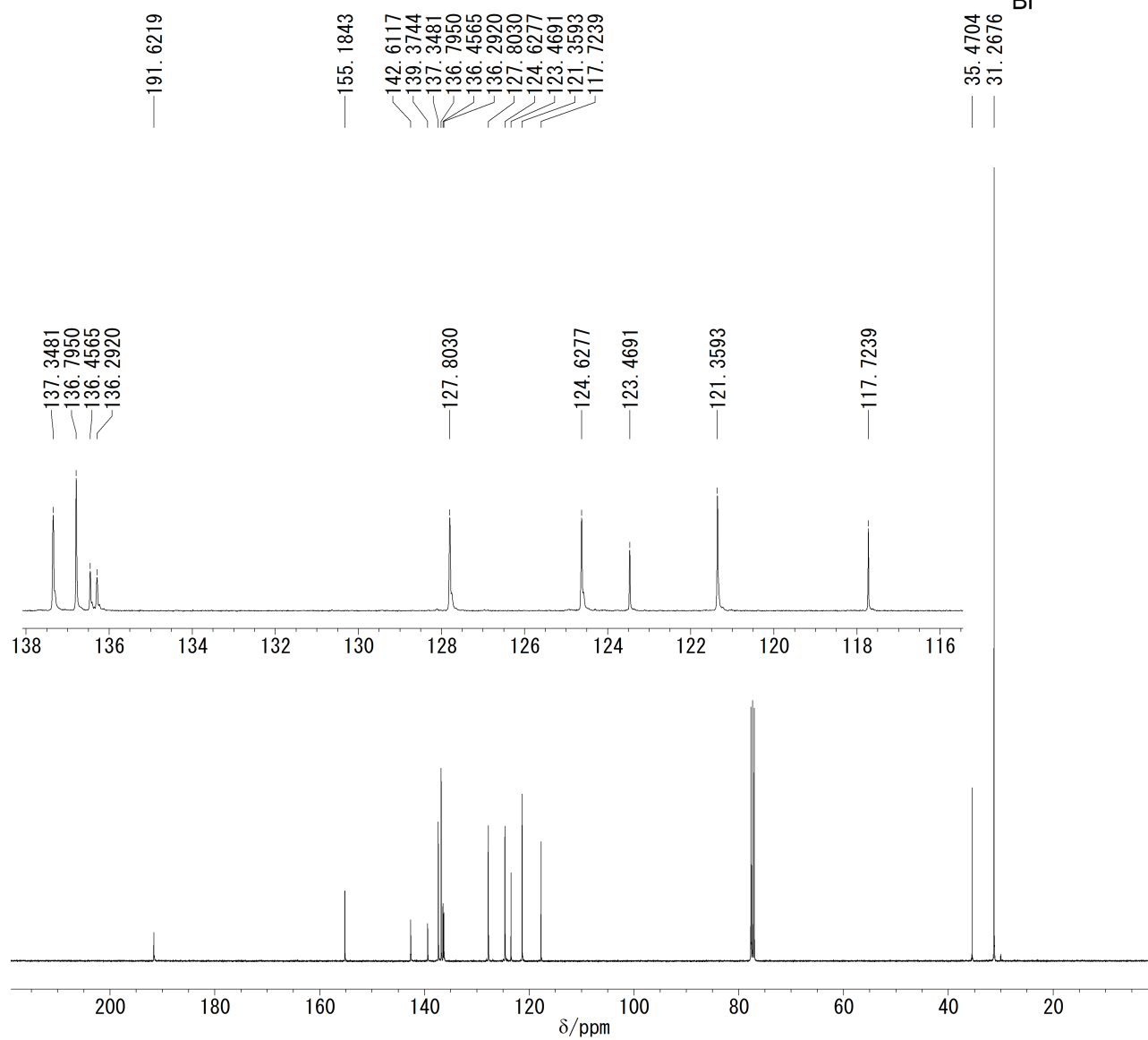
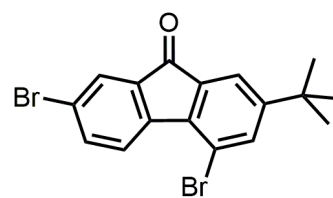
Compound **1** (^{13}C NMR spectrum in CDCl_3).



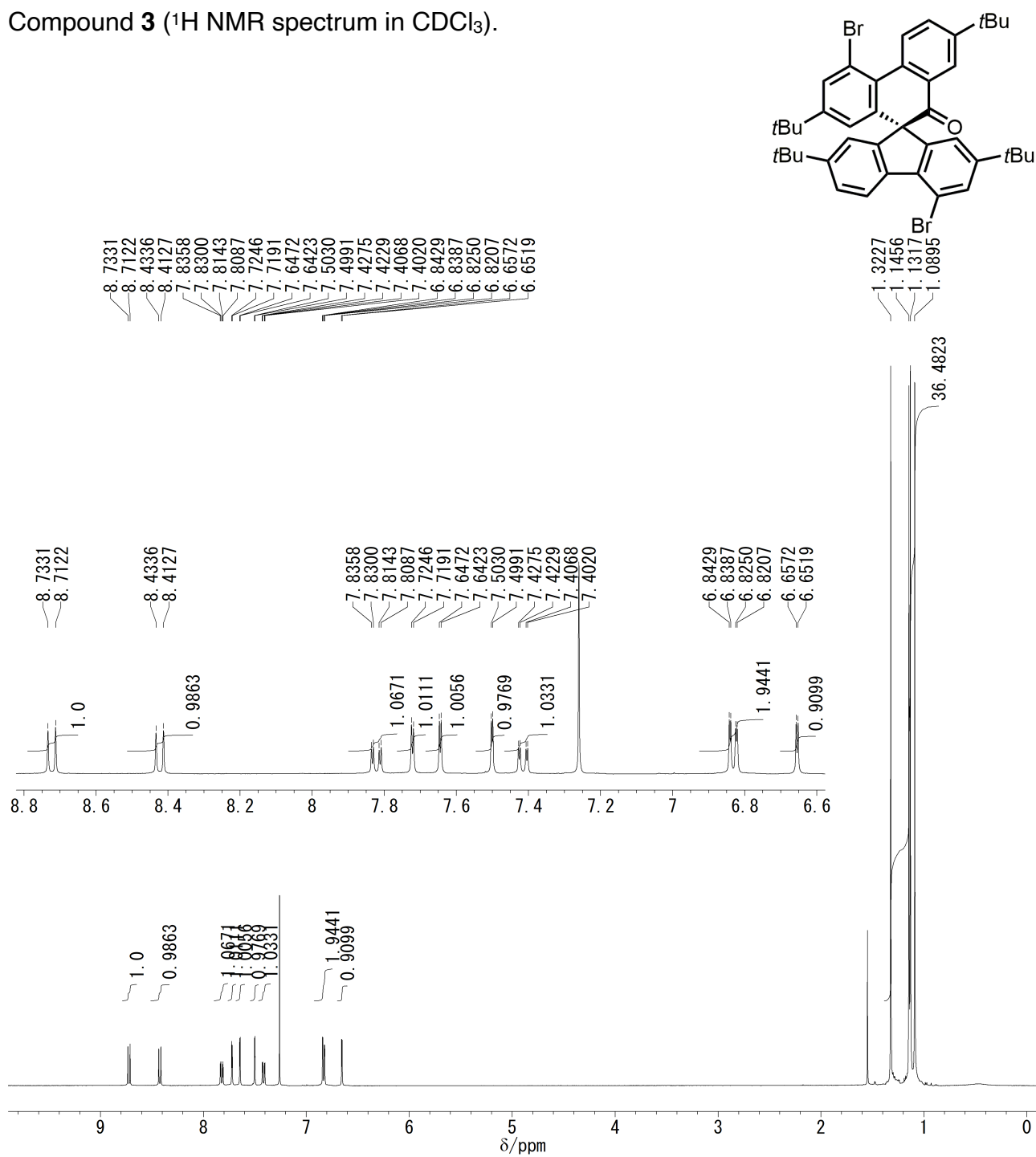
Compound **2** (^1H NMR spectrum in CDCl_3).



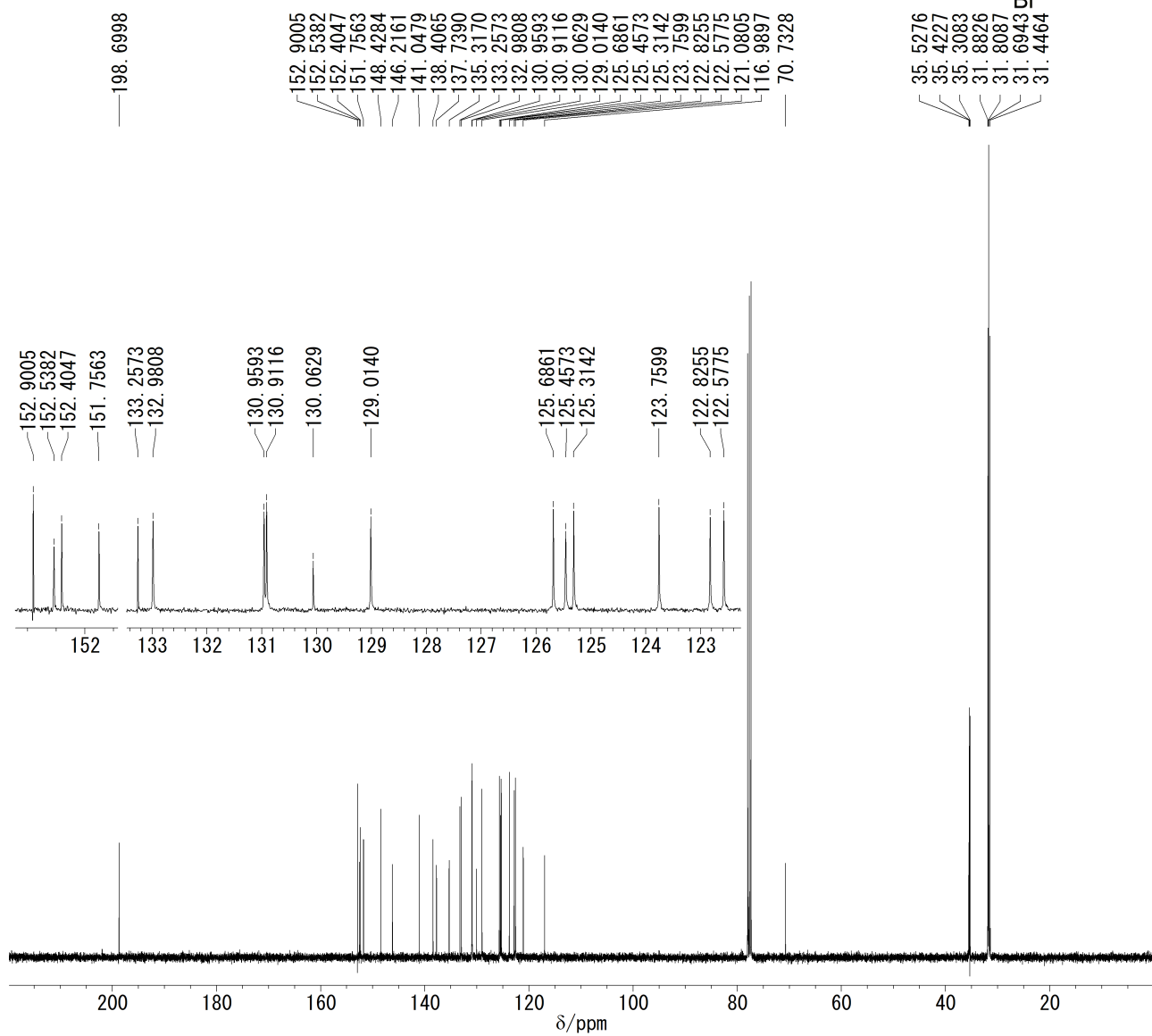
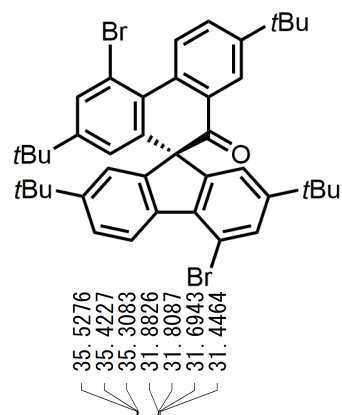
Compound **2** (^{13}C NMR spectrum in CDCl_3).



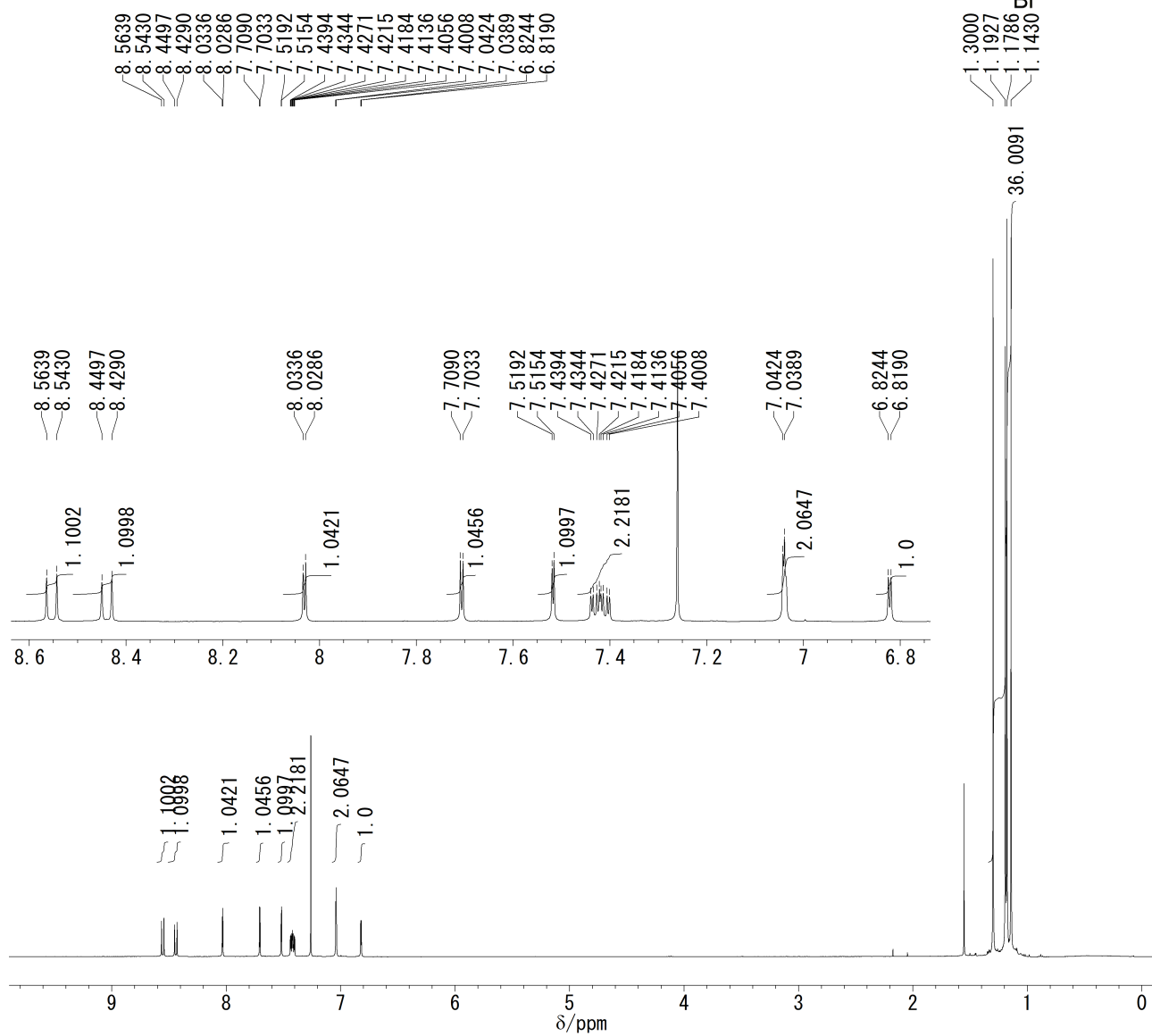
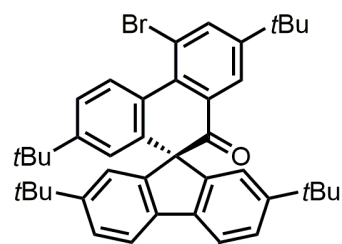
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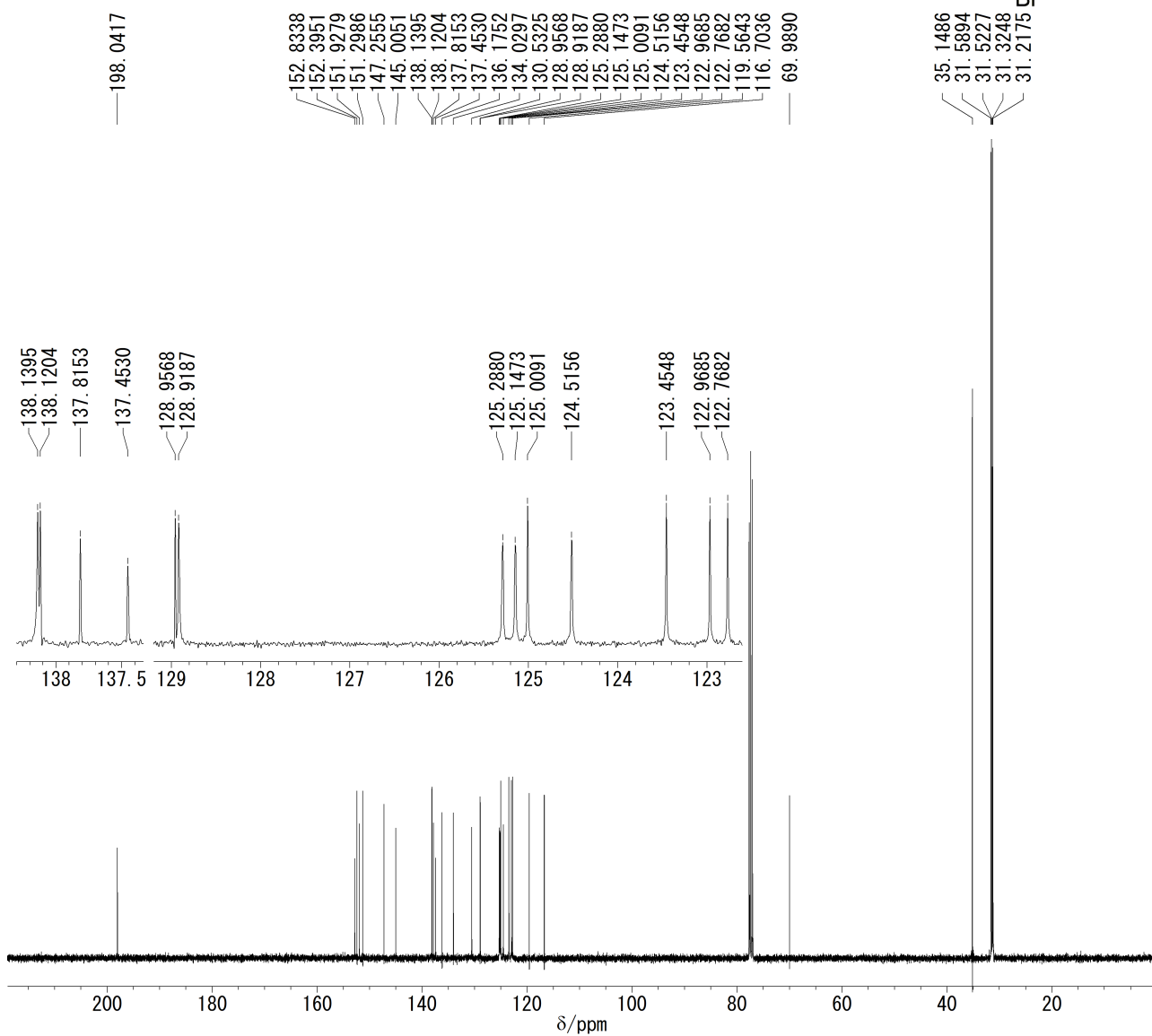
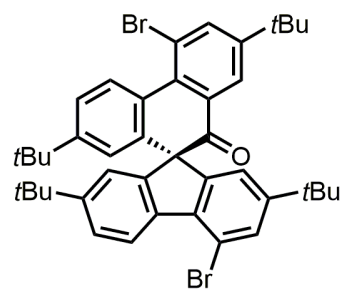
Compound **3** (^{13}C NMR spectrum in CDCl_3).



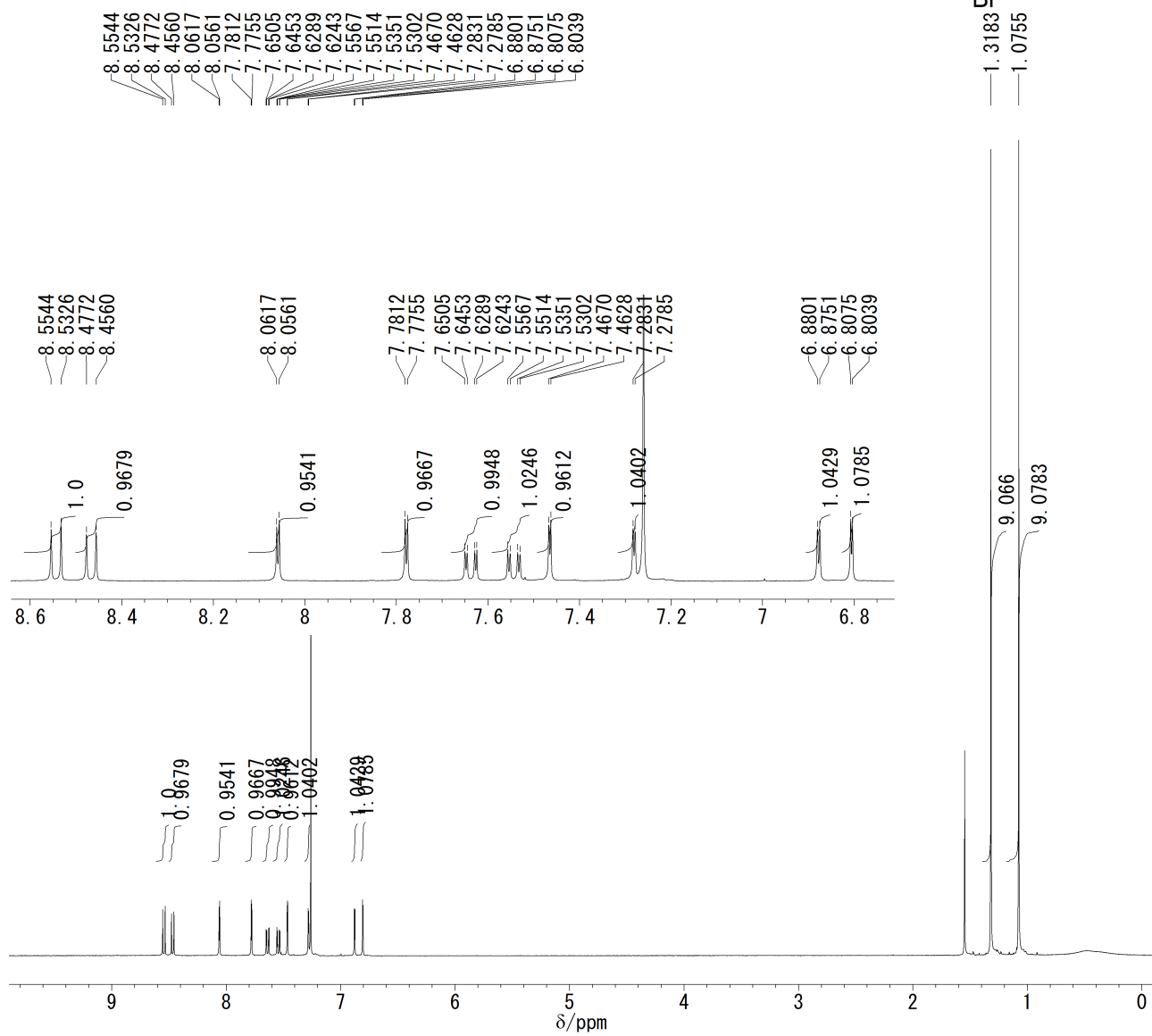
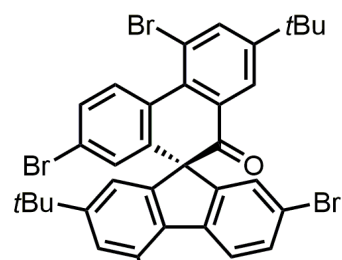
Compound *iso-3* (^1H NMR spectrum in CDCl_3).



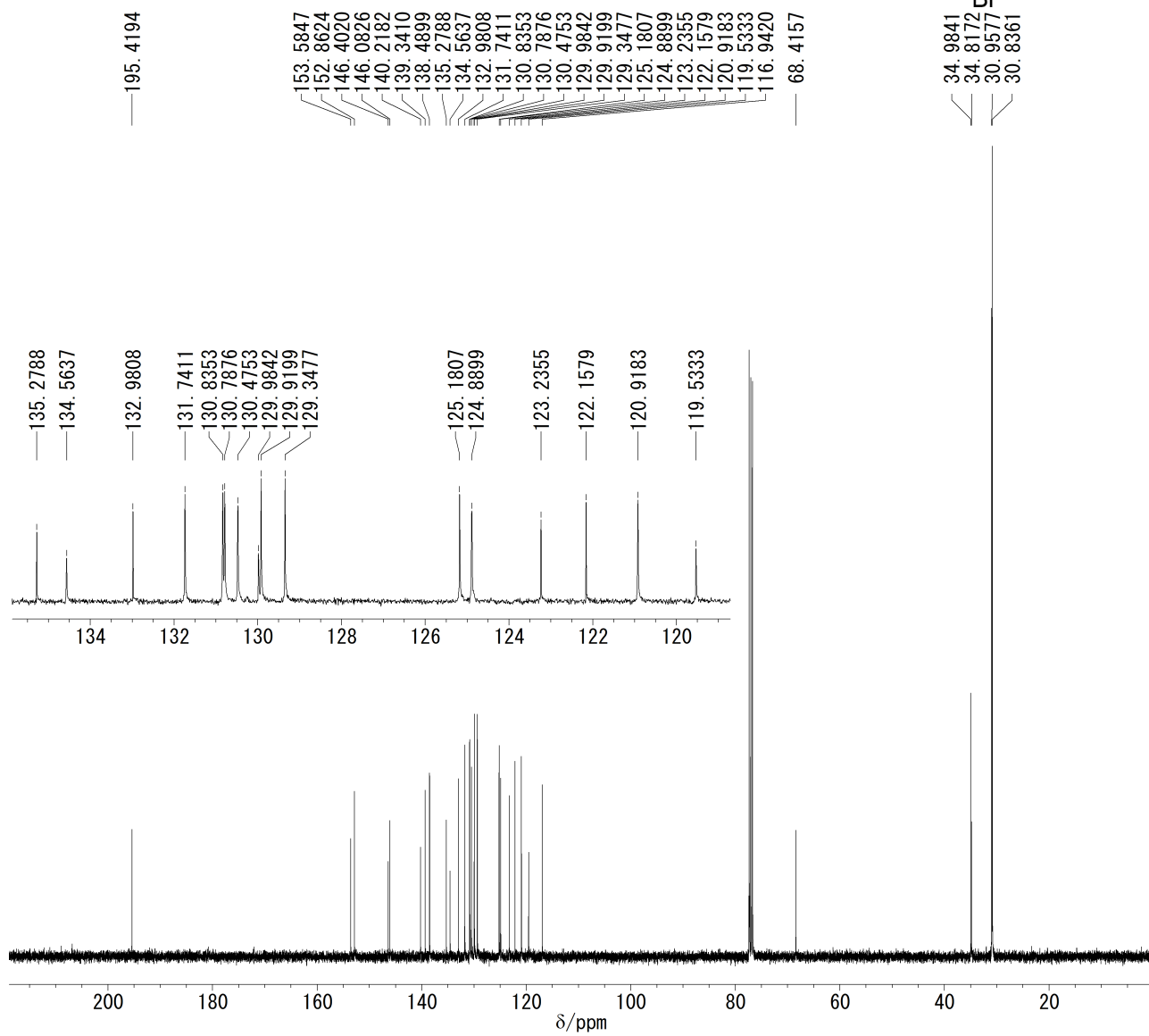
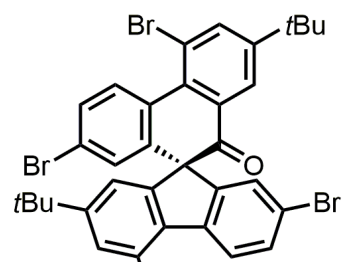
Compound *iso-3* (^{13}C NMR spectrum in CDCl_3).



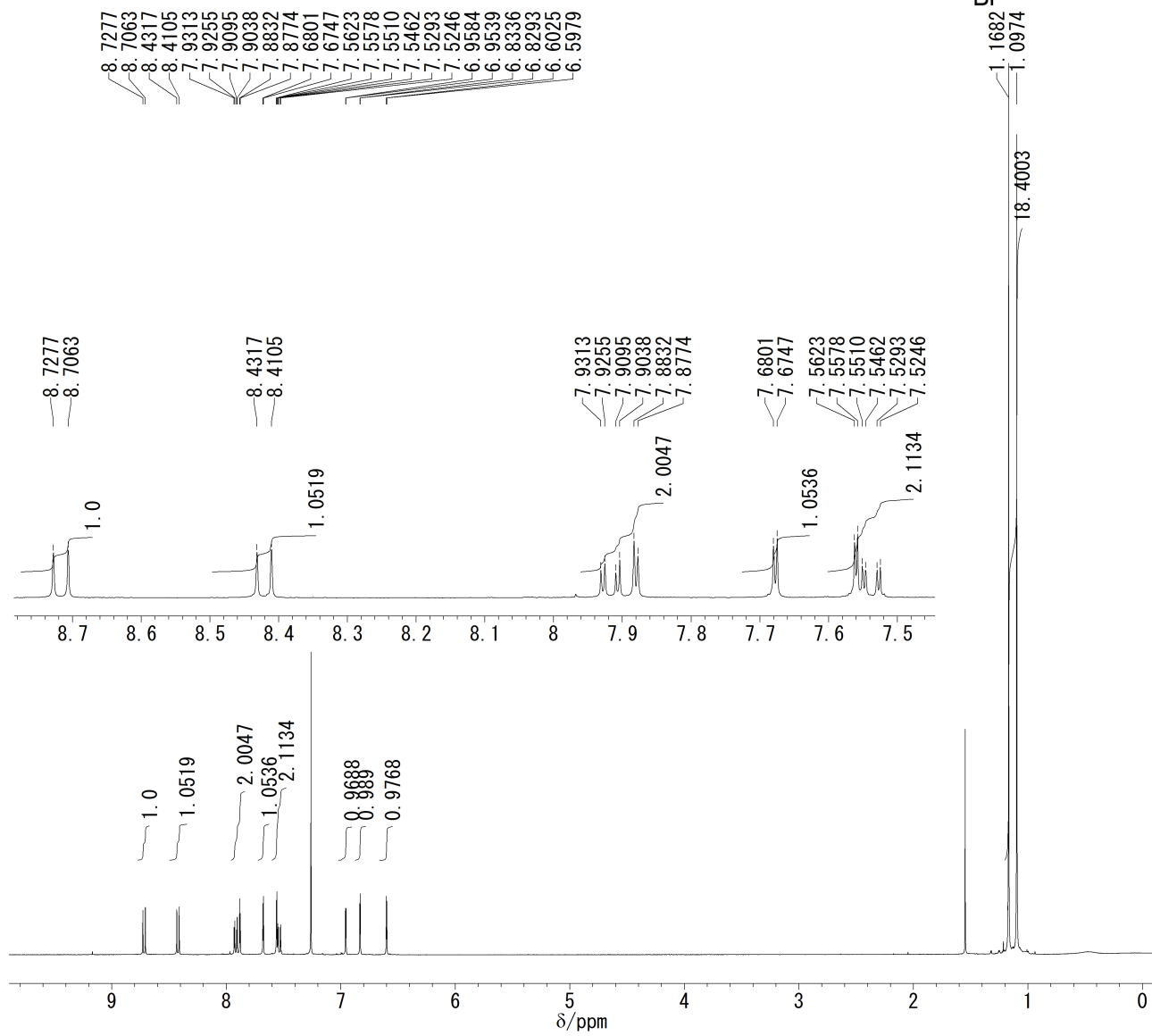
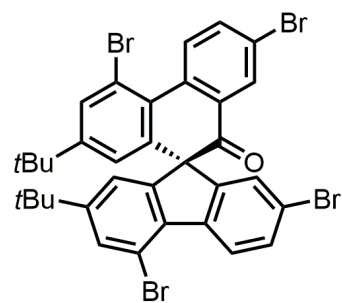
Compound 4 (^1H NMR spectrum in CDCl_3).



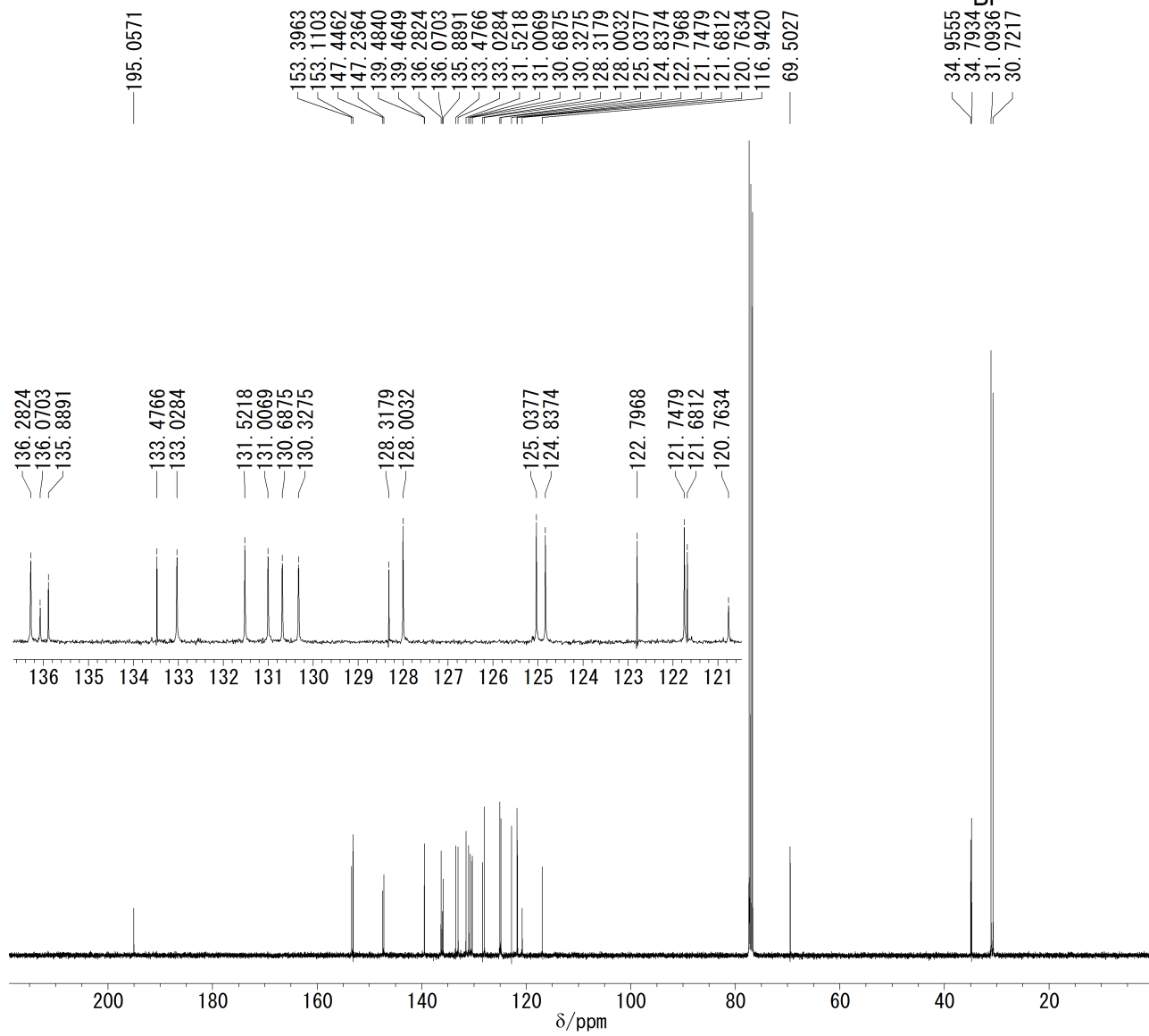
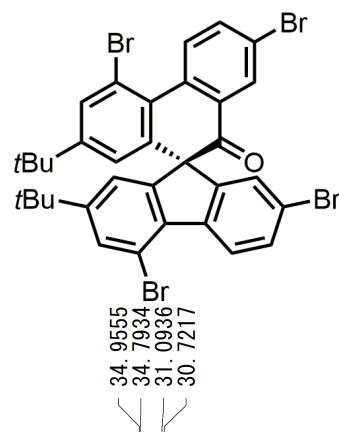
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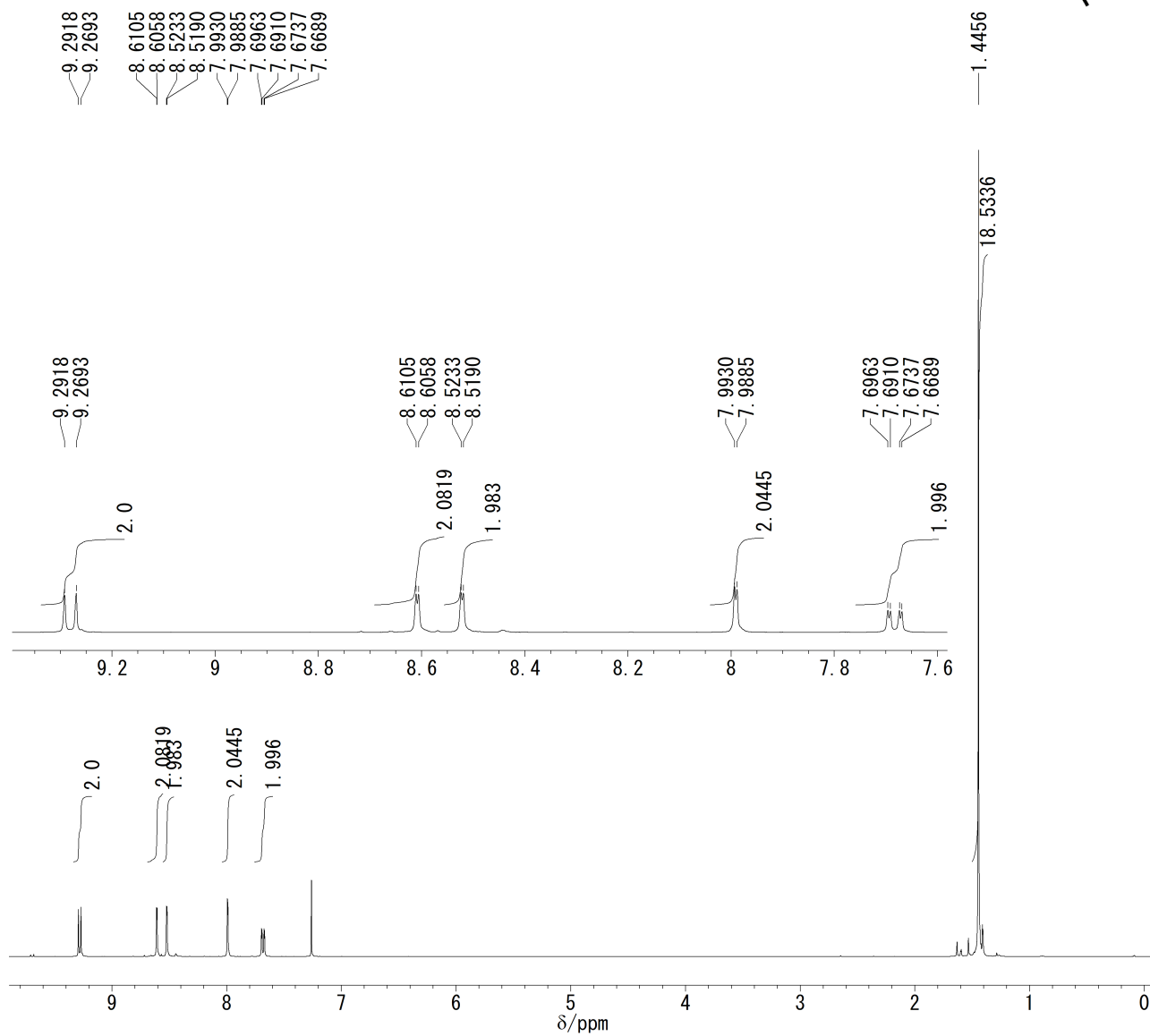
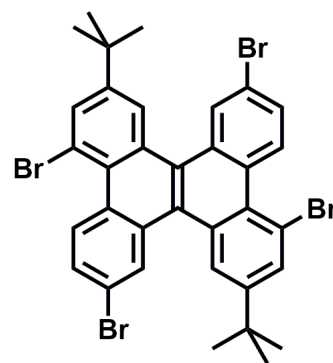
Compound *iso-4* (^1H NMR spectrum in CDCl_3).



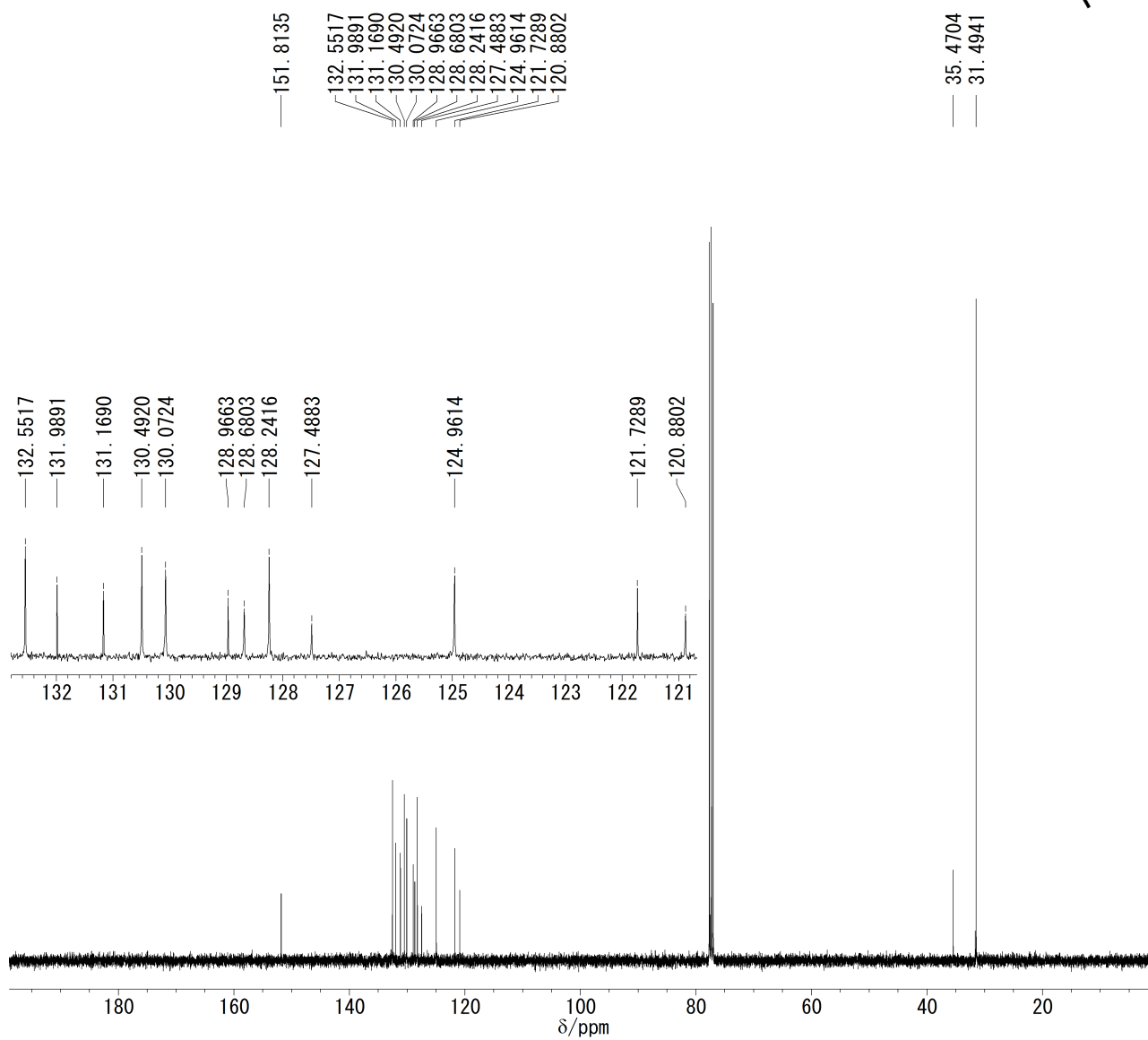
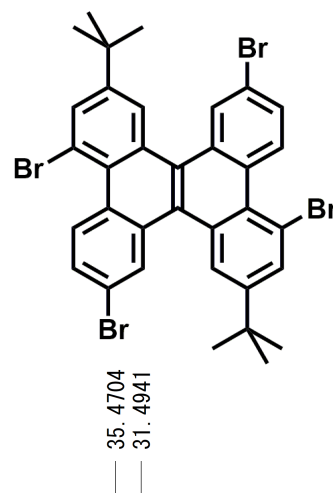
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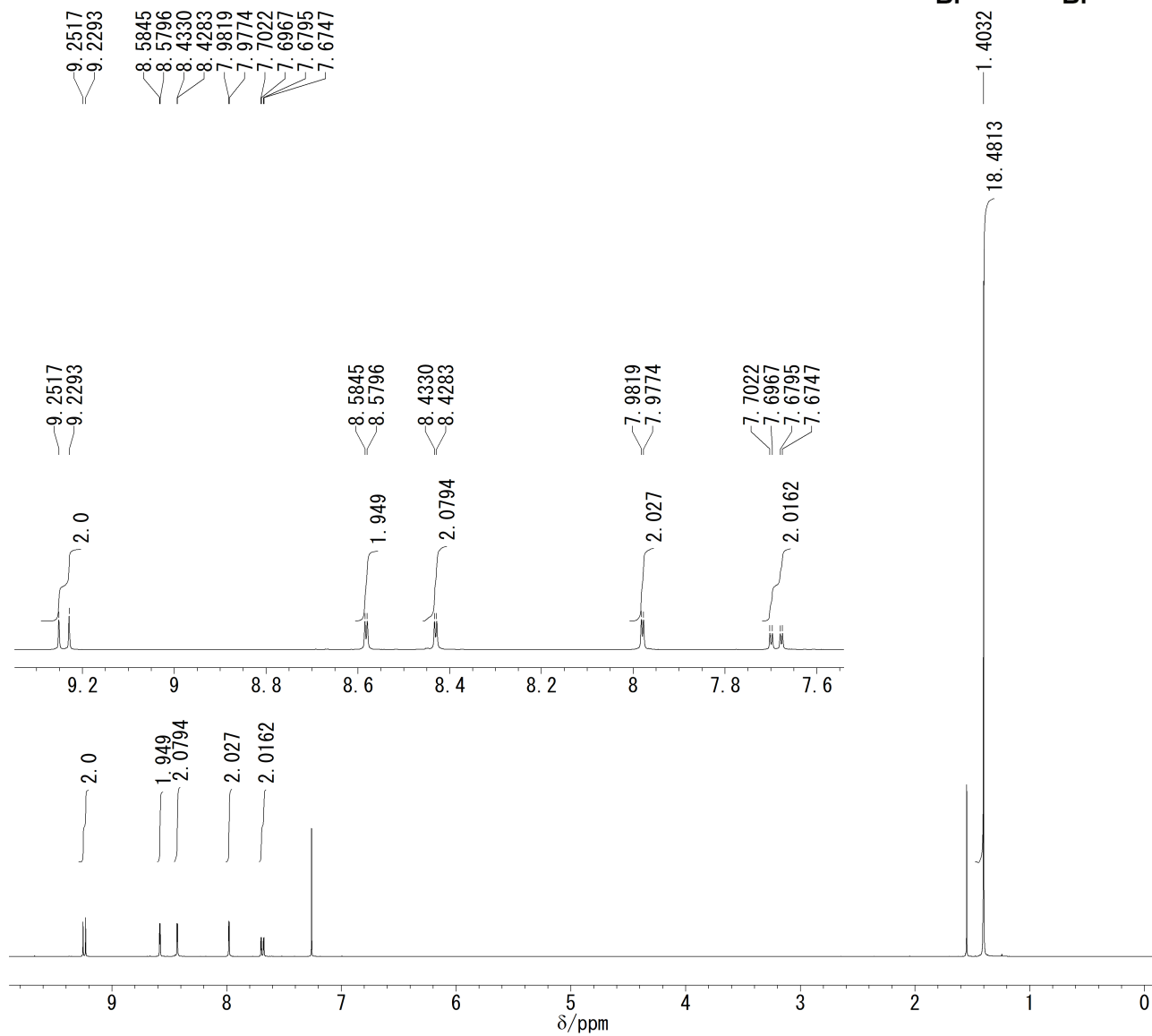
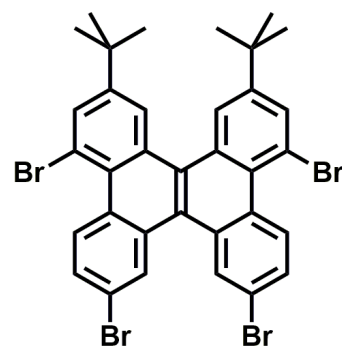
Compound **6** (^1H NMR spectrum in CDCl_3).



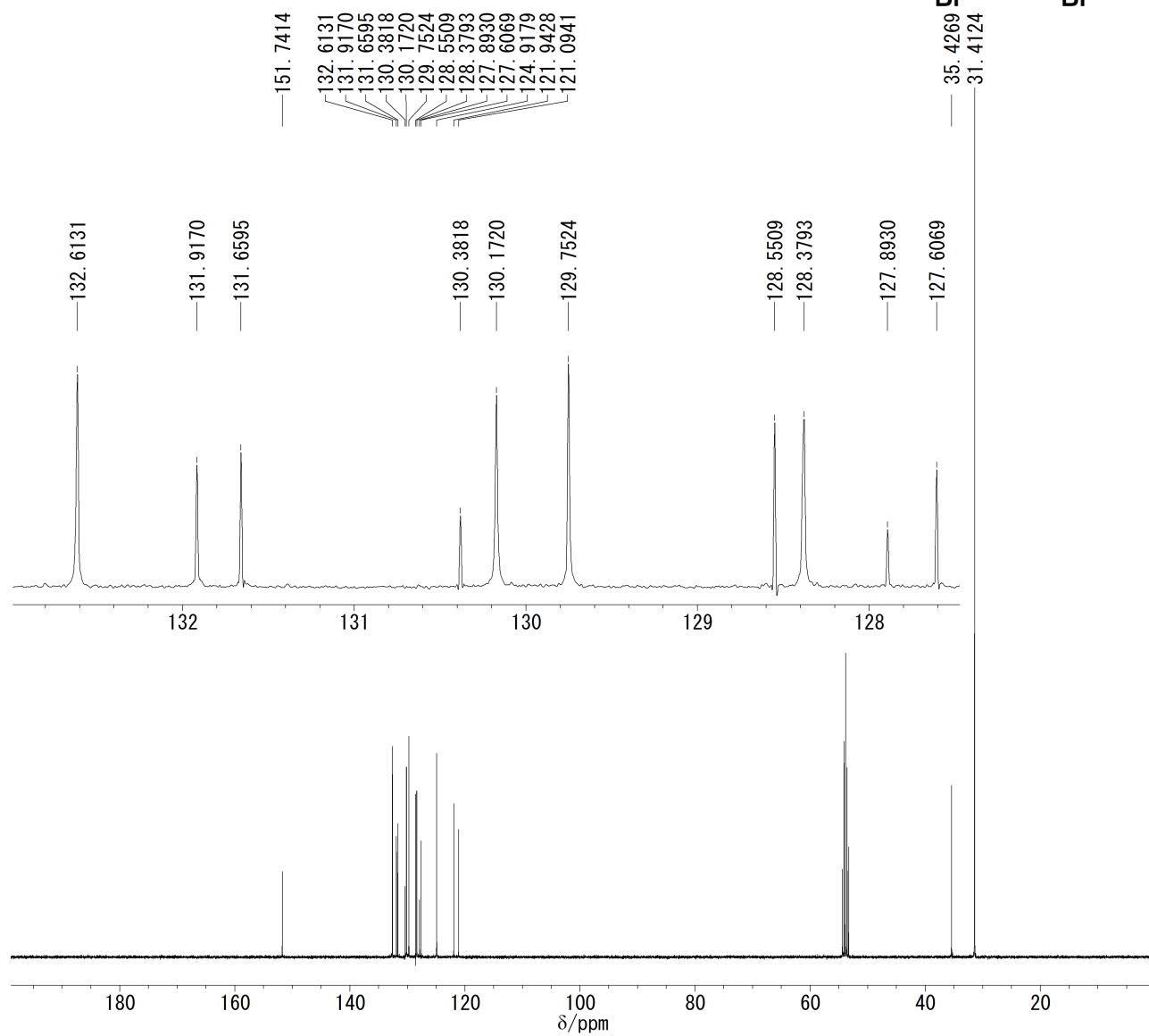
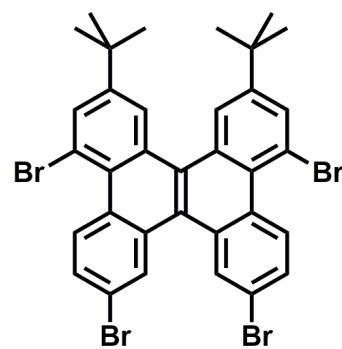
Compound **6** (^{13}C NMR spectrum in CDCl_3).



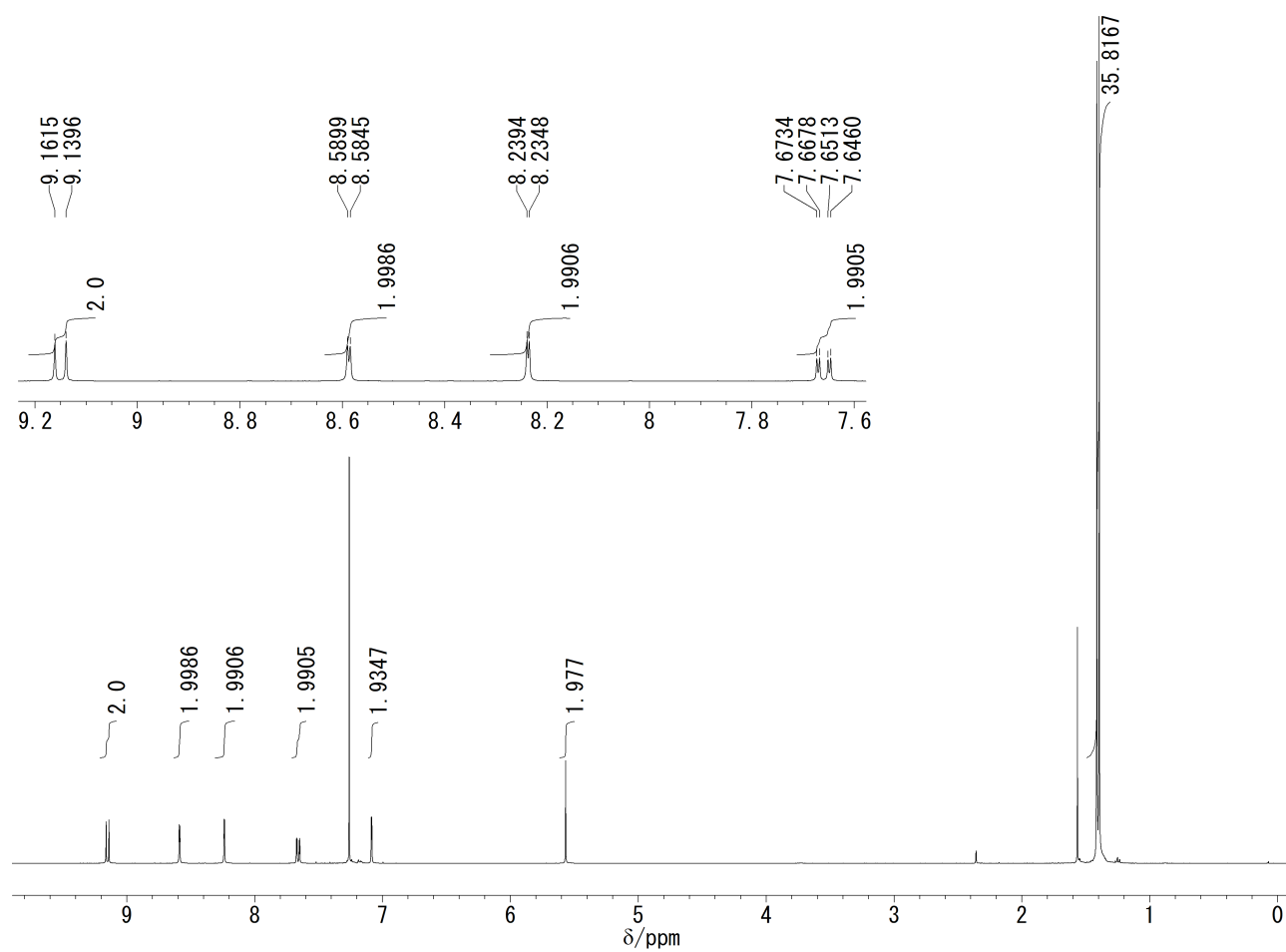
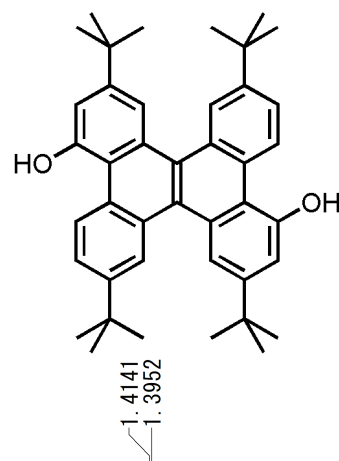
Compound *iso*-6 (^1H NMR spectrum in CDCl_3).



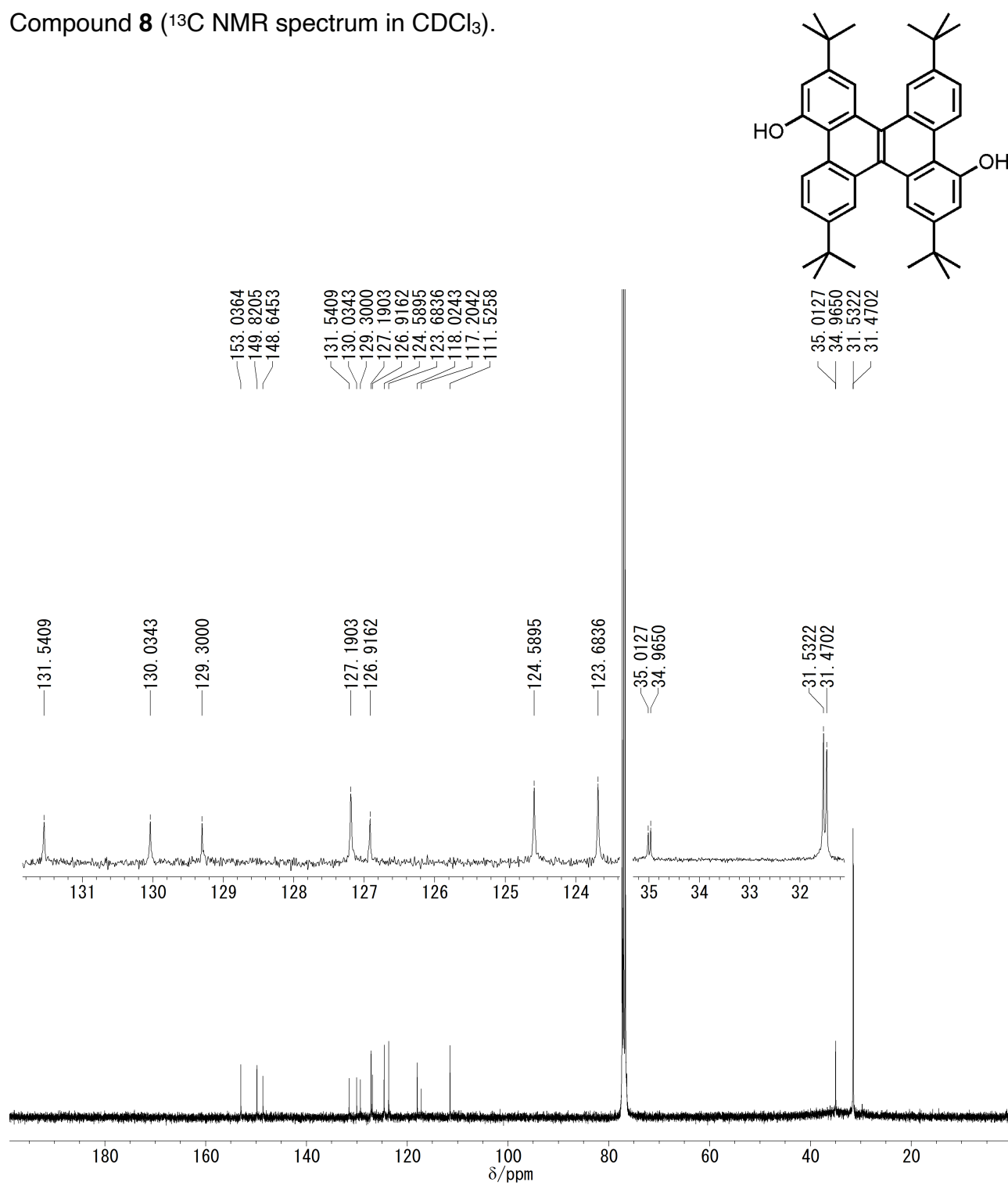
Compound *iso-6* (^{13}C NMR spectrum in CD_2Cl_2).



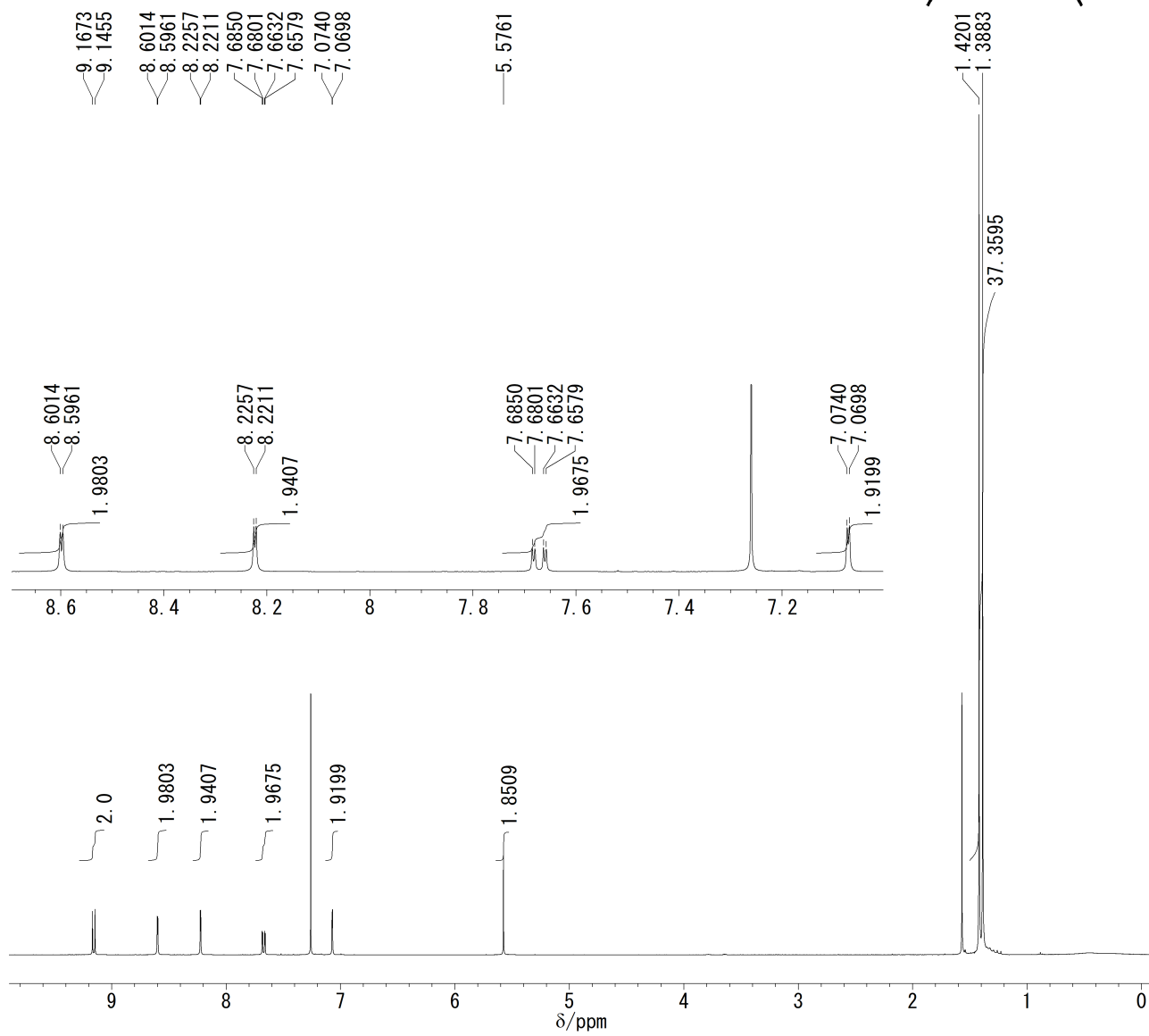
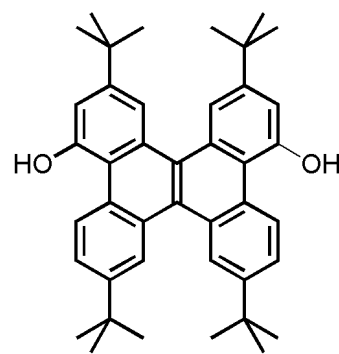
Compound **8** (^1H NMR spectrum in CDCl_3).



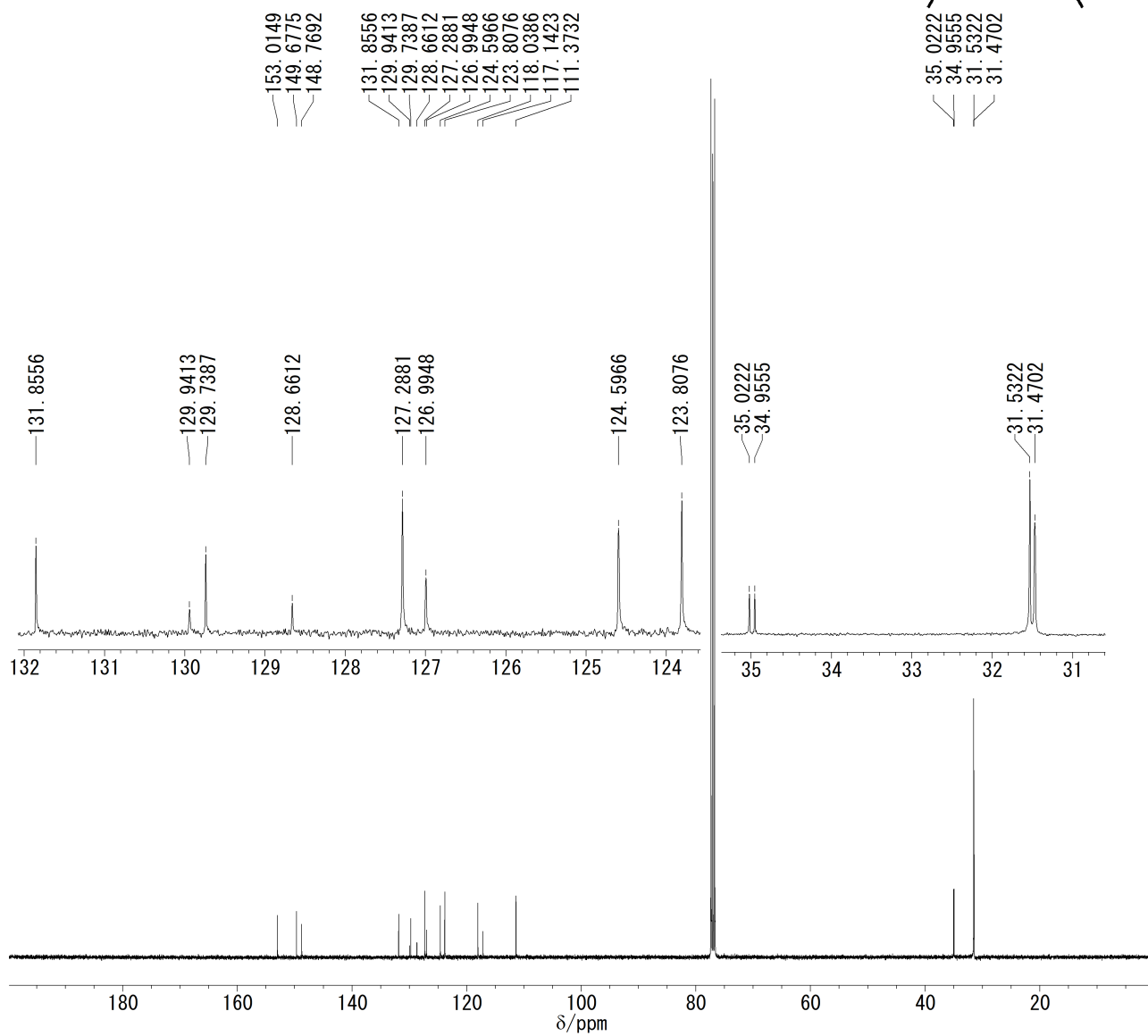
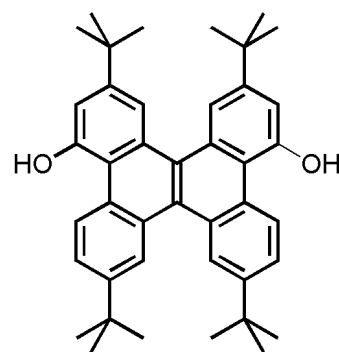
Compound **8** (^{13}C NMR spectrum in CDCl_3).



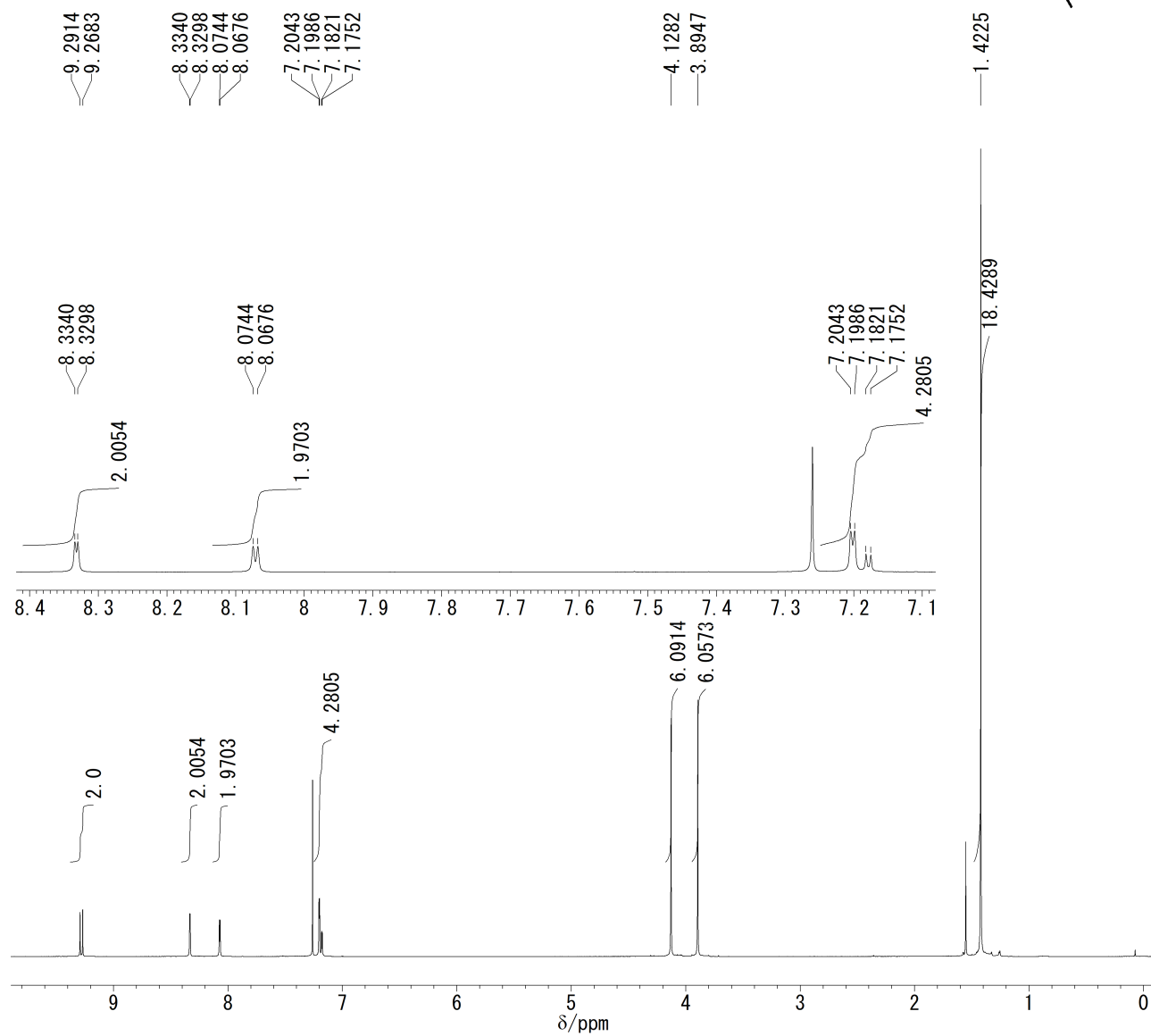
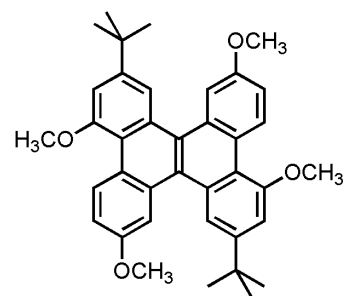
Compound *iso*-8 (¹H NMR spectrum in CDCl₃).



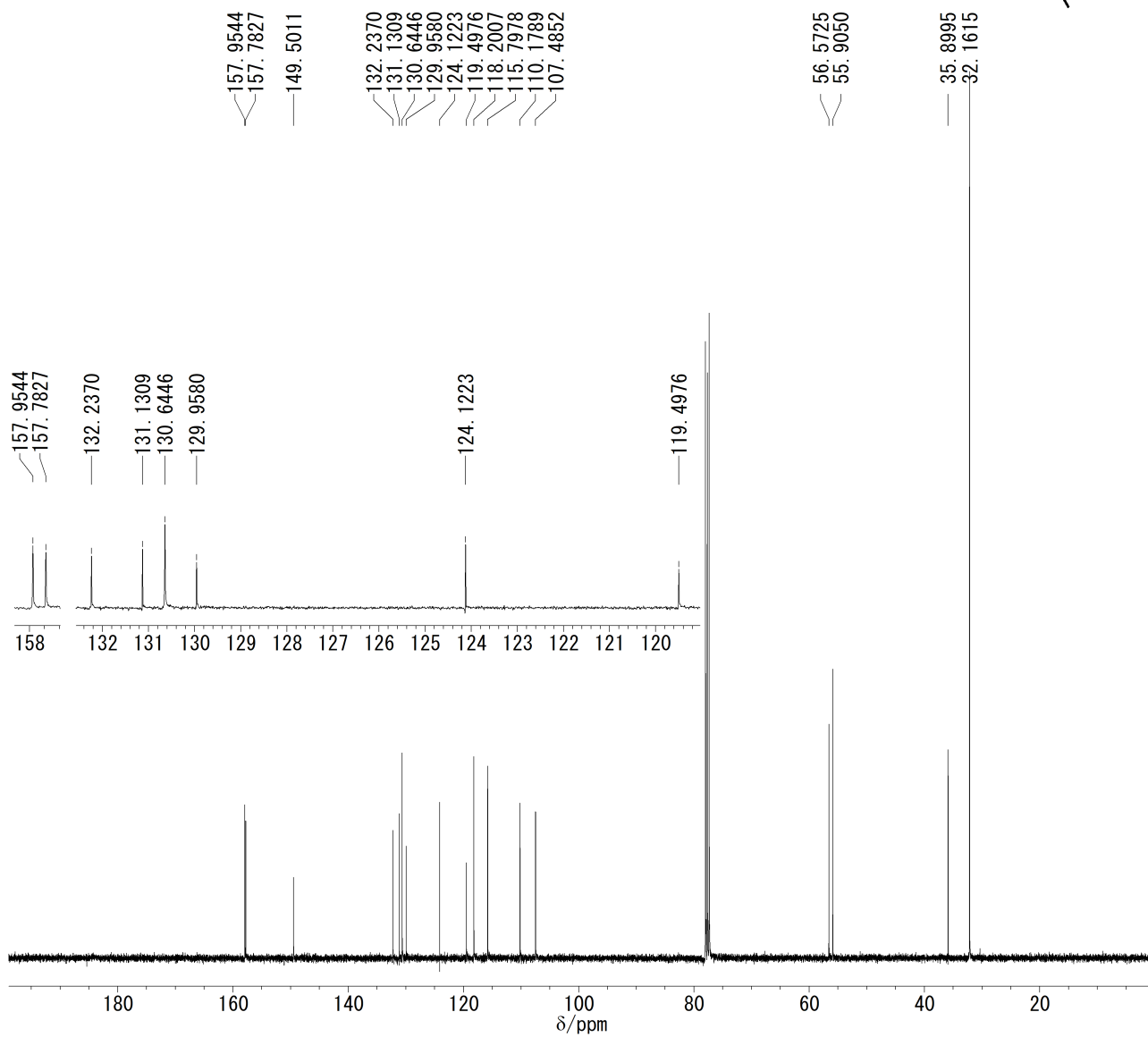
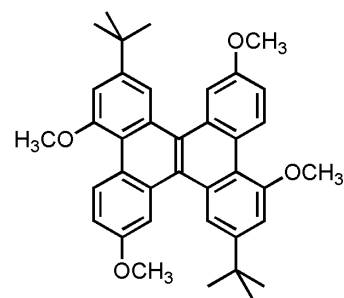
Compound *iso*-**8** (^{13}C NMR spectrum in CDCl_3).



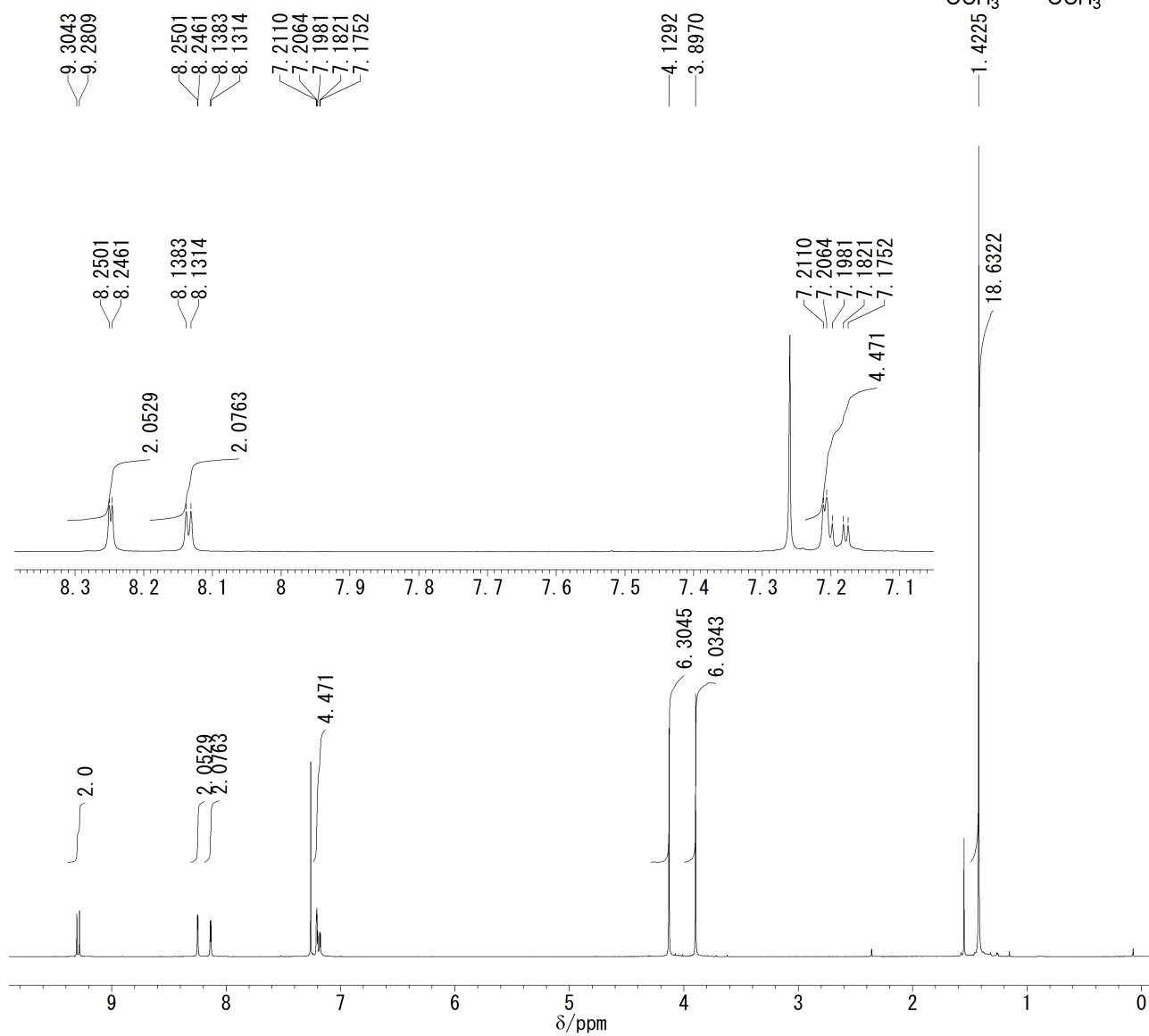
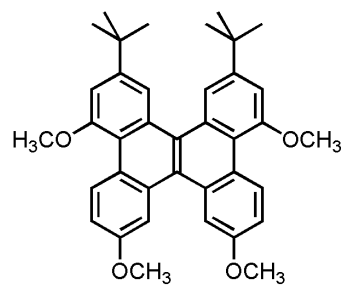
Compound **9** (^1H NMR spectrum in CDCl_3).



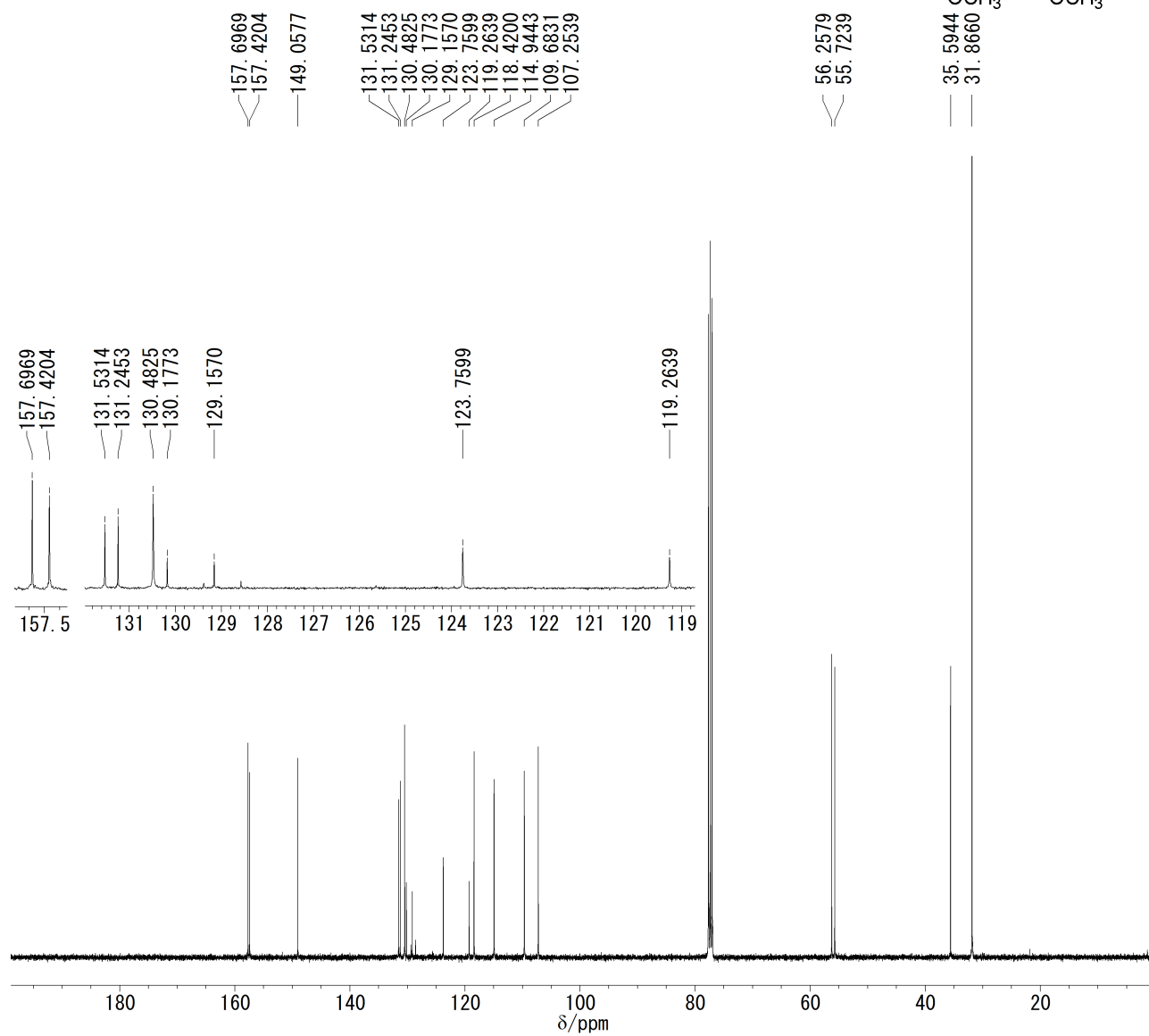
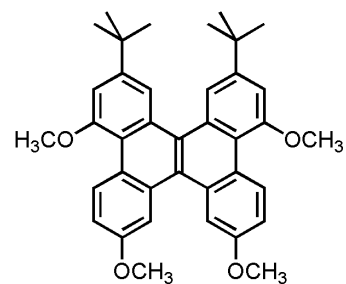
Compound **9** (^{13}C NMR spectrum in CDCl_3).



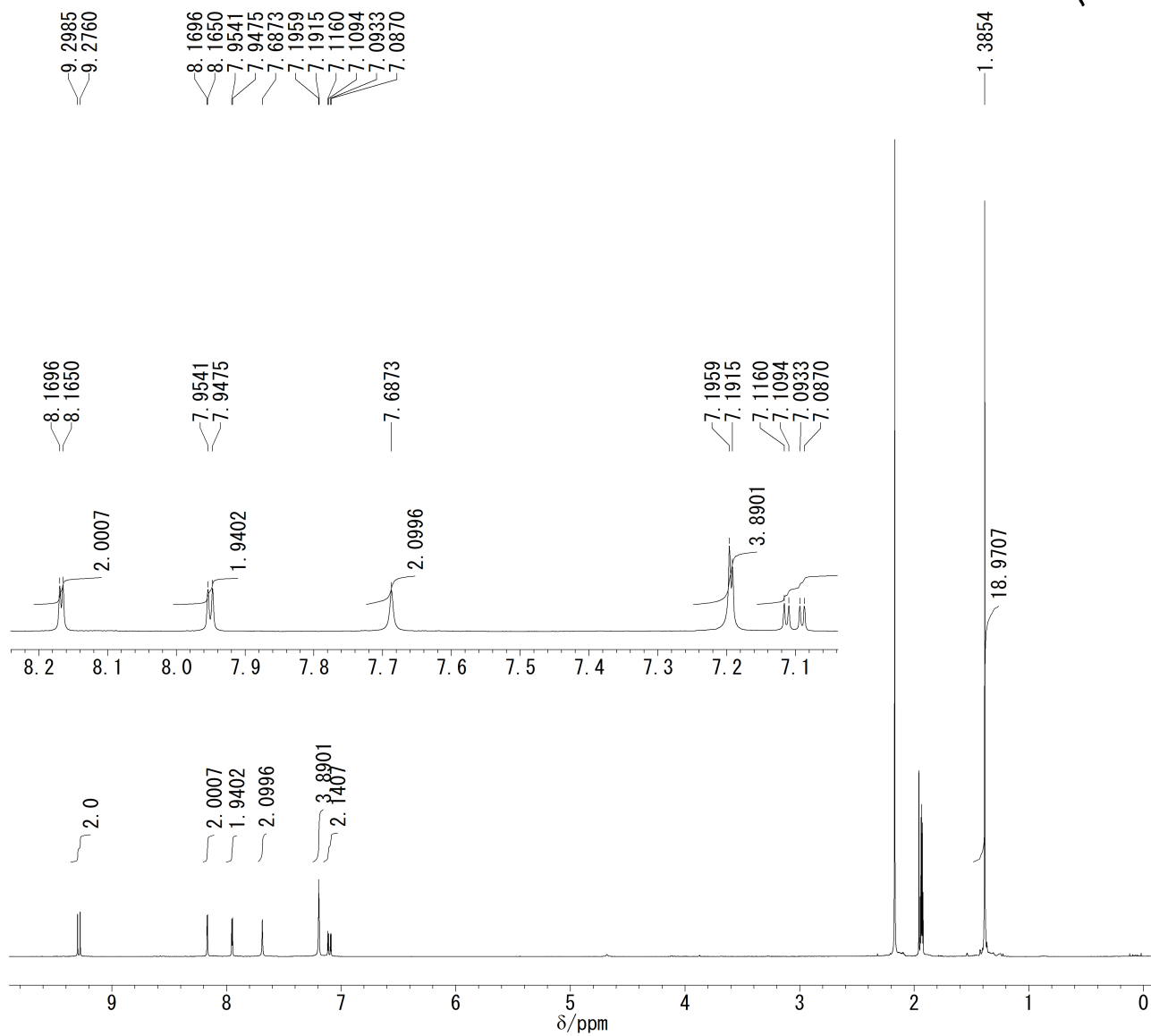
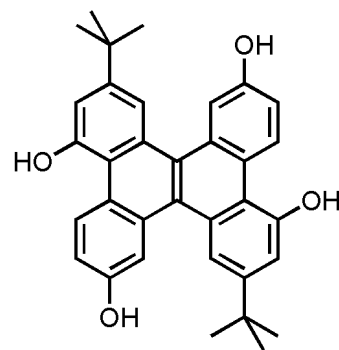
Compound *iso*-9 (¹H NMR spectrum in CDCl₃).



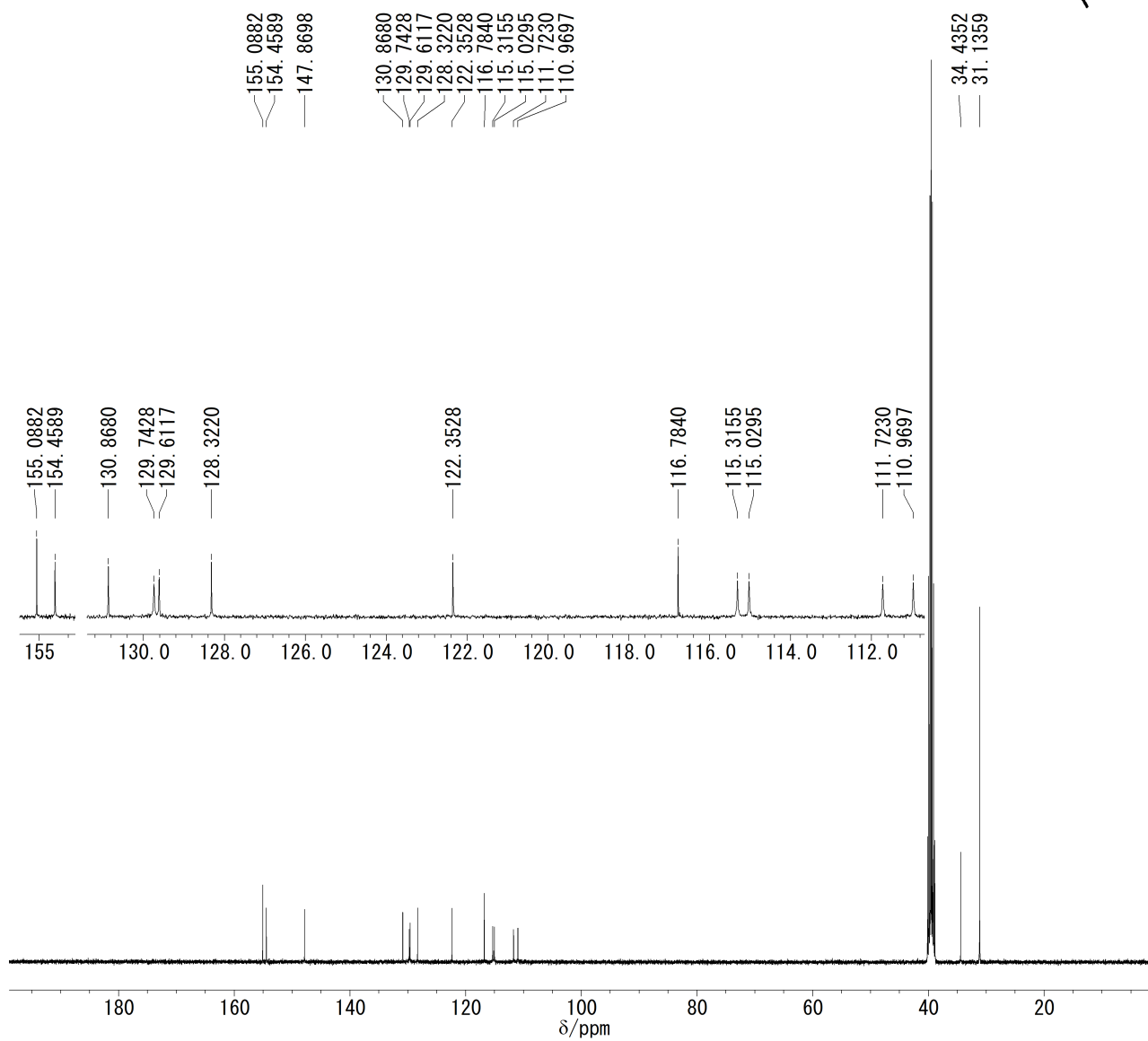
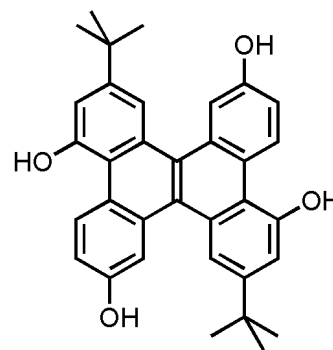
Compound *iso*-9 (^{13}C NMR spectrum in CDCl_3).



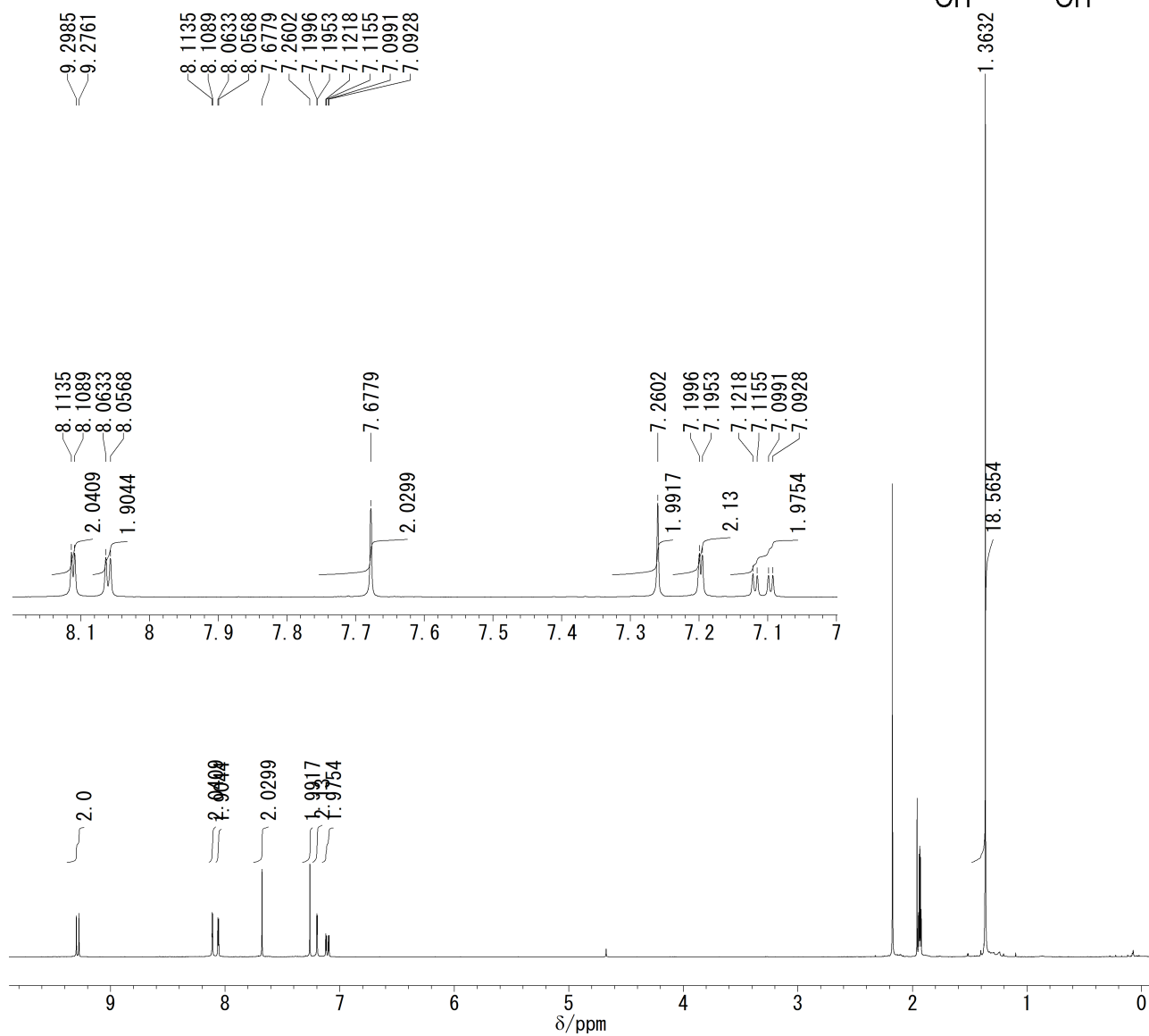
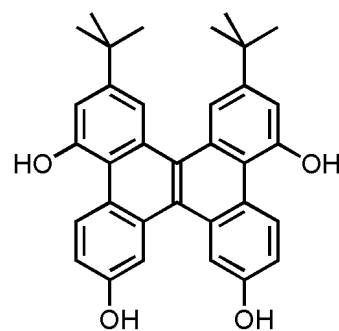
Compound **10** (^1H NMR spectrum in CD_3CN).



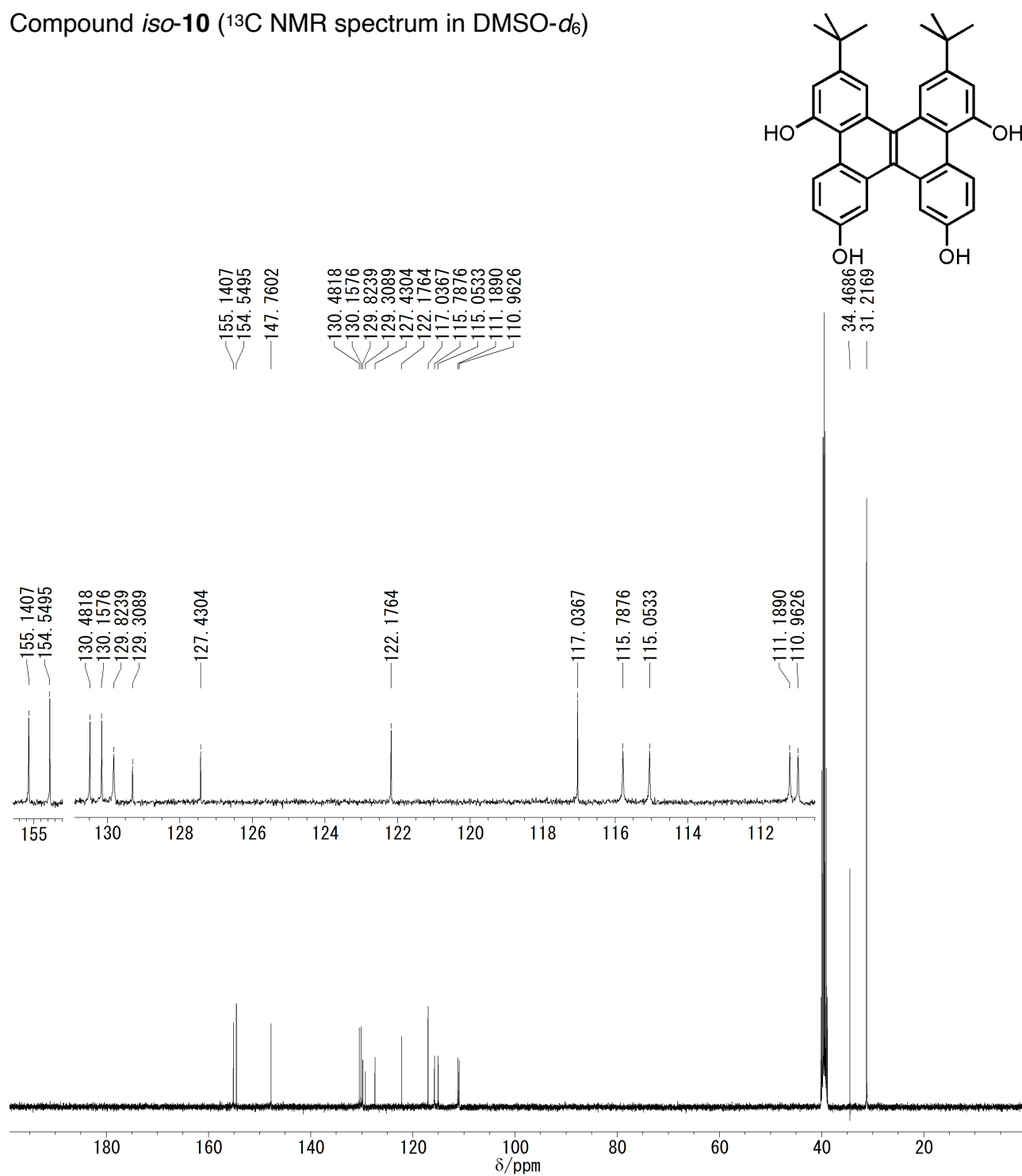
Compound **10** (^{13}C NMR spectrum in $\text{DMSO}-d_6$).



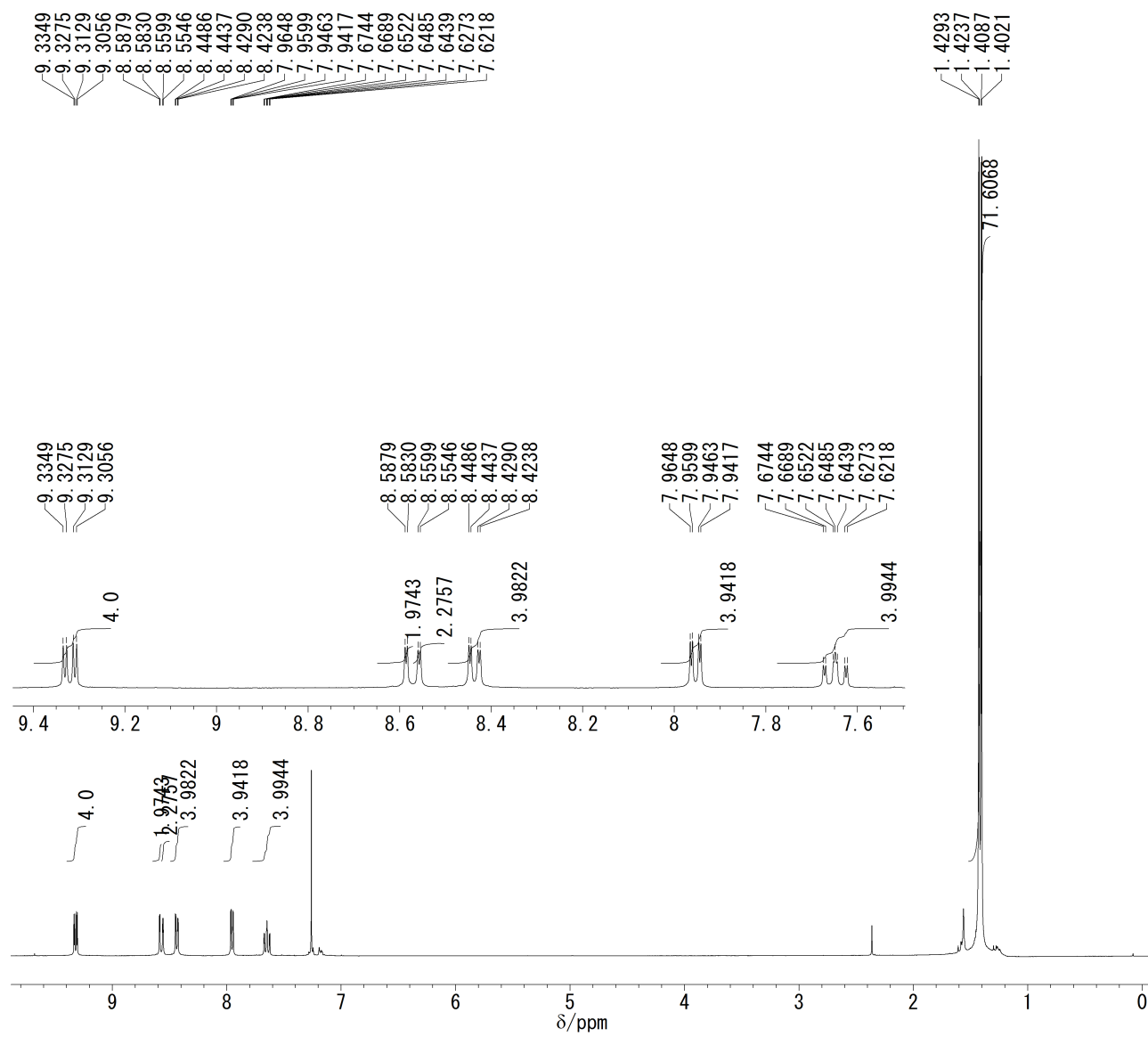
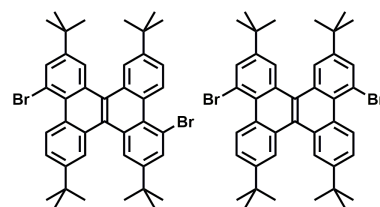
Compound *iso*-**10** (^1H NMR spectrum in CD_3CN).



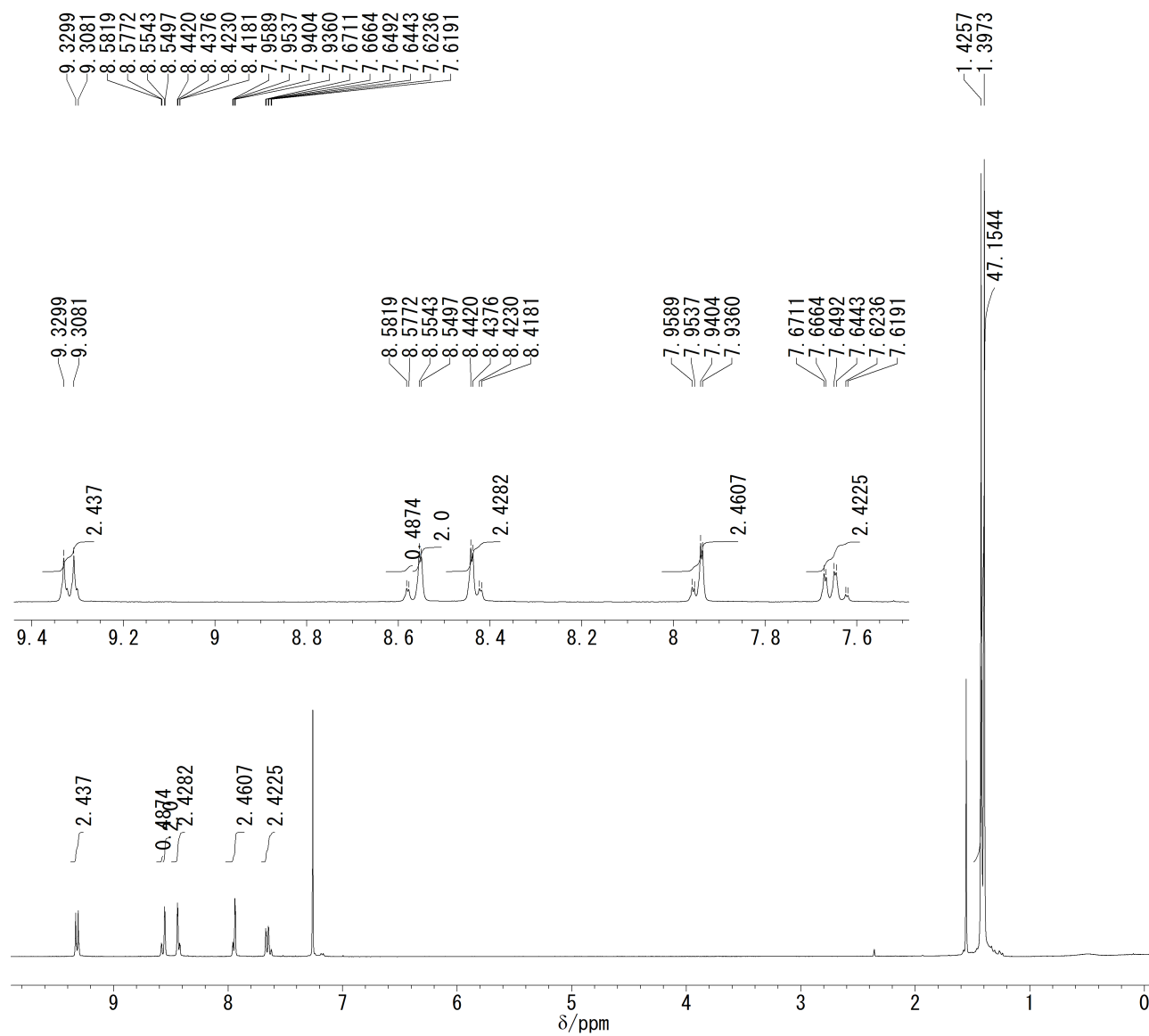
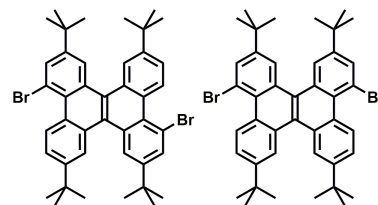
Compound *iso*-**10** (^{13}C NMR spectrum in $\text{DMSO-}d_6$)



2. ^1H NMR spectrum of mixtures of **5**/*iso*-**5** with molar ratio of 46:54 in Scheme 3 (a).



3. ^1H NMR spectrum of mixtures of **5**/*iso*-**5** with molar ratio of 20:80 in Scheme 4 (a).



4. ^1H NMR spectrum of mixtures of **5**/*iso*-**5** with molar ratio of 75:25 in Scheme 4 (b).

