

# **Synthesis and Antimicrobial Evaluation of Side-Chain Derivatives based on Eurotiumide A**

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<sup>2</sup> Department of Microbiology and Infection Control Sciences, Kyoto Pharmaceutical University, Misasaginakauchi-cho, Yamashita-Ku, Kyoto 607-8414, Japan; e-mail@e-mail.com

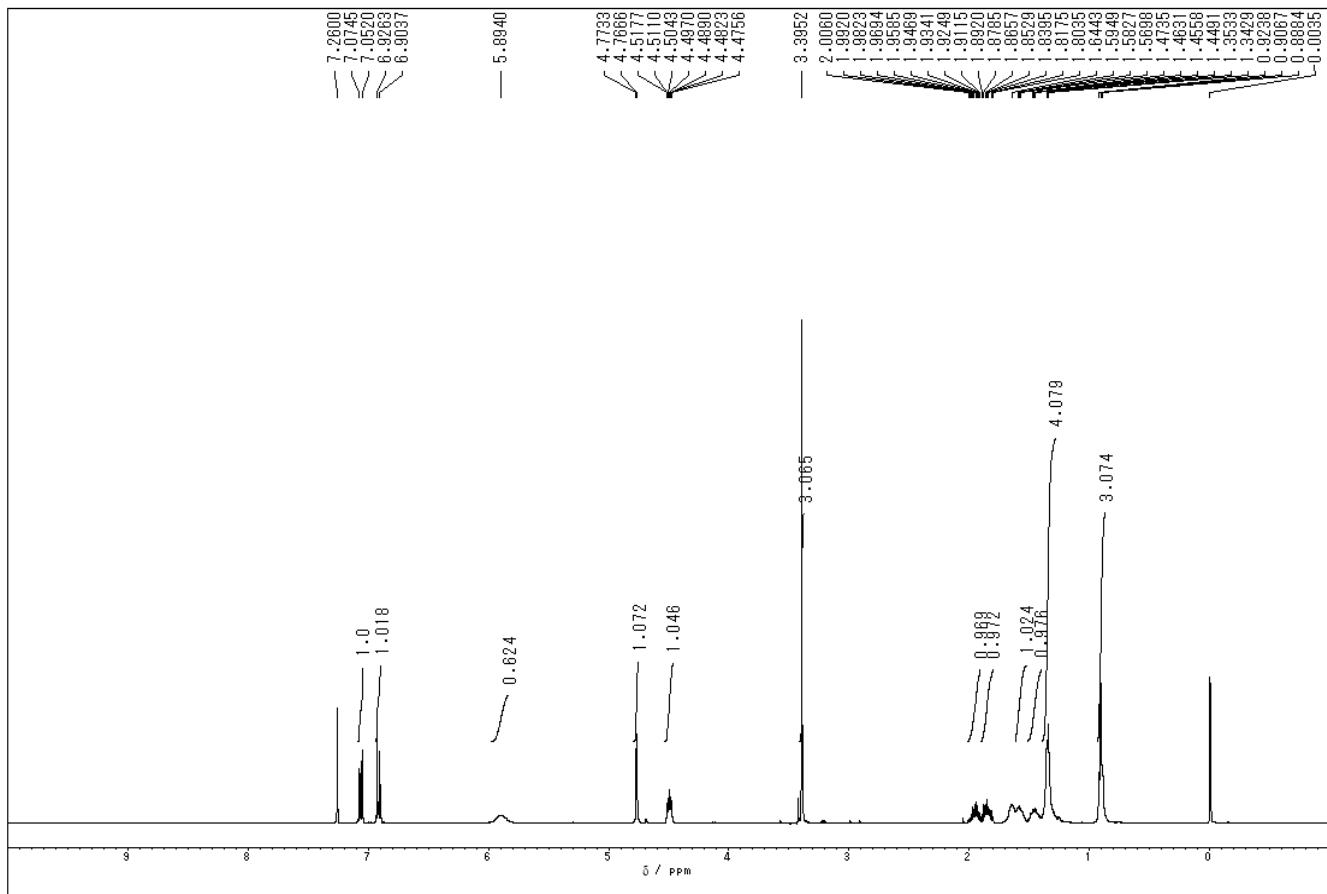
\* Correspondence: [anakaya@tokushima-u.ac.jp](mailto:anakaya@tokushima-u.ac.jp) (A.N.) & [namba@tokushima-u.ac.jp](mailto:namba@tokushima-u.ac.jp) (K.N.)

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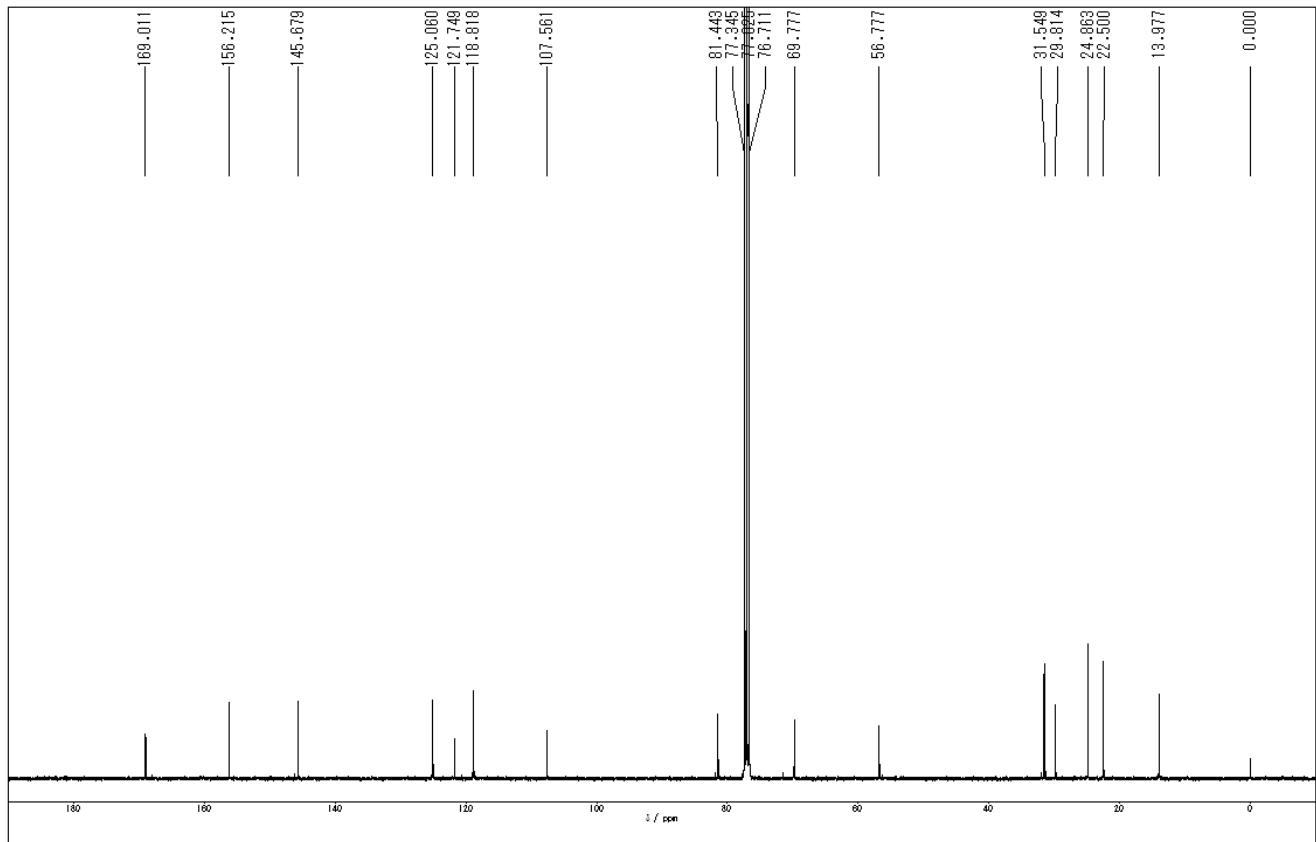
· **1H-NMR and 13C-NMR spectra of synthetic compounds      S2 – S28**

### Compound 4

<sup>1</sup>H-NMR (CDCl<sub>3</sub>, 400 MHz)

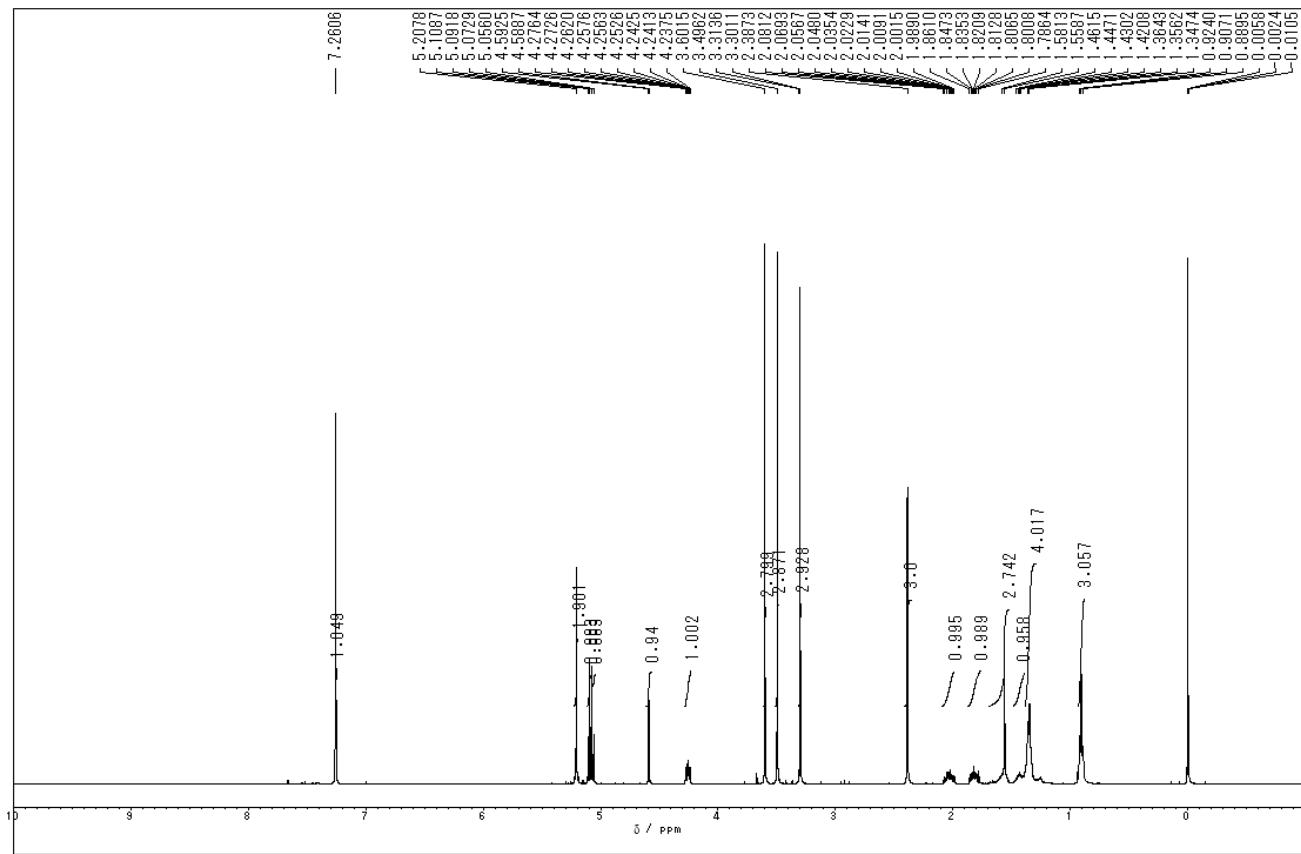


<sup>13</sup>C-NMR (CDCl<sub>3</sub>, 100 MHz)

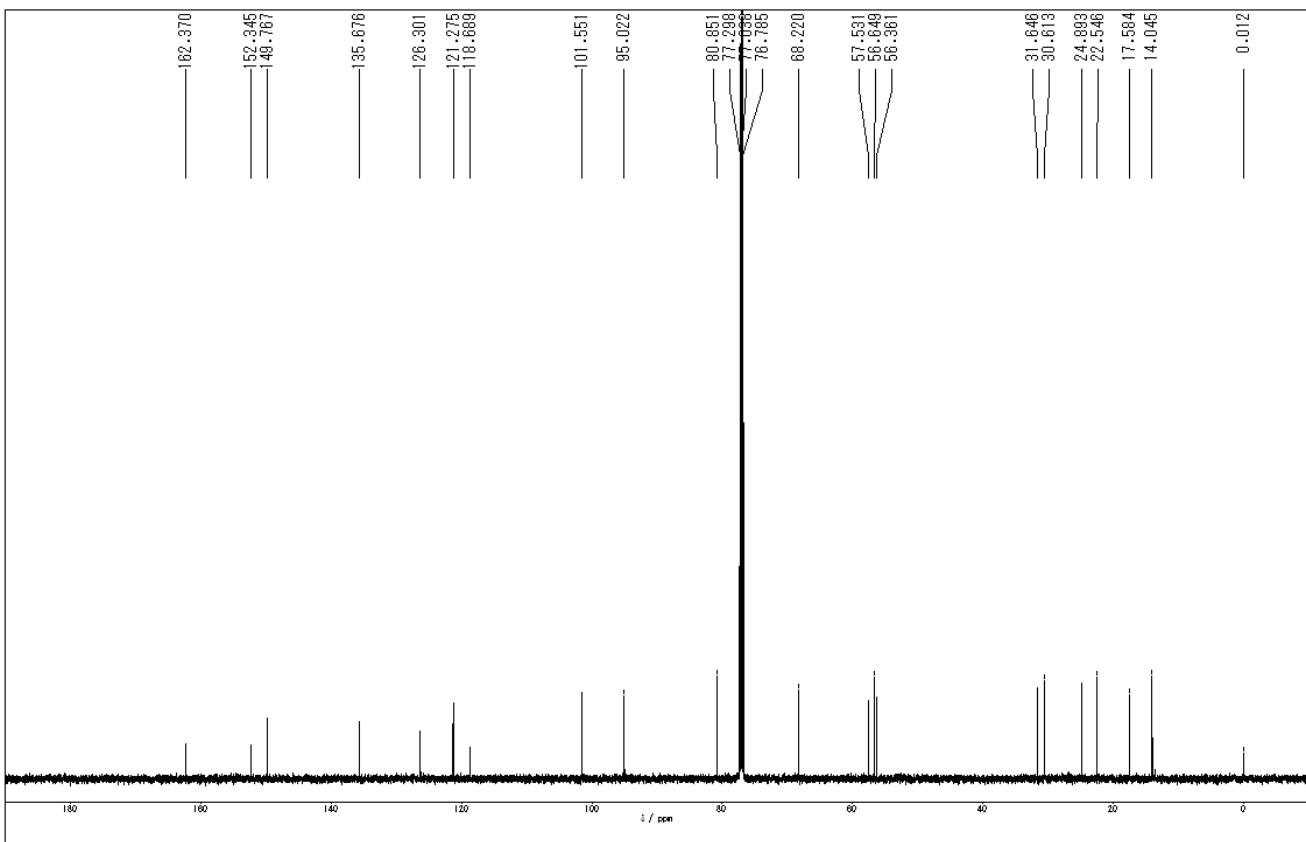


### Compound 5a

<sup>1</sup>H-NMR (CDCl<sub>3</sub>, 400 MHz)

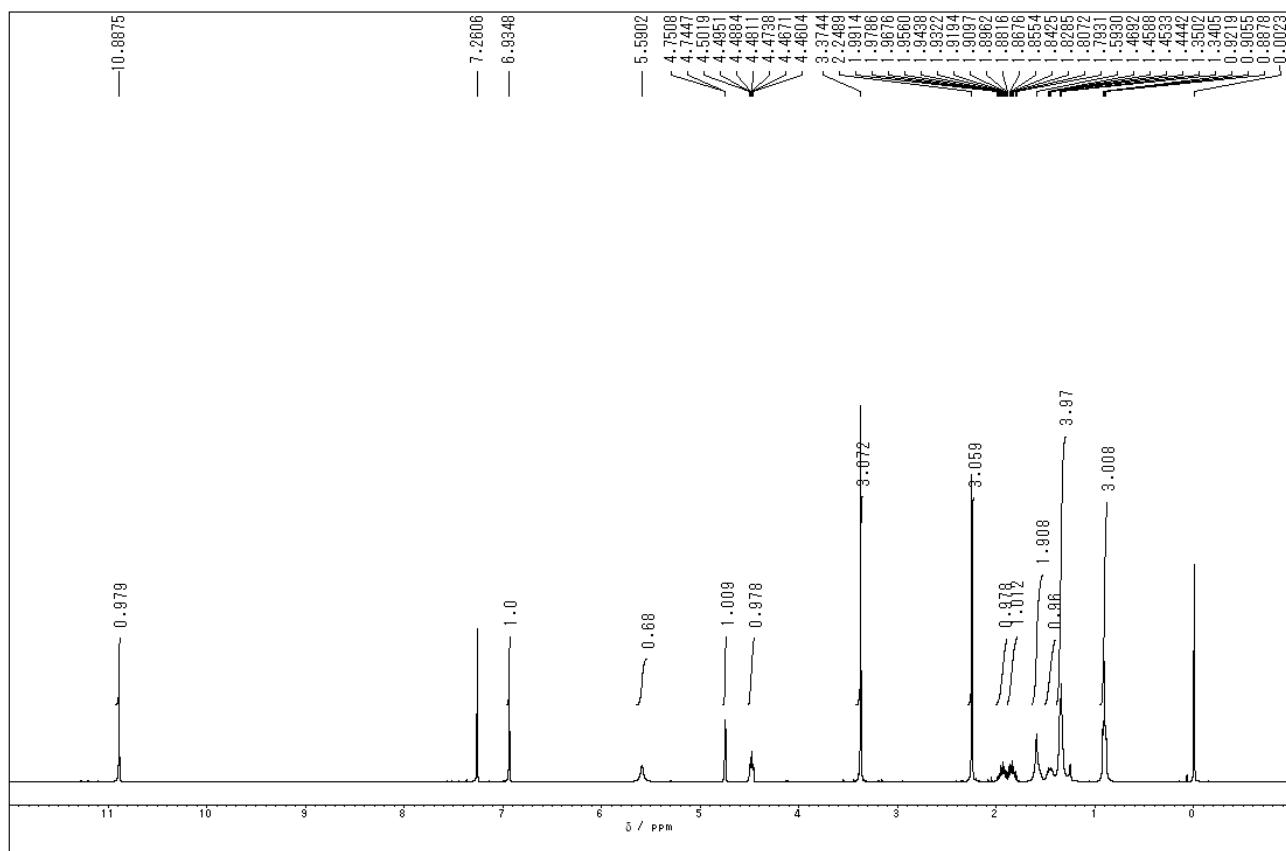


<sup>13</sup>C-NMR (CDCl<sub>3</sub>, 125 MHz)

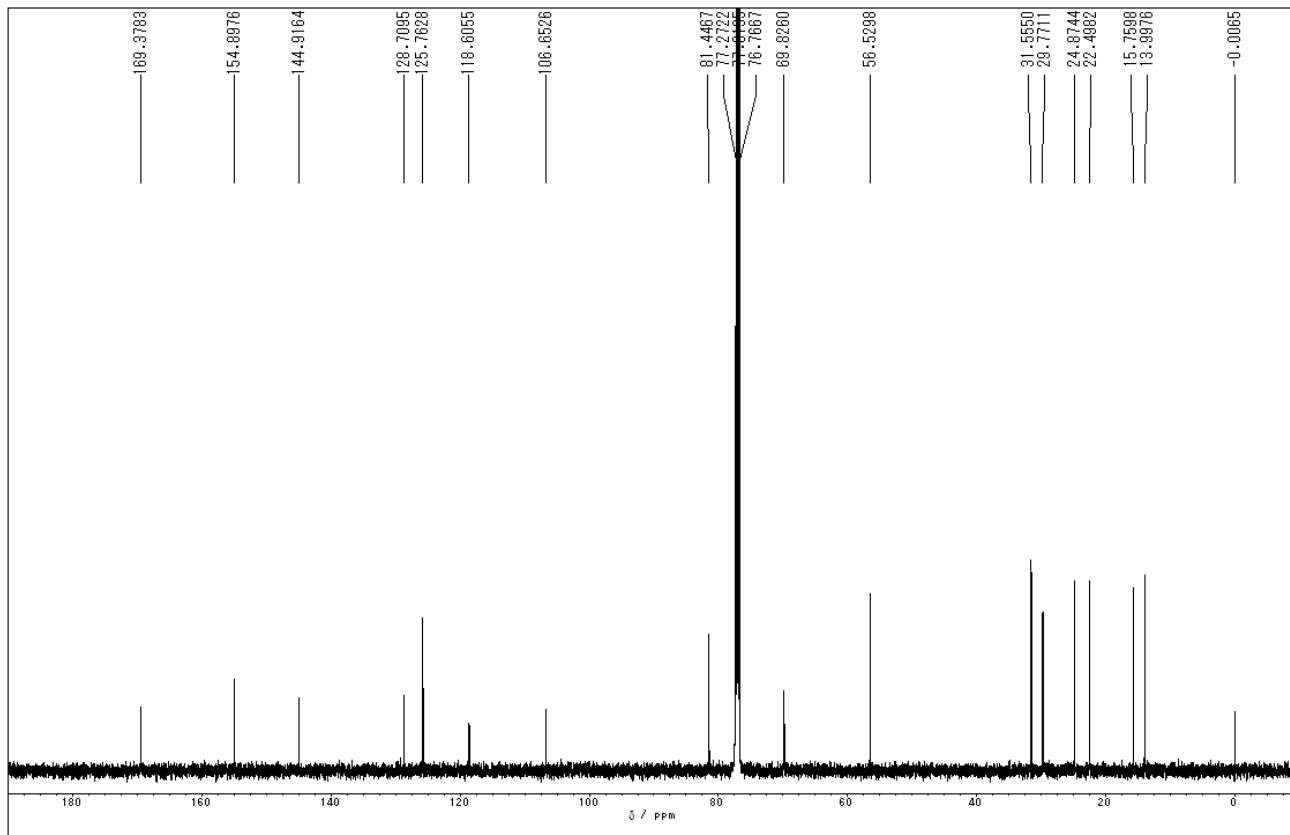


## Compound 5

<sup>1</sup>H-NMR (CDCl<sub>3</sub>, 400 MHz)

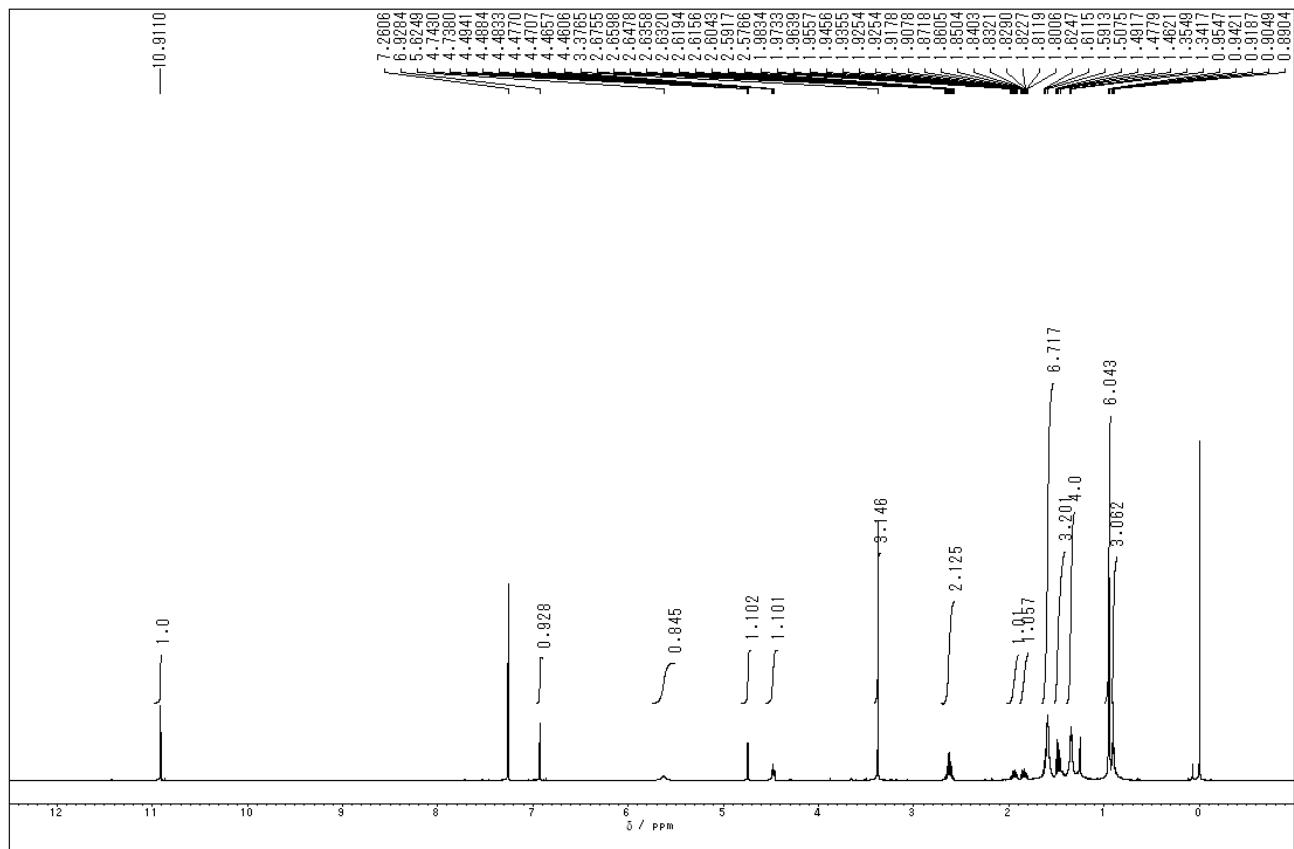


<sup>13</sup>C-NMR (CDCl<sub>3</sub>, 125 MHz)

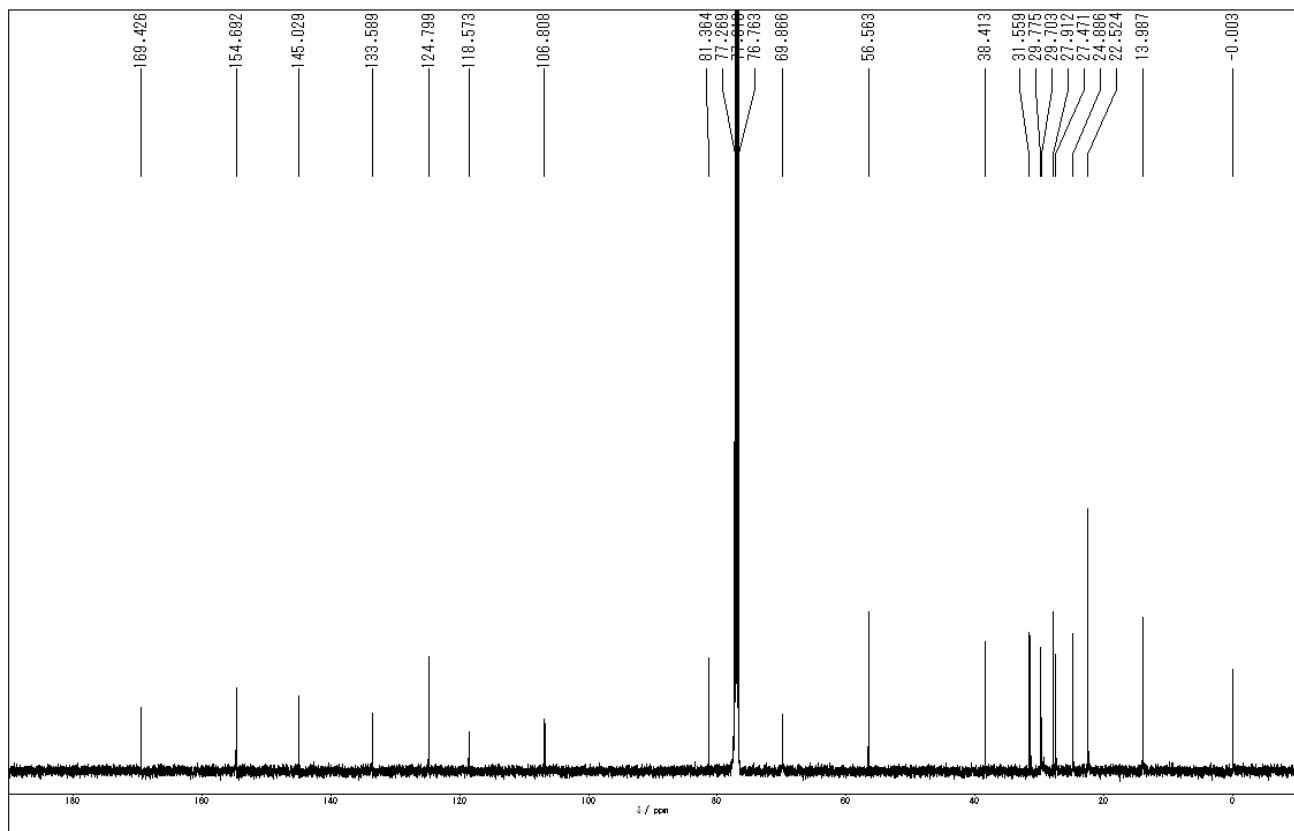


## Compound 6

<sup>1</sup>H-NMR (CDCl<sub>3</sub>, 500 MHz)

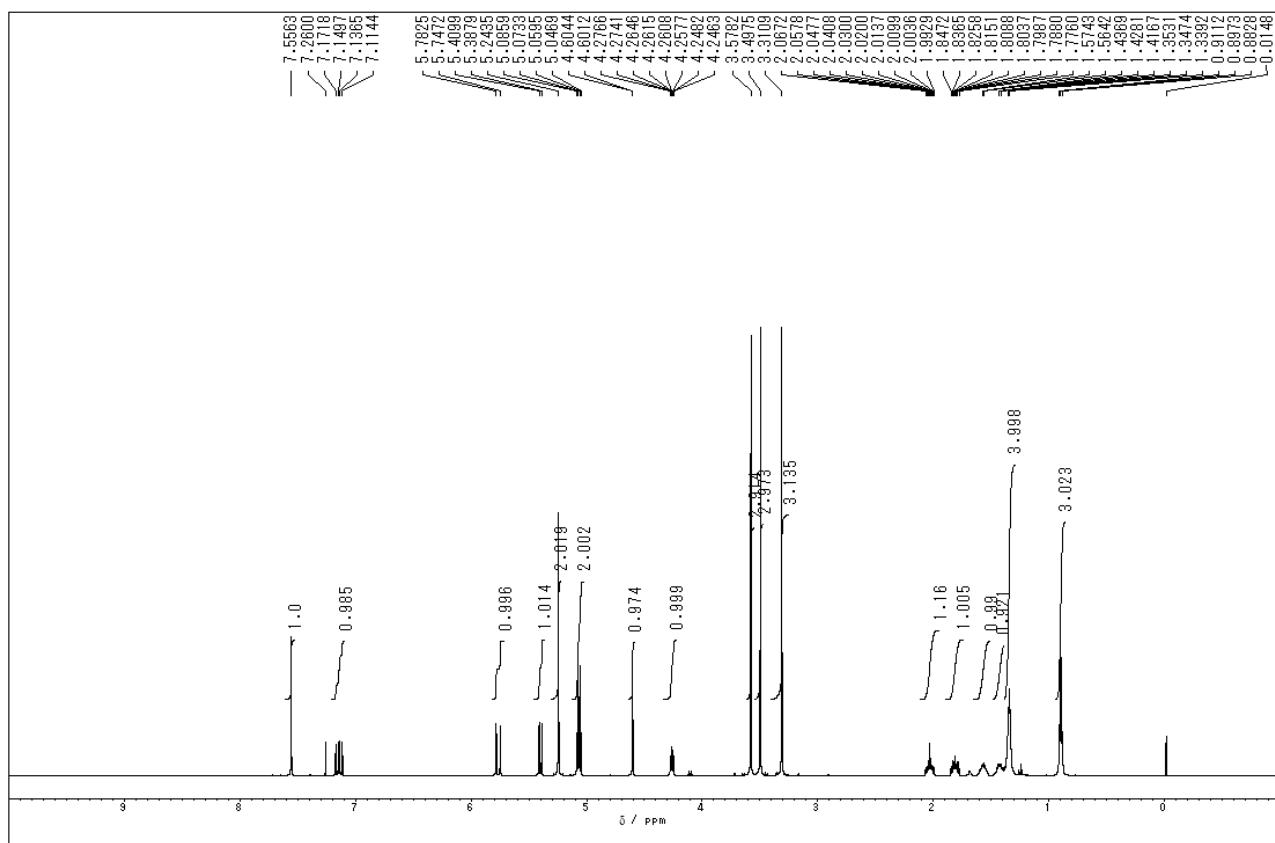


<sup>13</sup>C-NMR (CDCl<sub>3</sub>, 125 MHz)

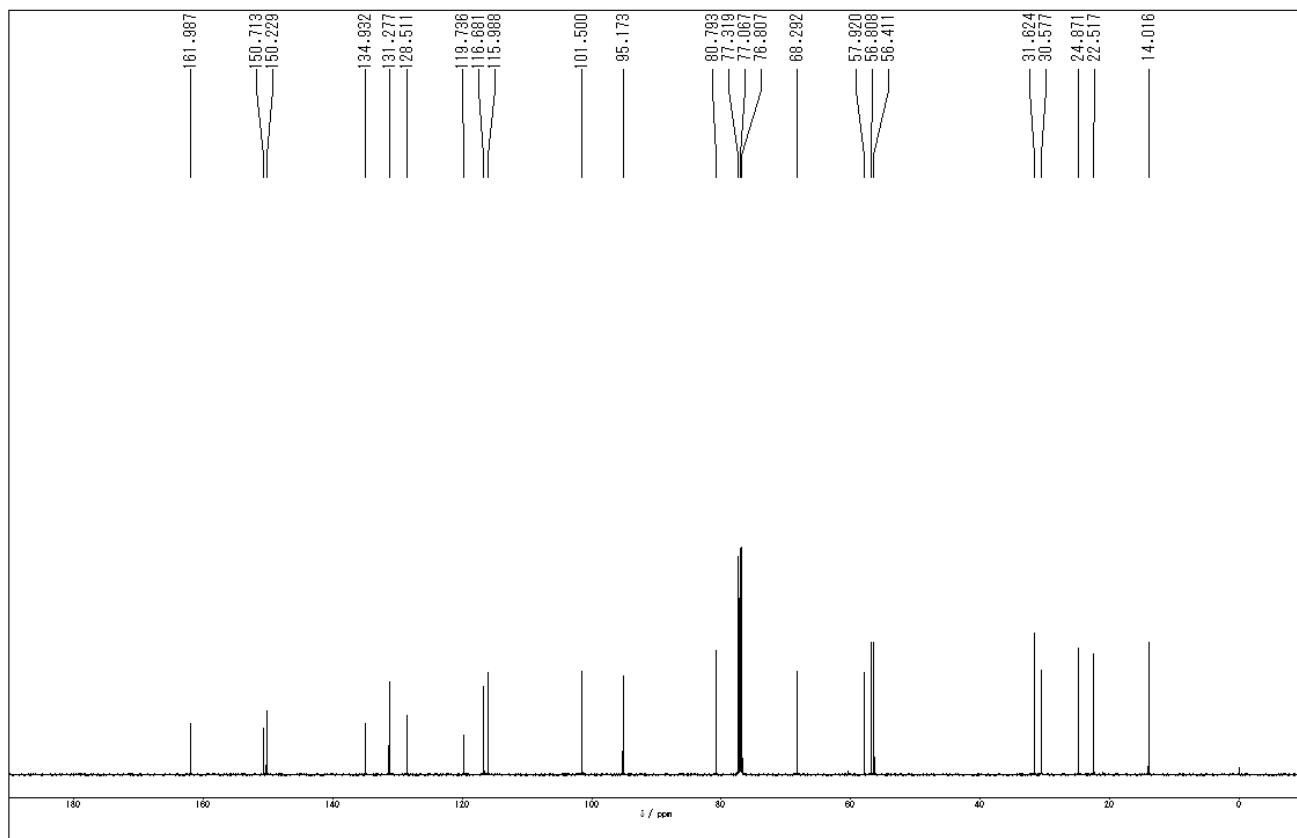


## Compound 7a

<sup>1</sup>H-NMR (CDCl<sub>3</sub>, 500 MHz)

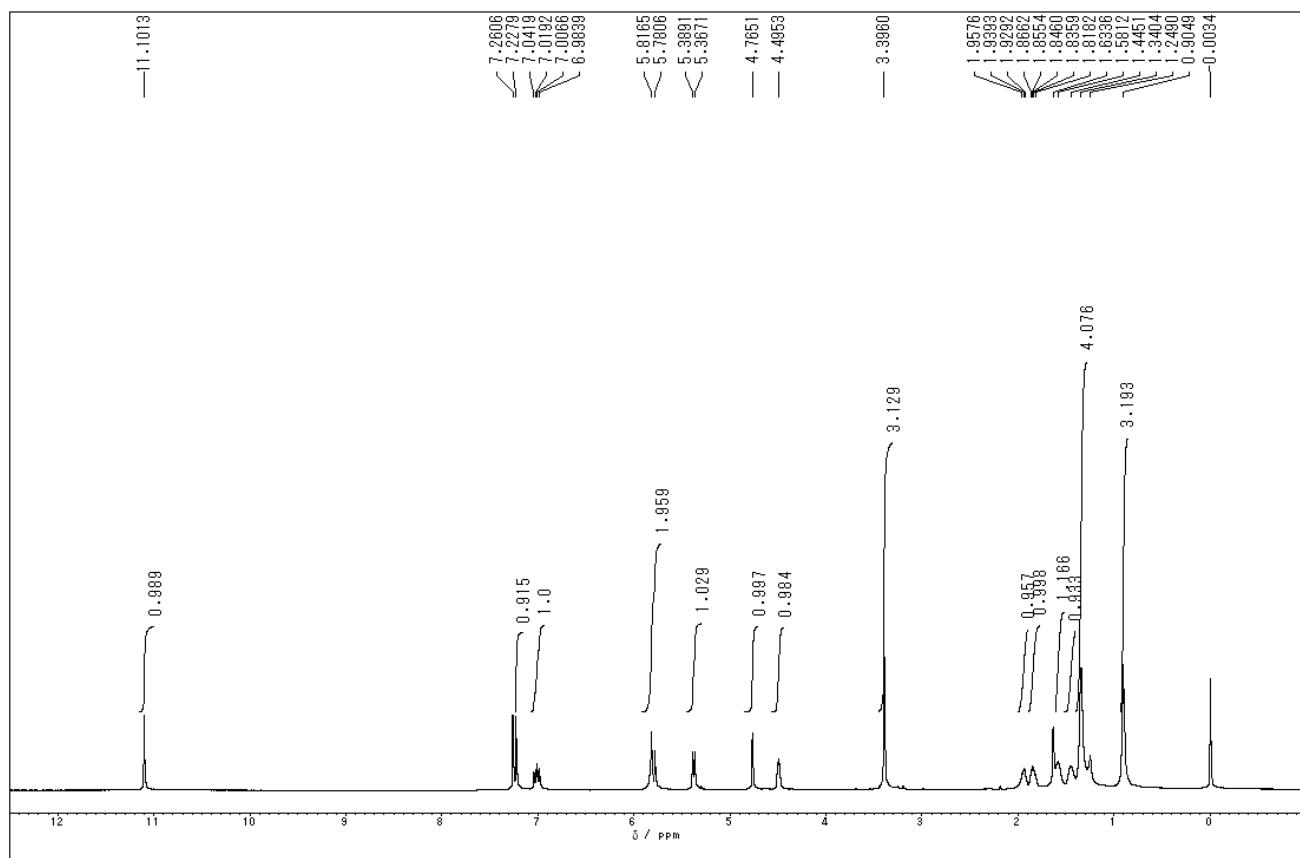


<sup>13</sup>C-NMR (CDCl<sub>3</sub>, 125 MHz)

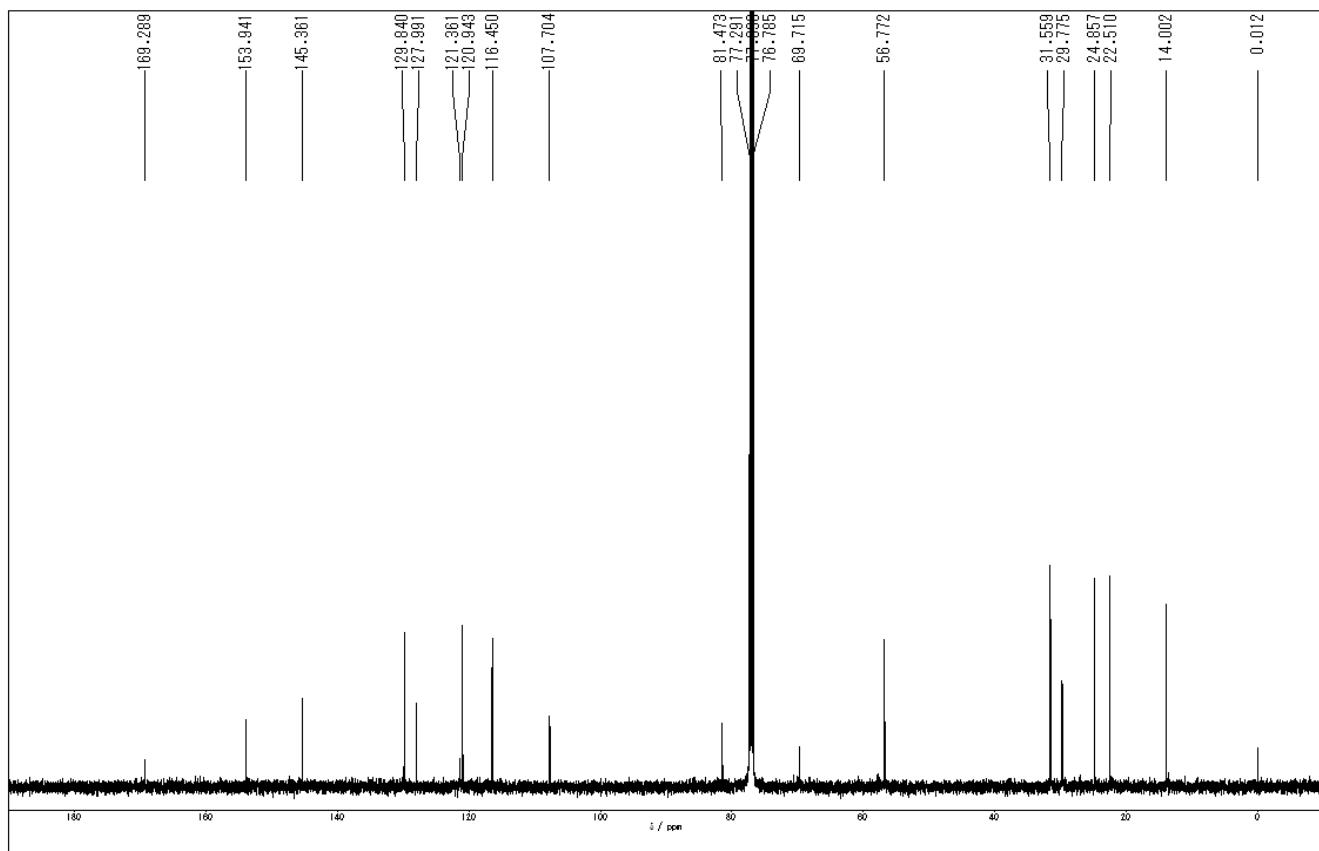


### Compound 7

<sup>1</sup>H-NMR (CDCl<sub>3</sub>, 500 MHz)

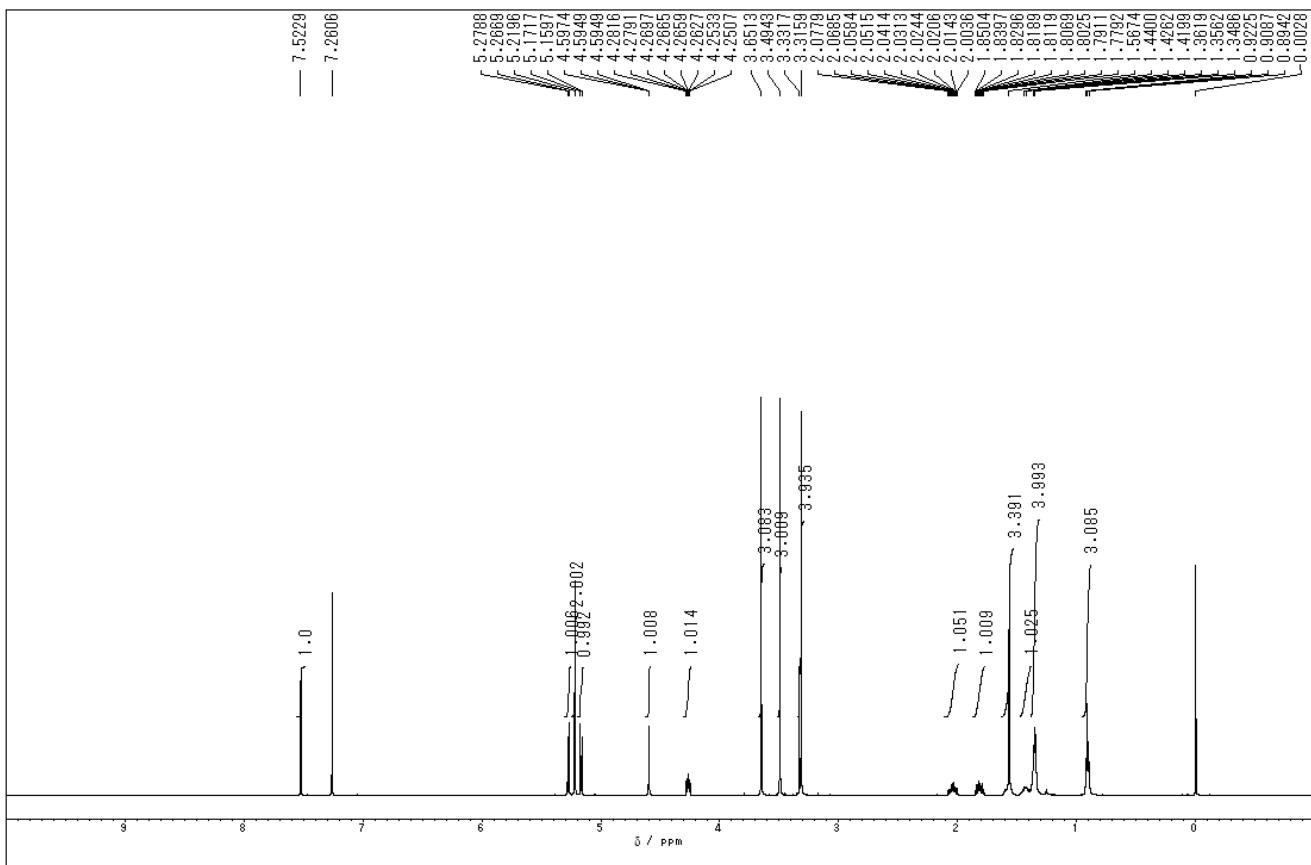


<sup>13</sup>C-NMR (CDCl<sub>3</sub>, 125 MHz)

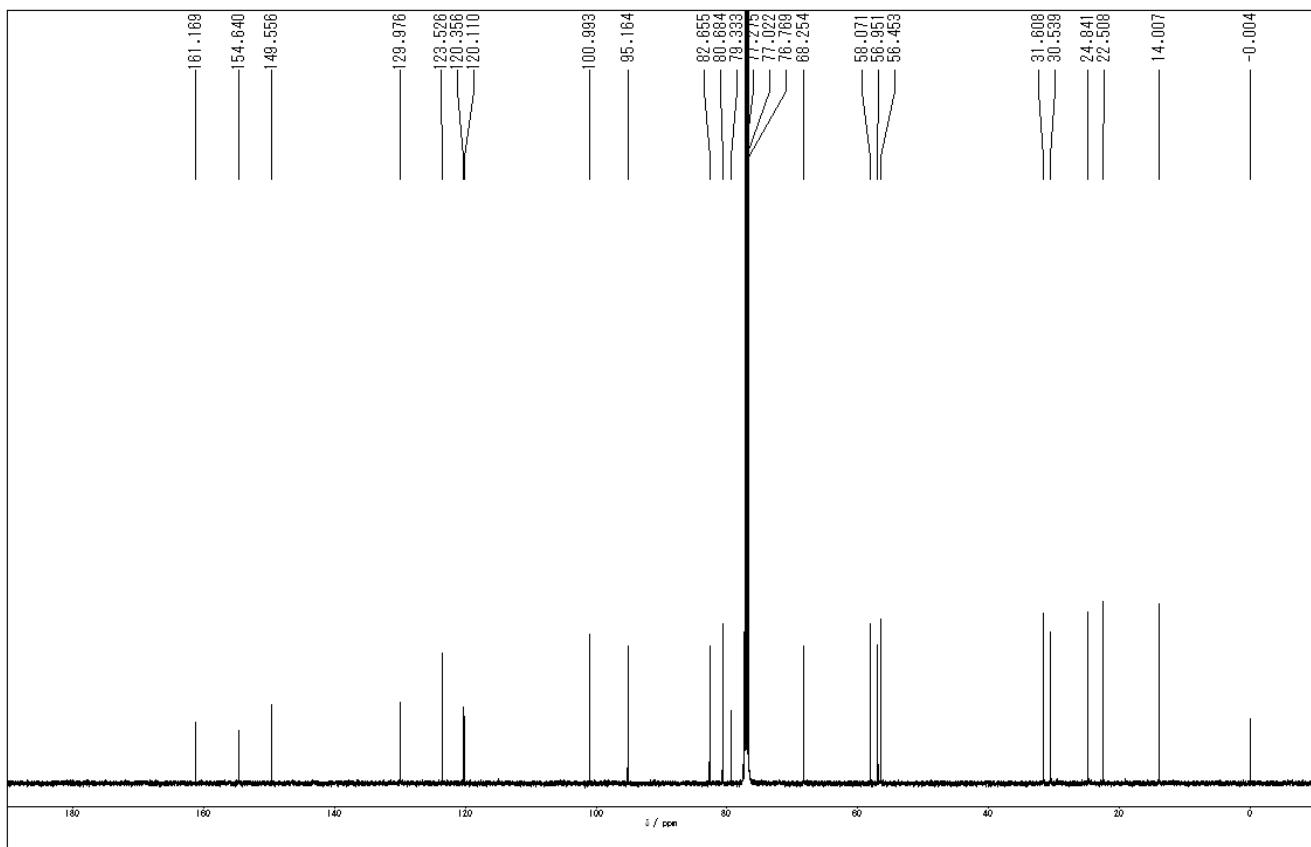


### Compound 8a

<sup>1</sup>H-NMR (CDCl<sub>3</sub>, 500 MHz)

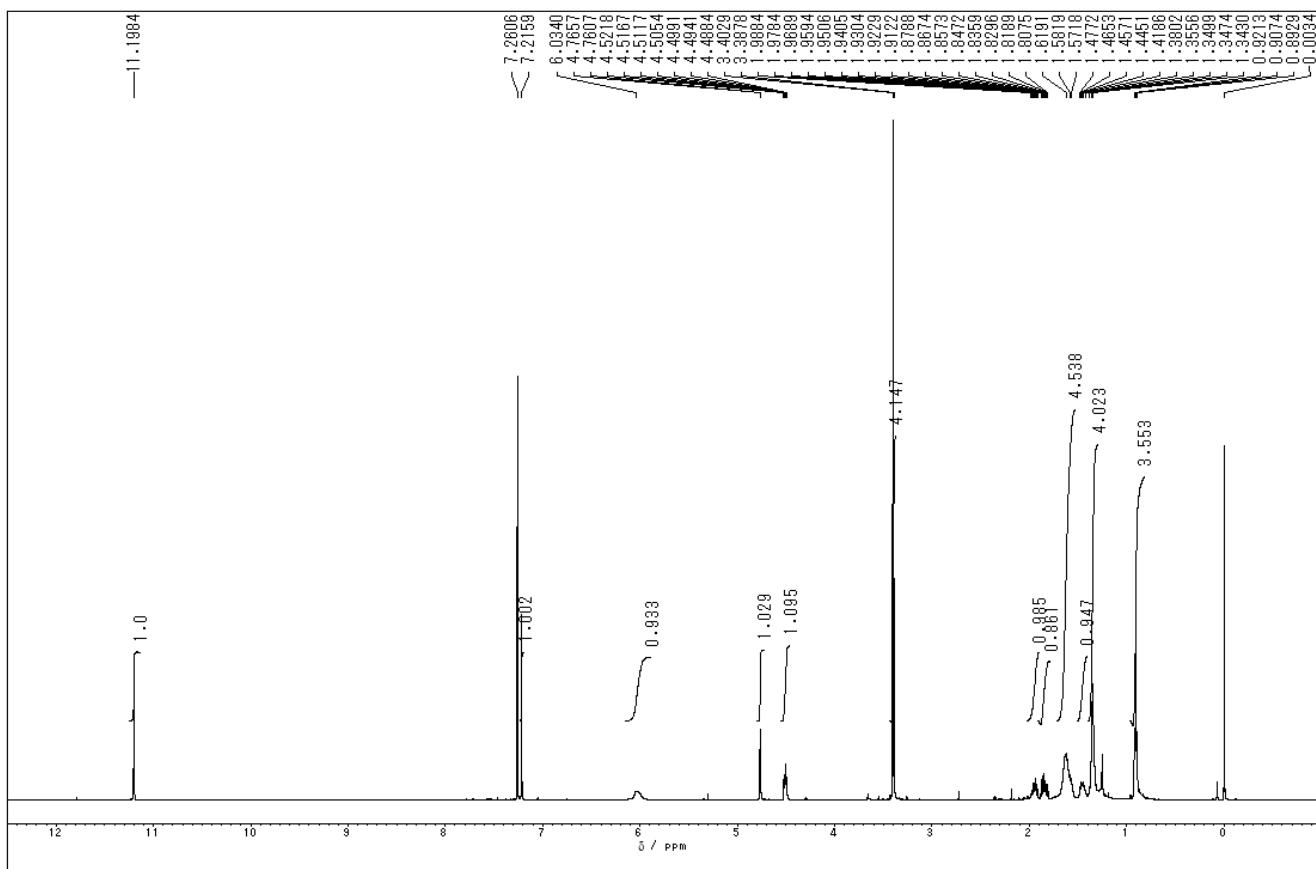


<sup>13</sup>C-NMR (CDCl<sub>3</sub>, 125 MHz)

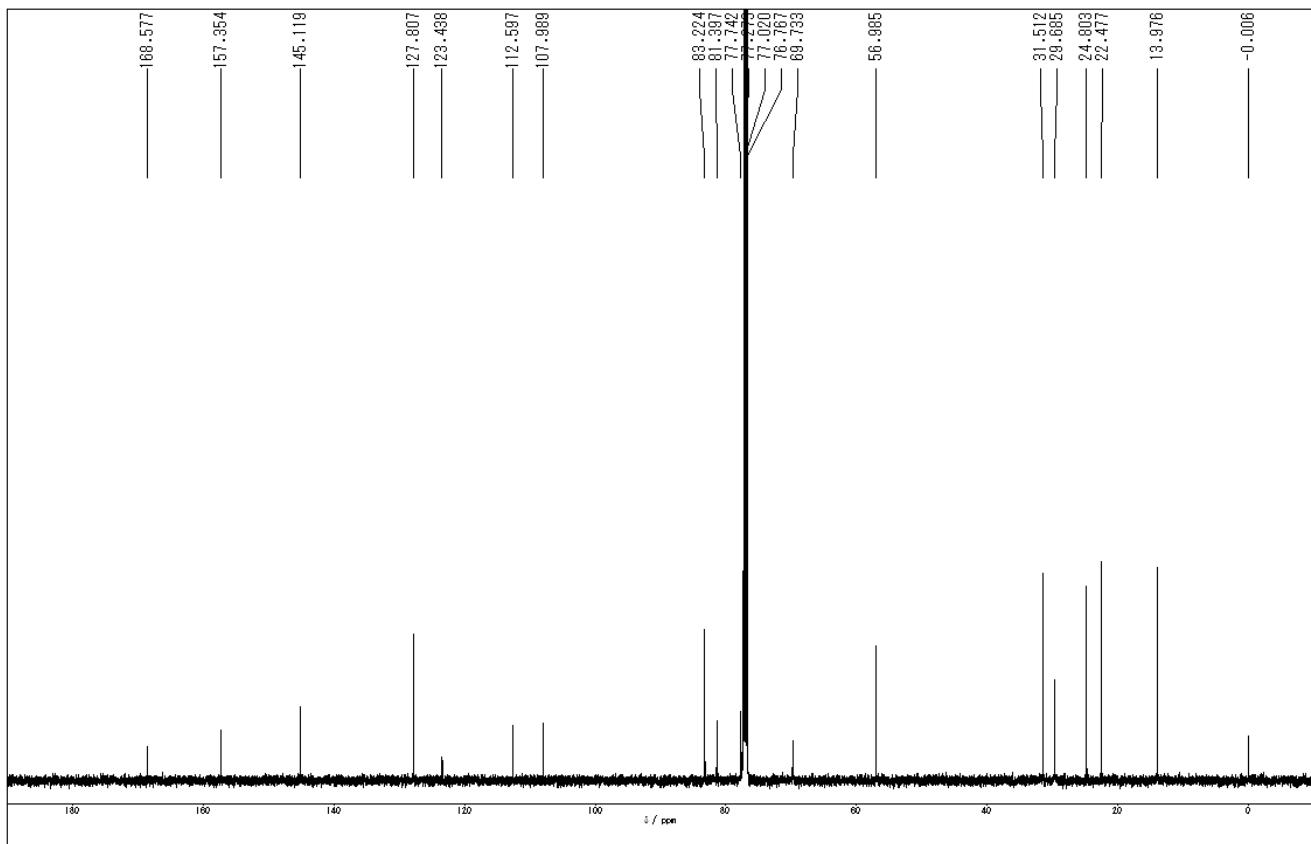


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<sup>1</sup>H-NMR (CDCl<sub>3</sub>, 500 MHz)

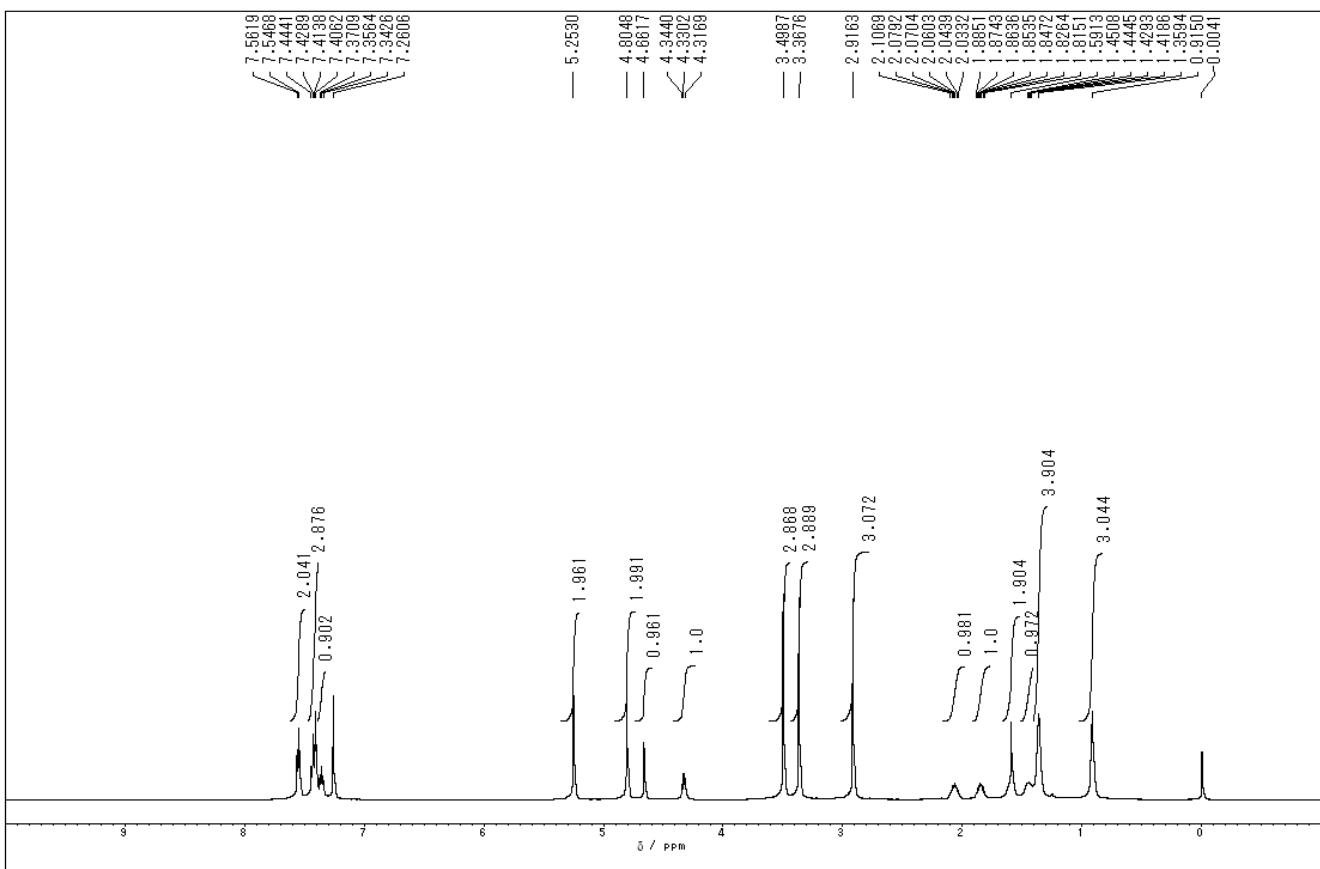


<sup>13</sup>C-NMR (CDCl<sub>3</sub>, 125 MHz)

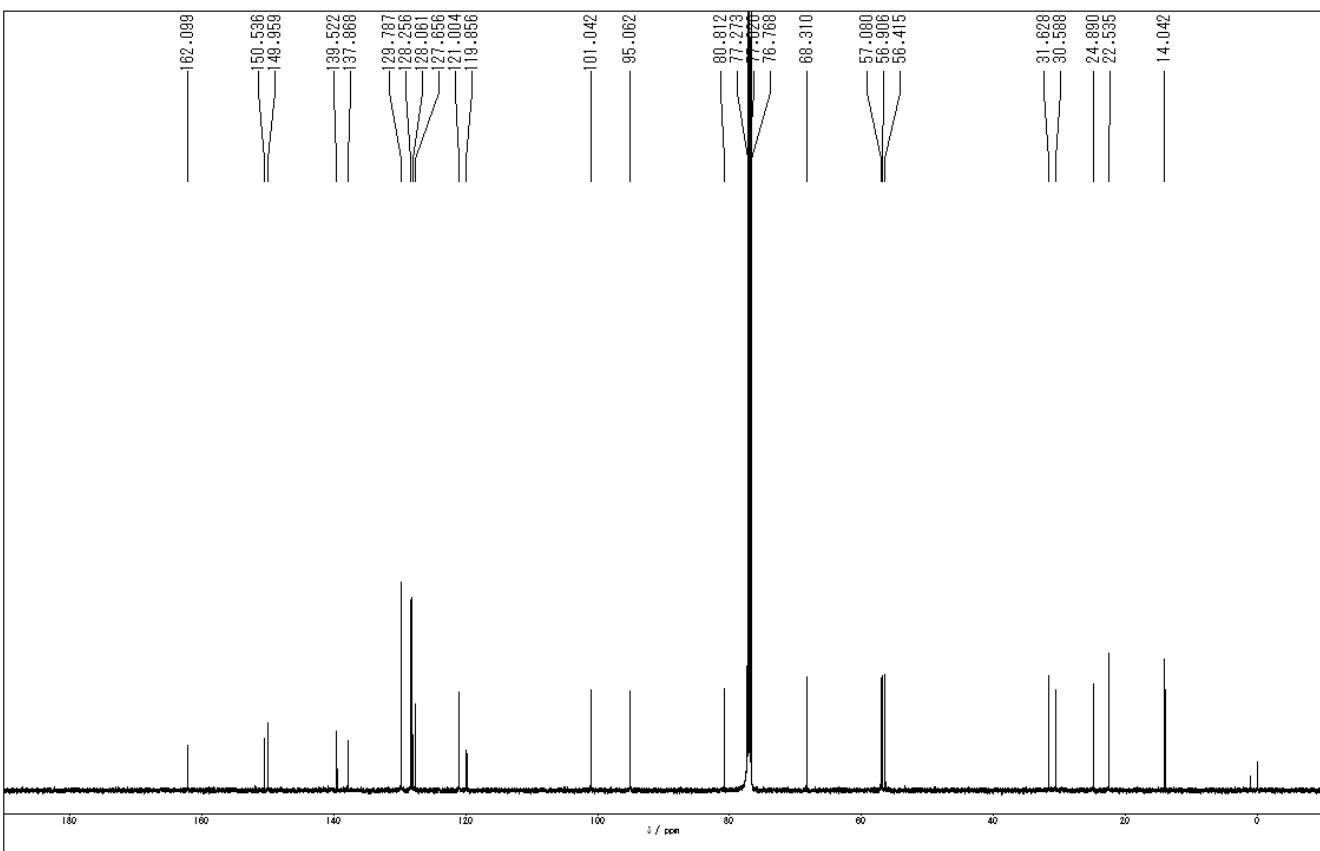


### Compound 9a

<sup>1</sup>H-NMR (CDCl<sub>3</sub>, 500 MHz)

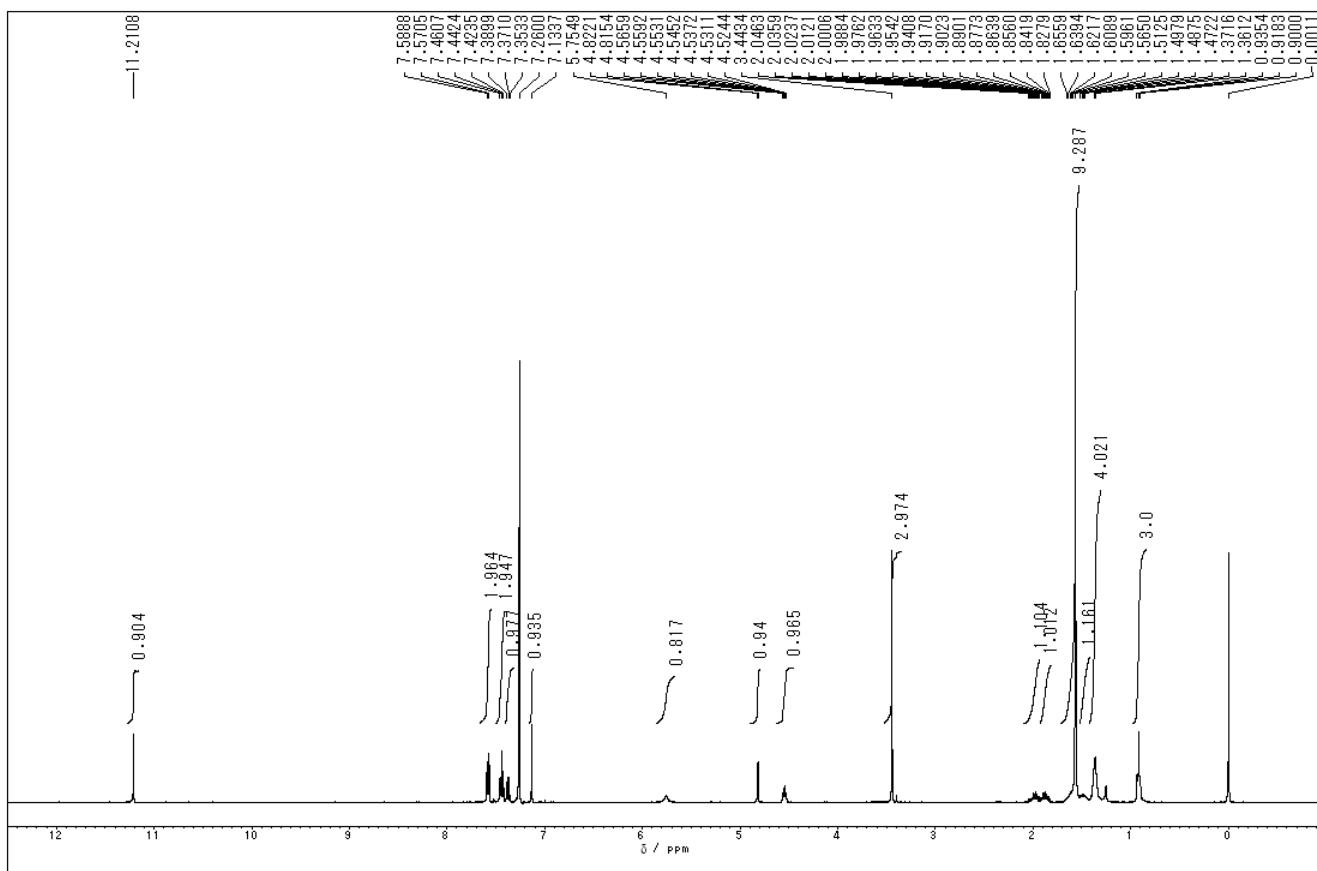


<sup>13</sup>C-NMR (CDCl<sub>3</sub>, 125 MHz)

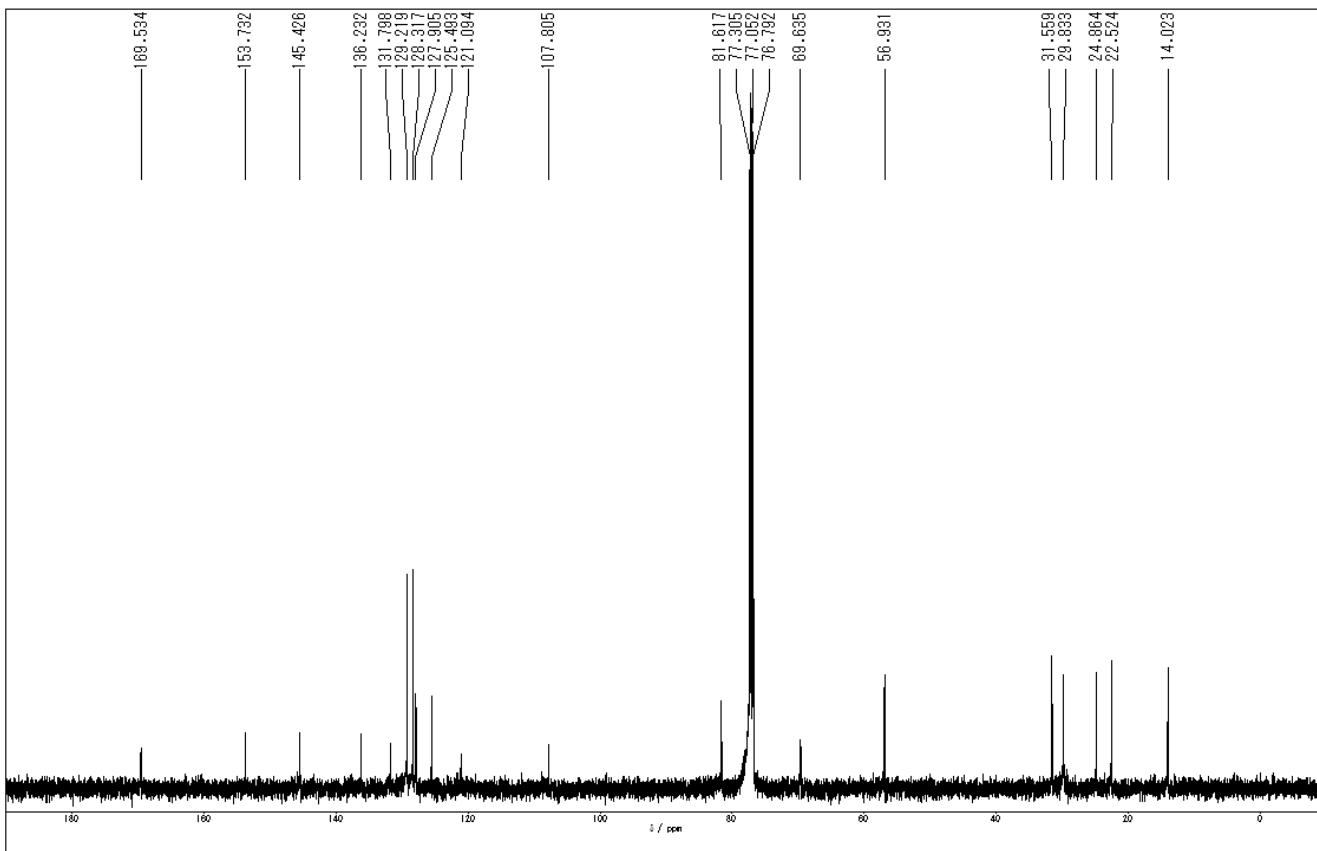


## Compound 9

<sup>1</sup>H-NMR (CDCl<sub>3</sub>, 400 MHz)

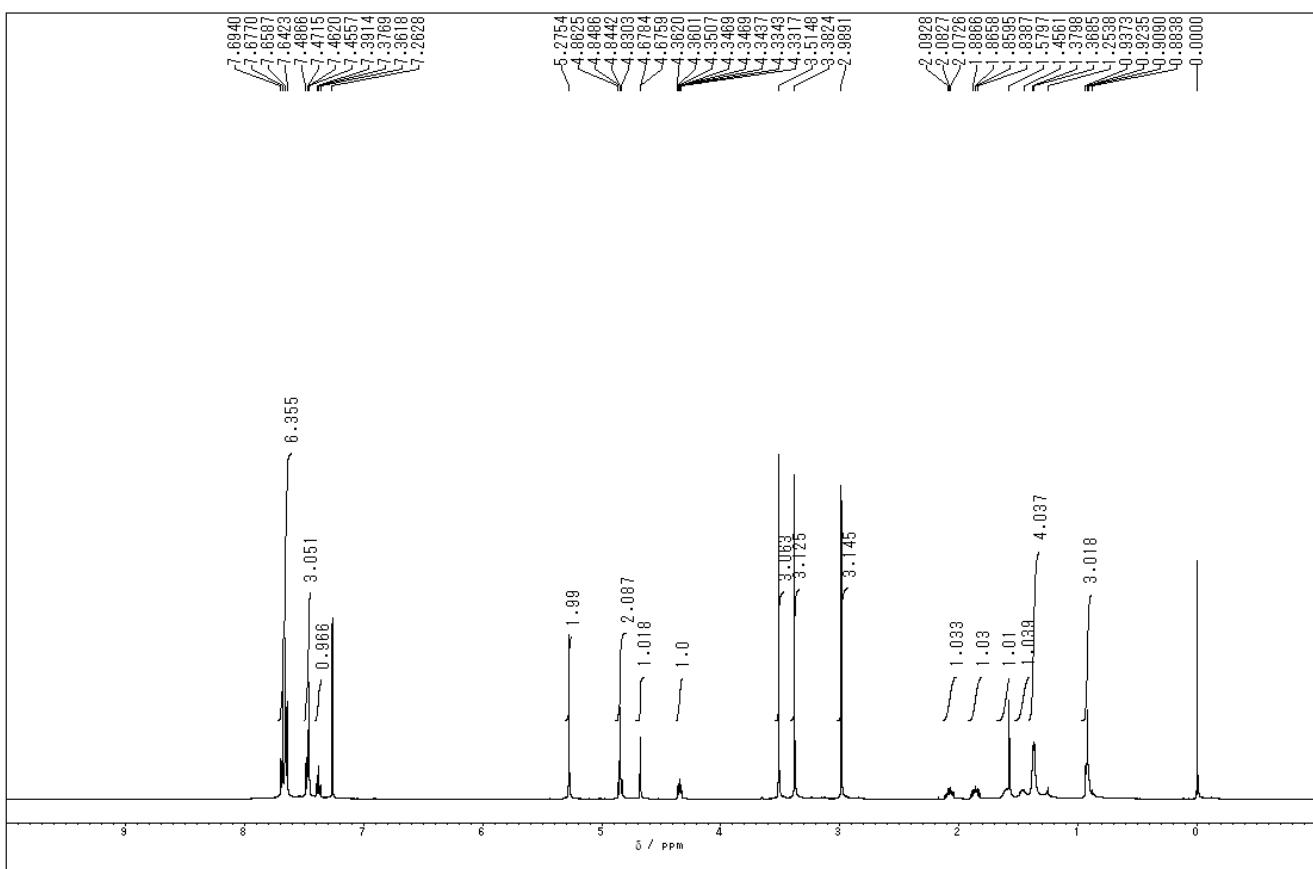


<sup>13</sup>C-NMR (CDCl<sub>3</sub>, 125 MHz)

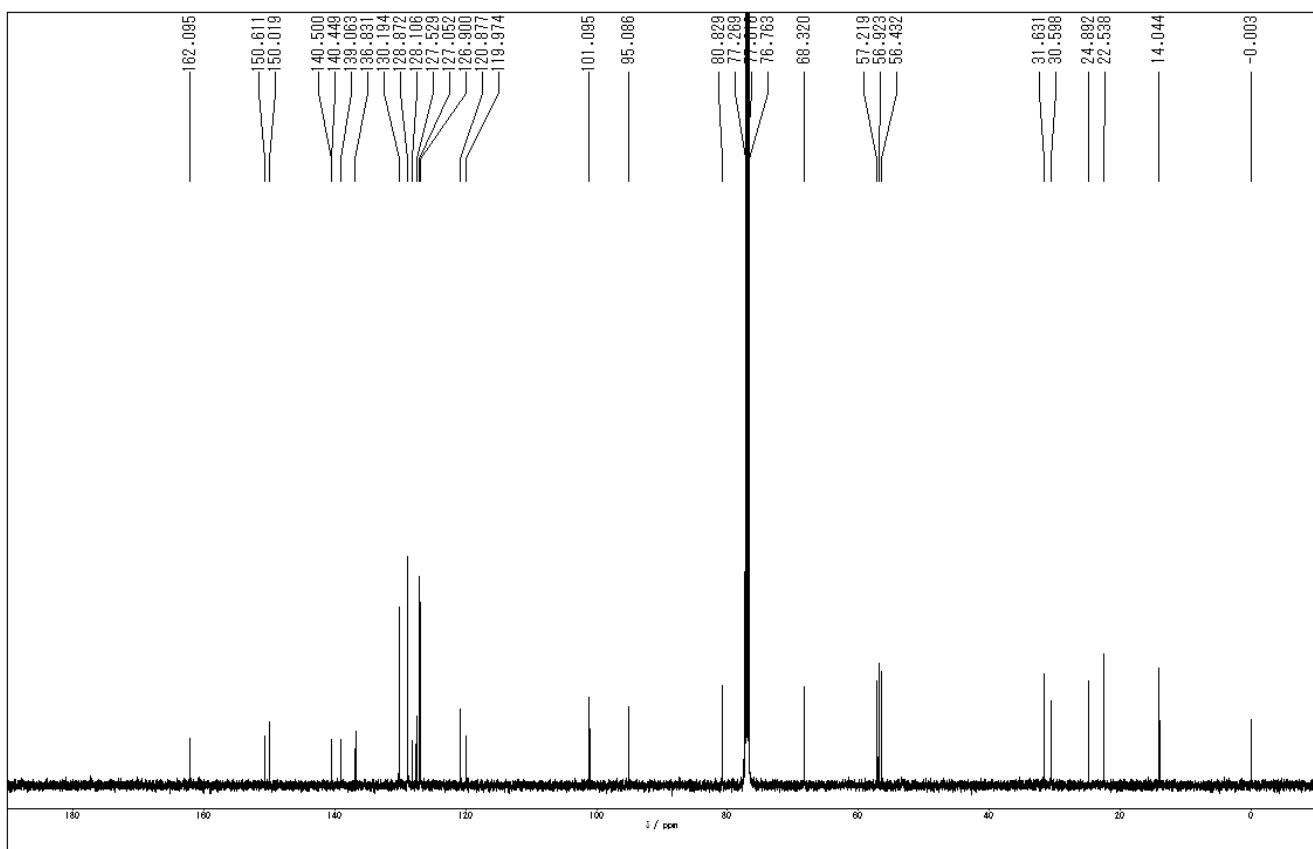


**Compound 10a**

<sup>1</sup>H-NMR (CDCl<sub>3</sub>, 500 MHz)

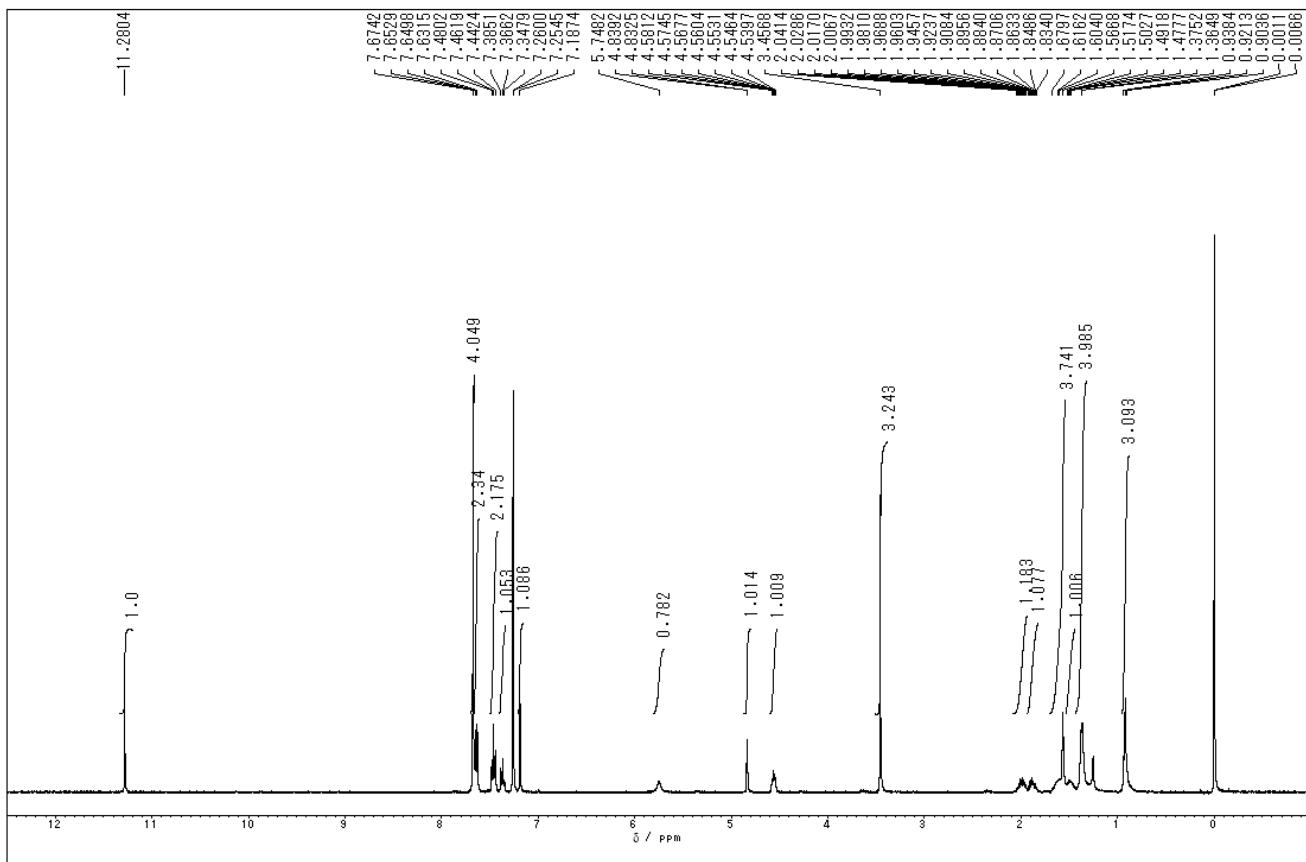


<sup>13</sup>C-NMR (CDCl<sub>3</sub>, 125 MHz)

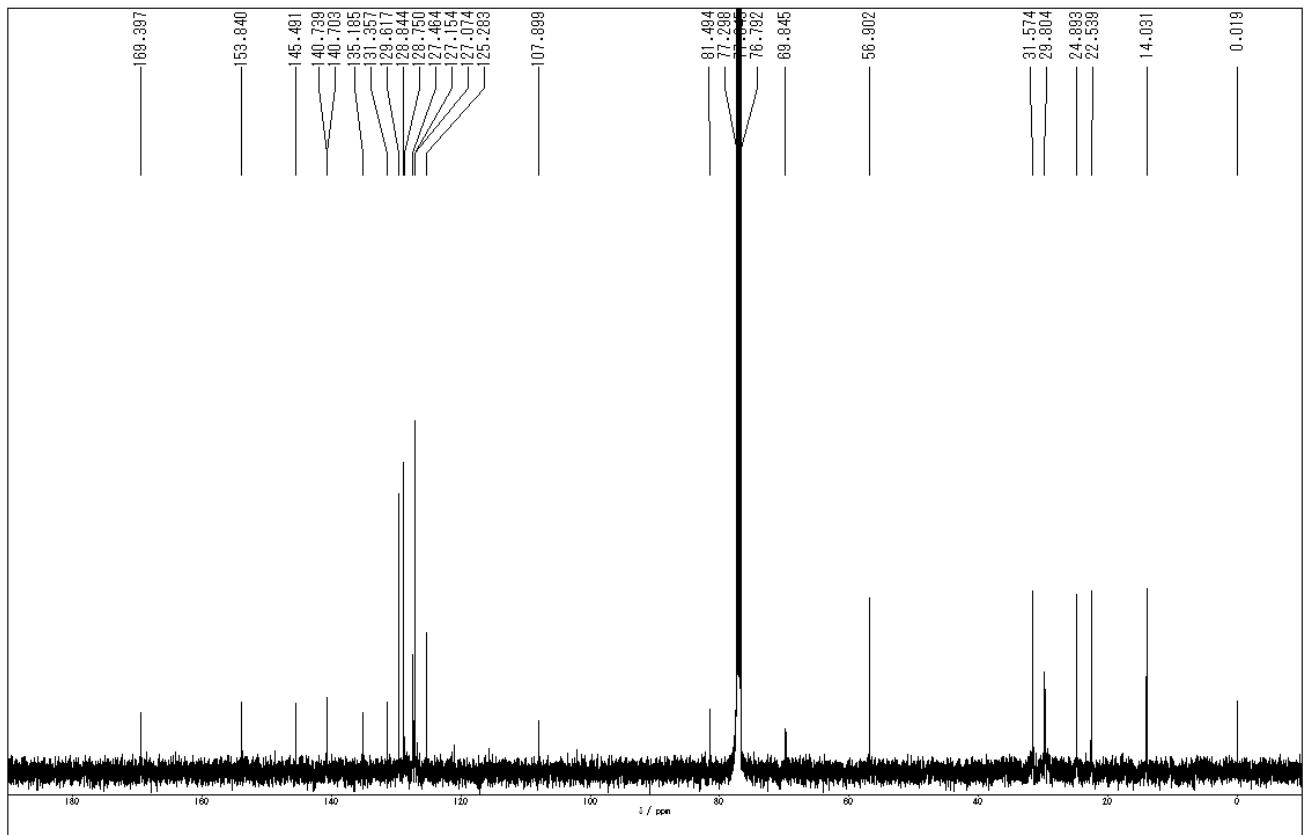


## Compound 10

<sup>1</sup>H-NMR (CDCl<sub>3</sub>, 400 MHz)

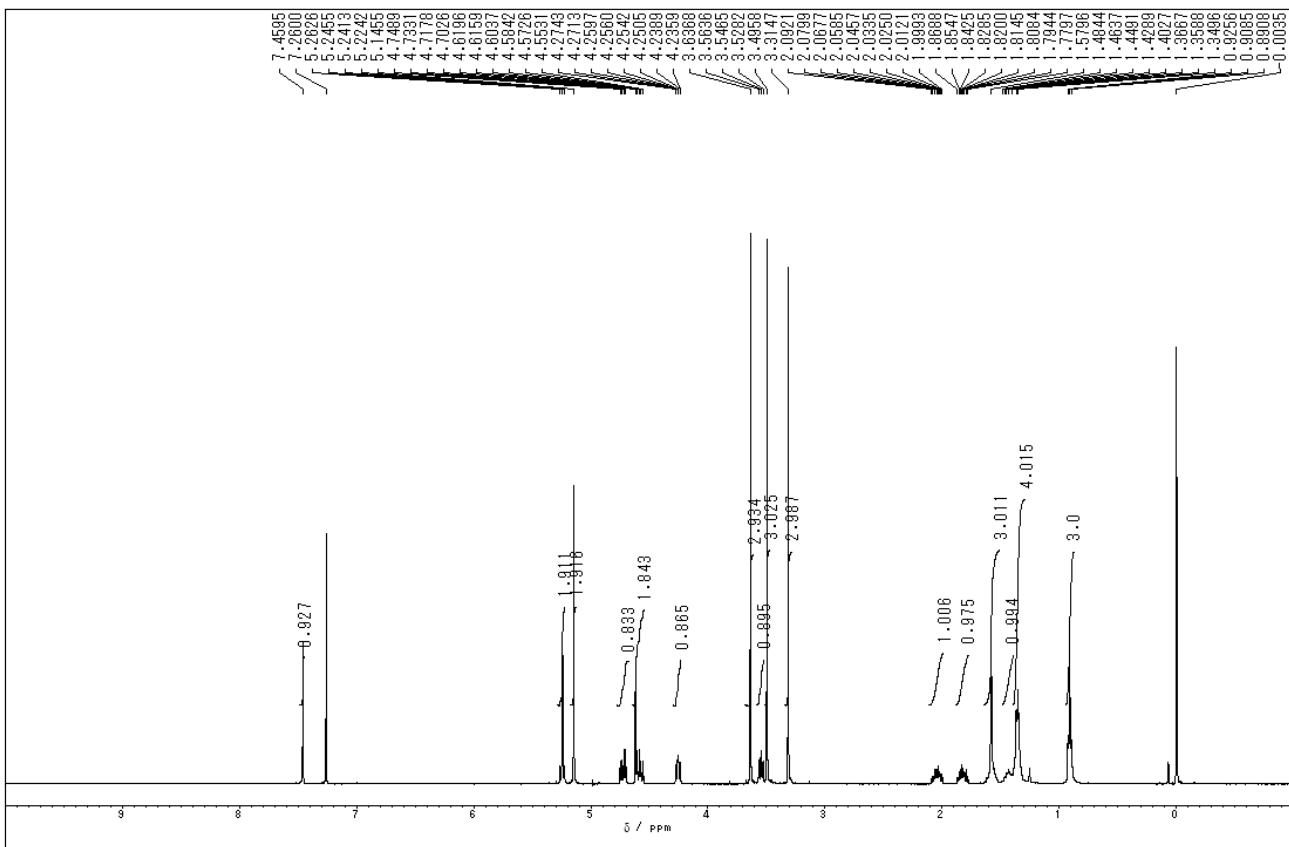


<sup>13</sup>C-NMR (CDCl<sub>3</sub>, 125 MHz)

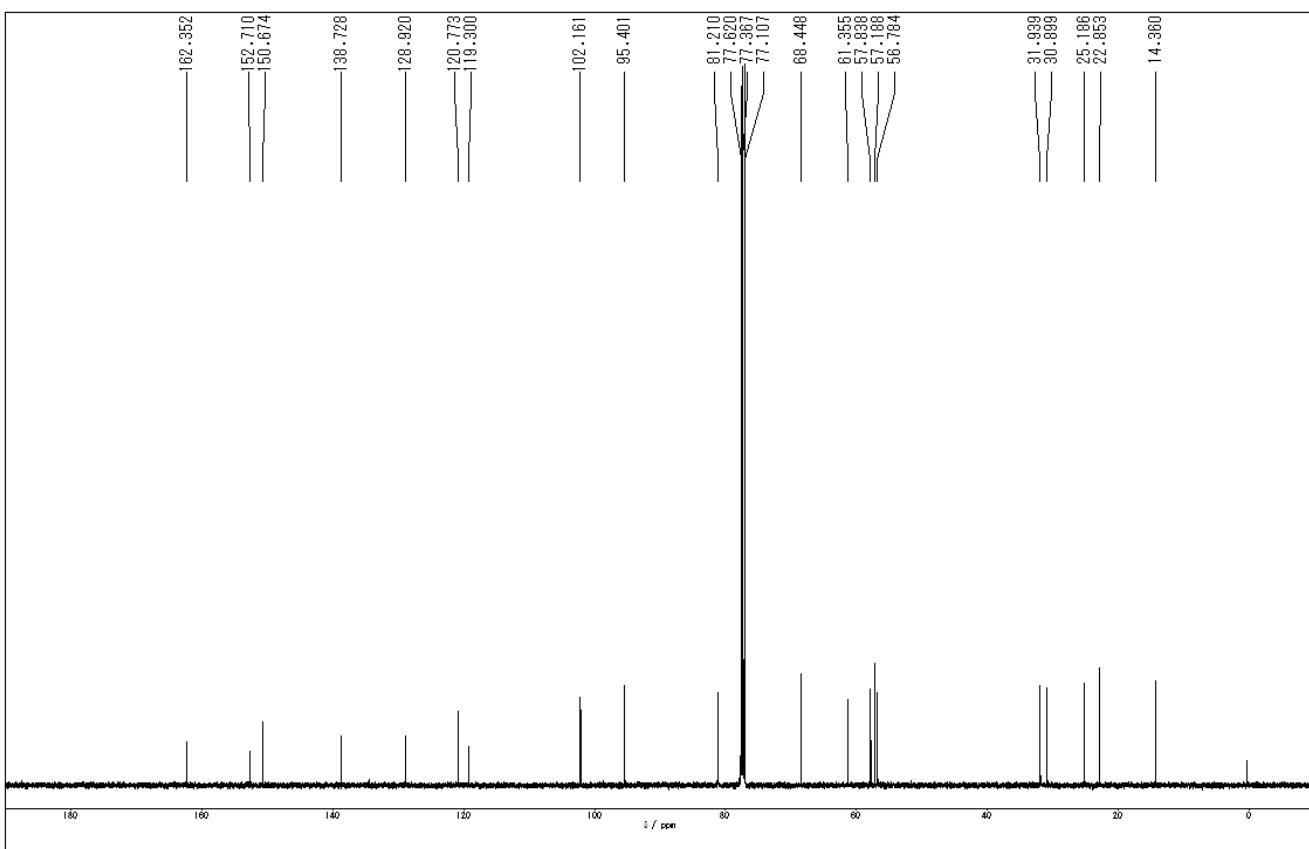


### Compound 11a

<sup>1</sup>H-NMR (CDCl<sub>3</sub>, 400 MHz)

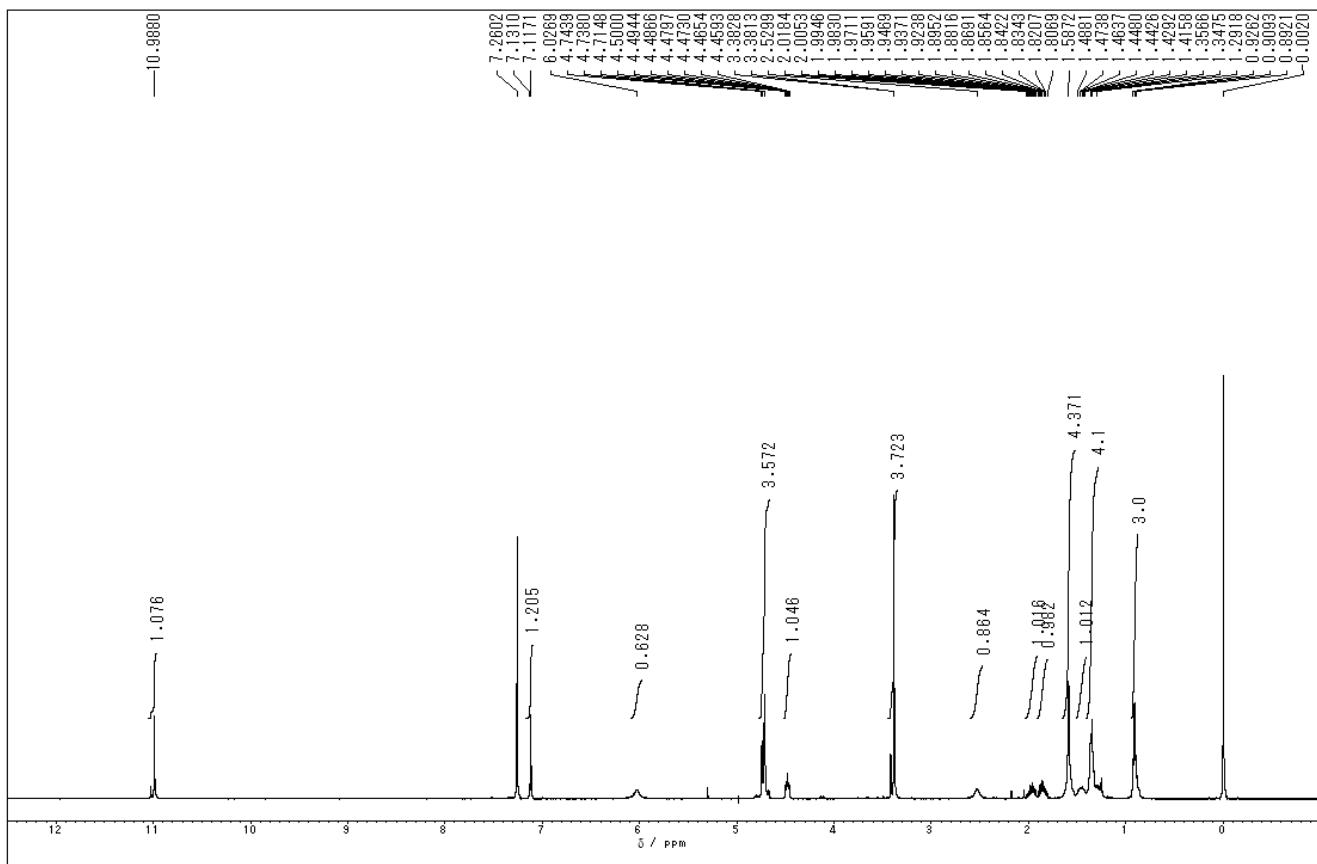


<sup>13</sup>C-NMR (CDCl<sub>3</sub>, 125 MHz)

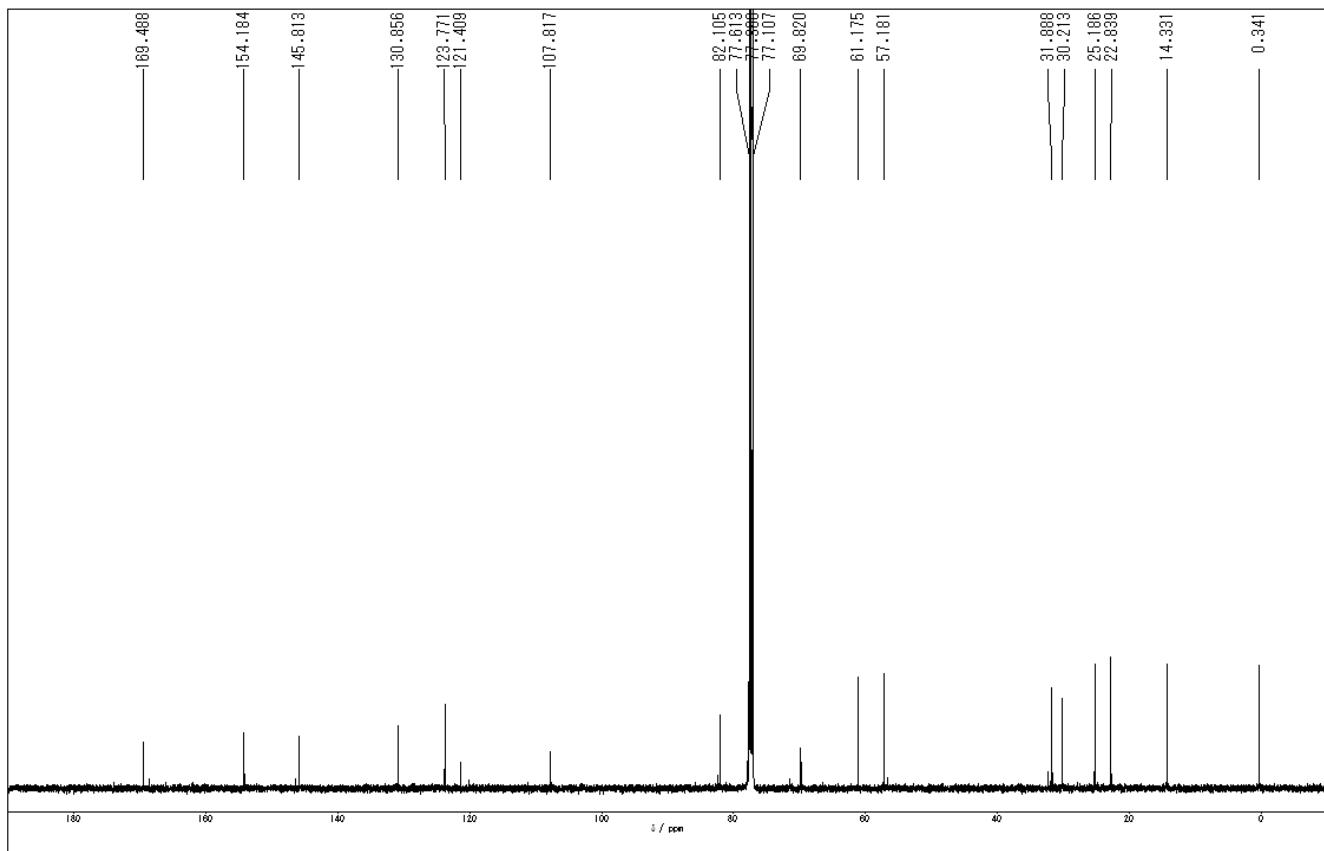


## Compound 11

<sup>1</sup>H-NMR (CDCl<sub>3</sub>, 400 MHz)

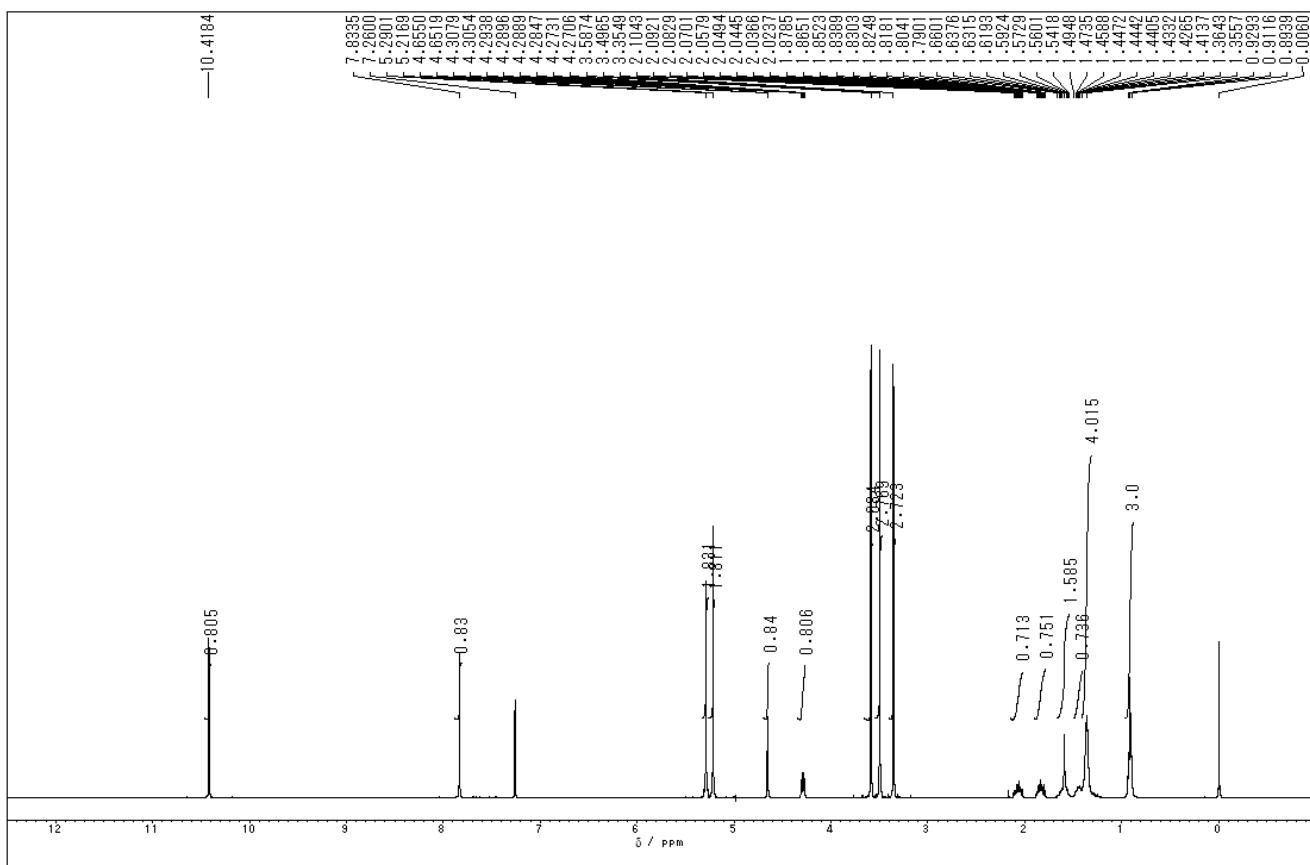


<sup>13</sup>C-NMR (CDCl<sub>3</sub>, 125 MHz)

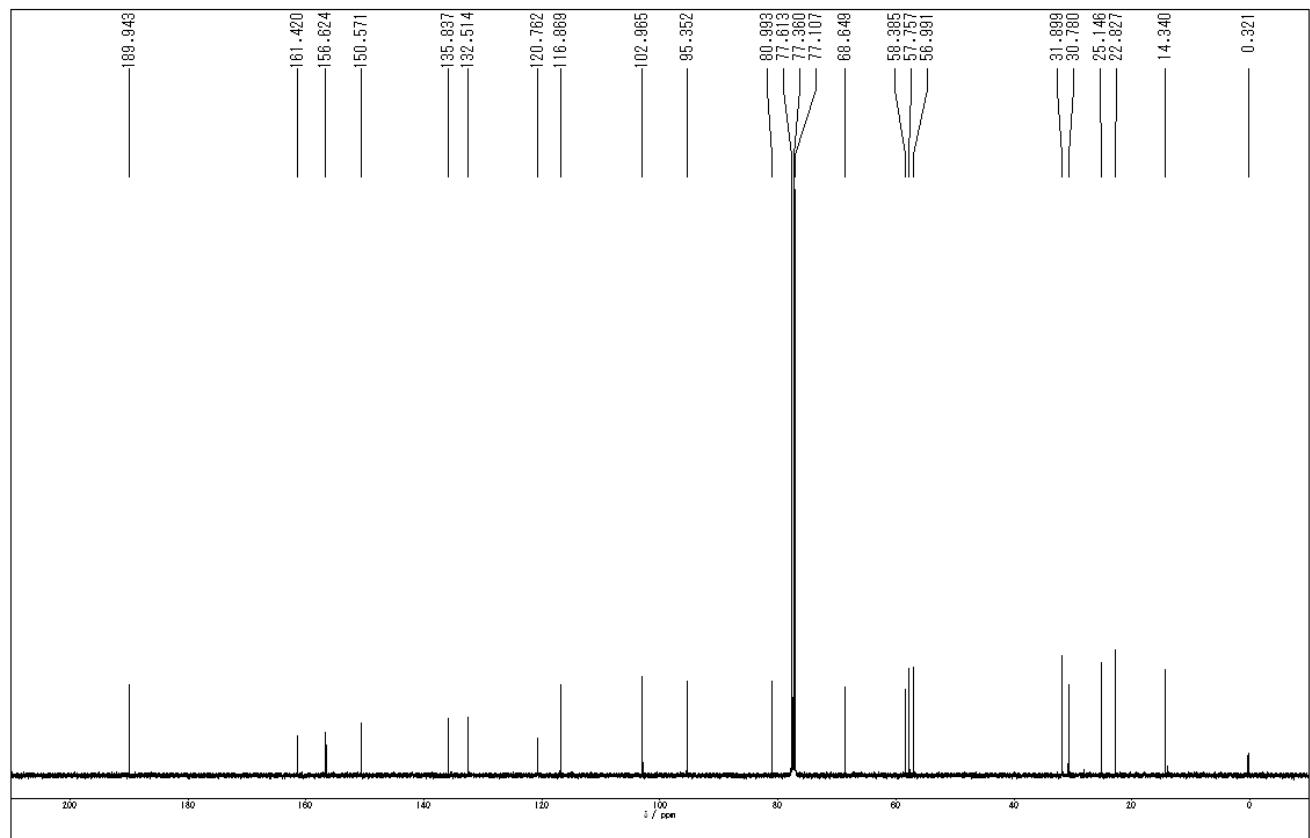


**Compound 12a**

<sup>1</sup>H-NMR (CDCl<sub>3</sub>, 400 MHz)

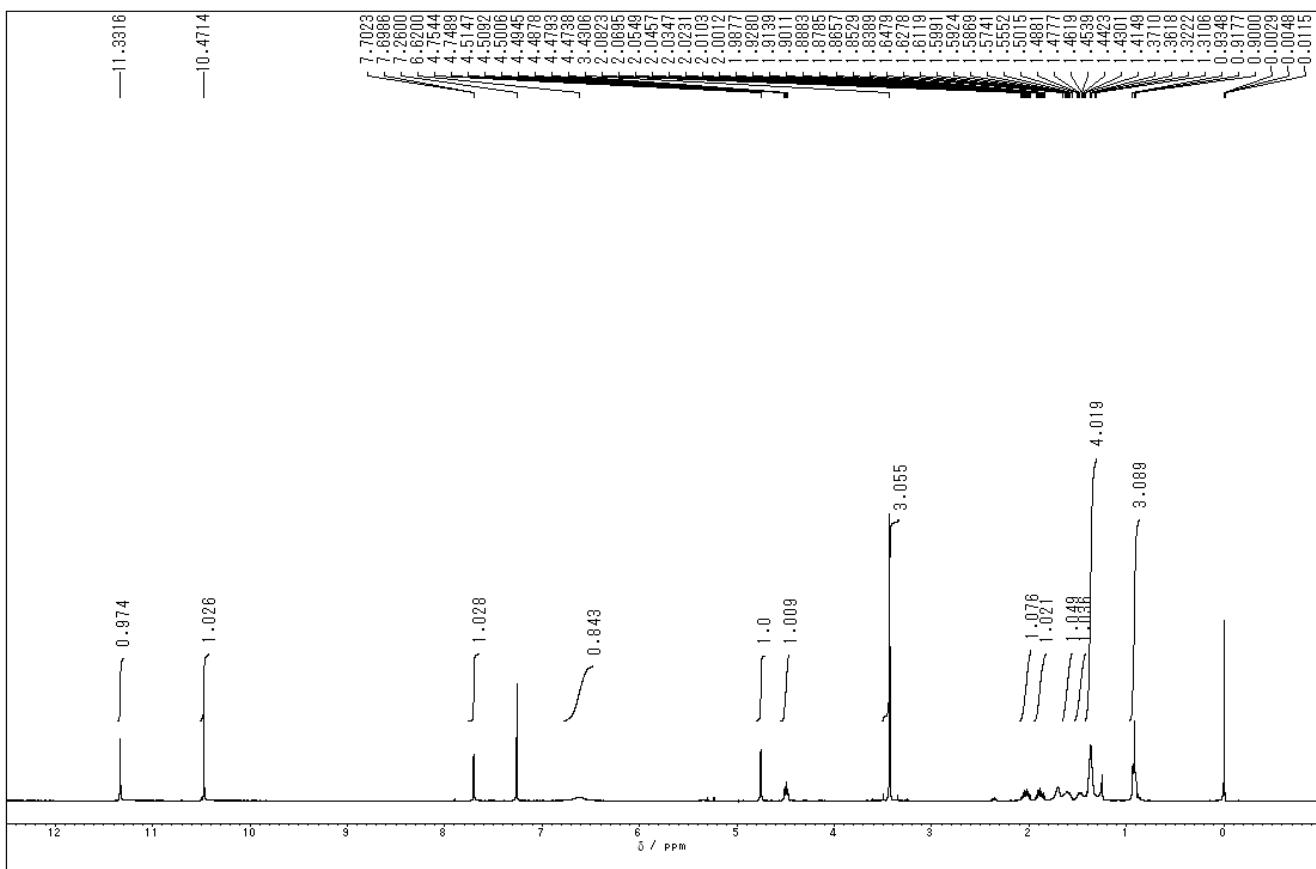


<sup>13</sup>C-NMR (CDCl<sub>3</sub>, 125 MHz)

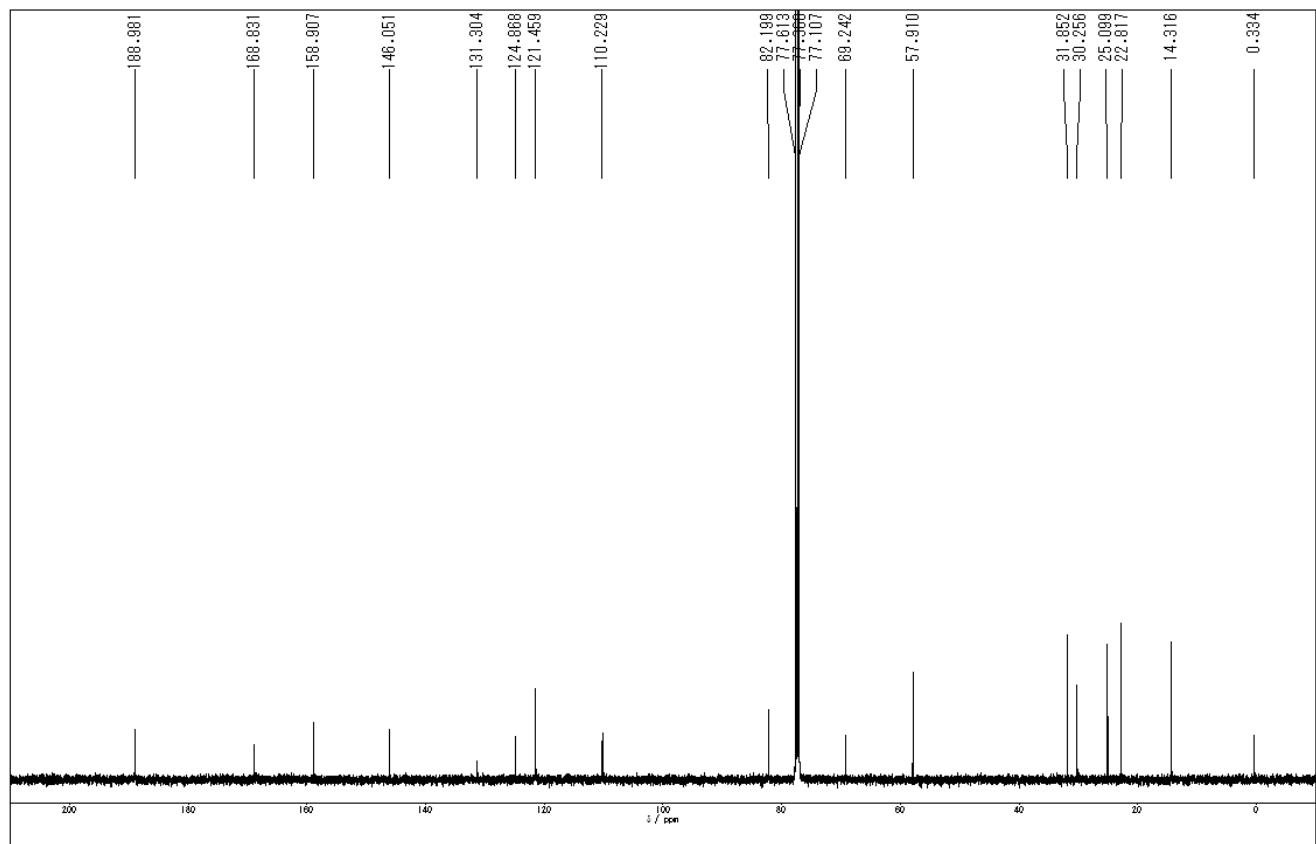


## Compound 12

<sup>1</sup>H-NMR (CDCl<sub>3</sub>, 400 MHz)

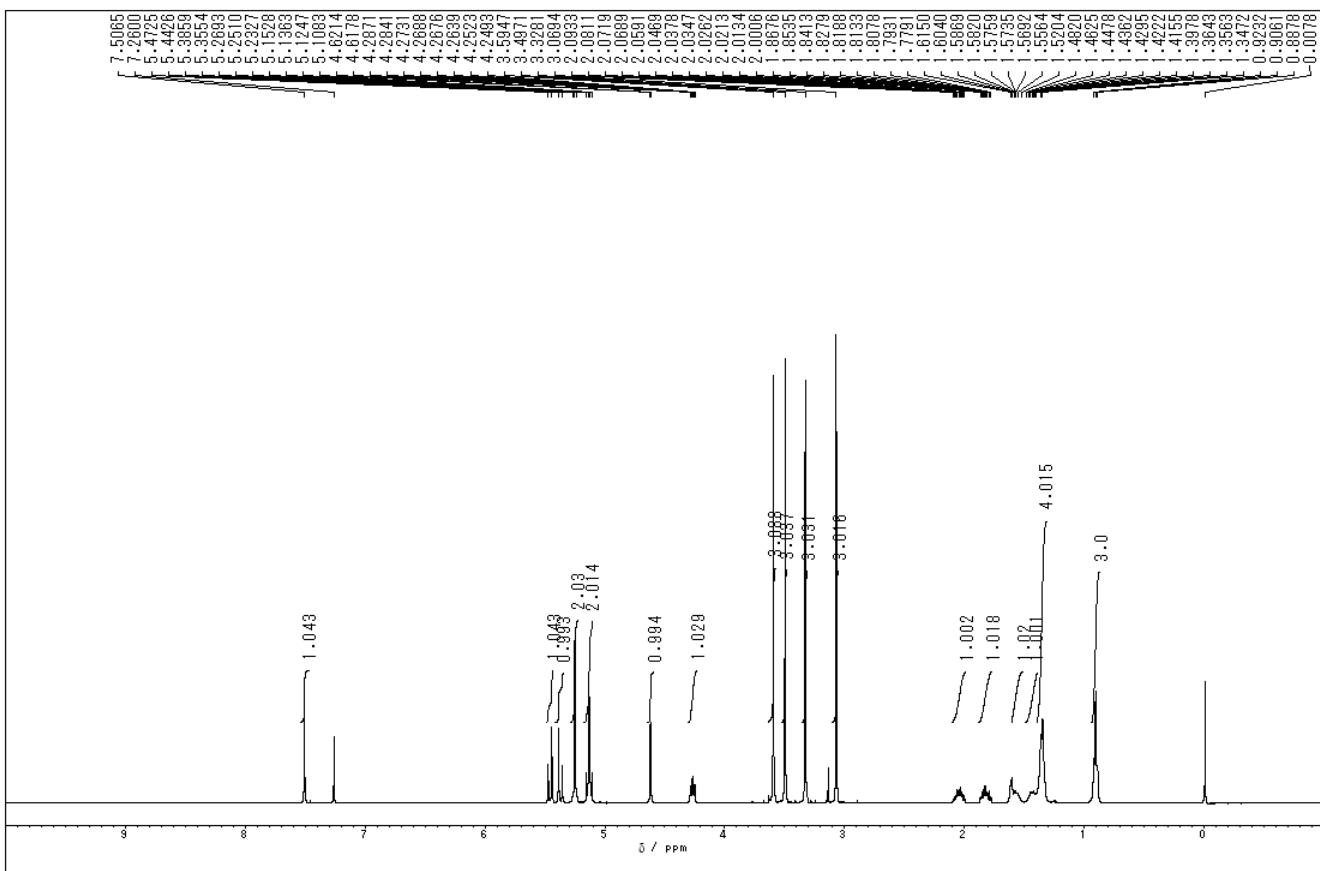


<sup>13</sup>C-NMR (CDCl<sub>3</sub>, 125 MHz)

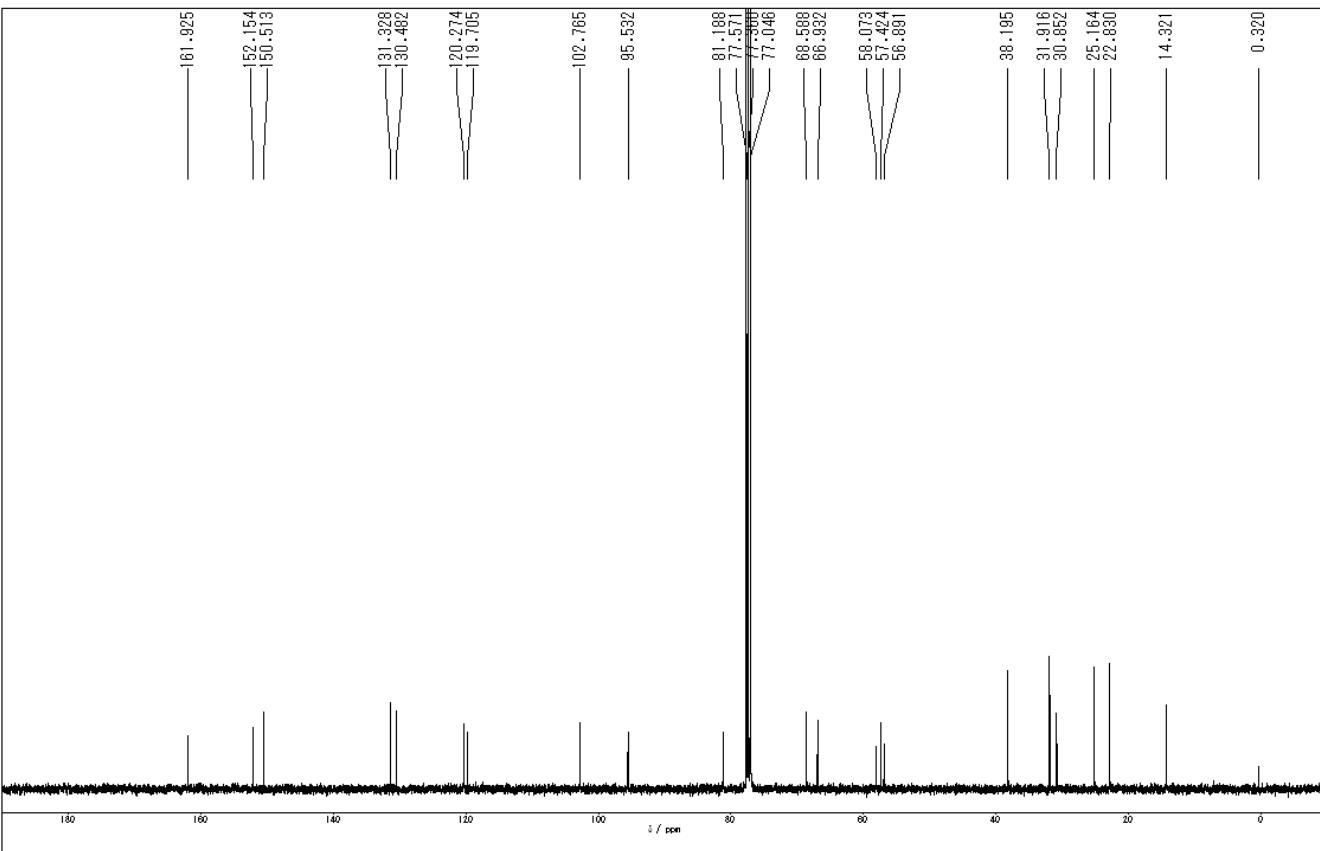


## Compound 22

<sup>1</sup>H-NMR (CDCl<sub>3</sub>, 400 MHz)

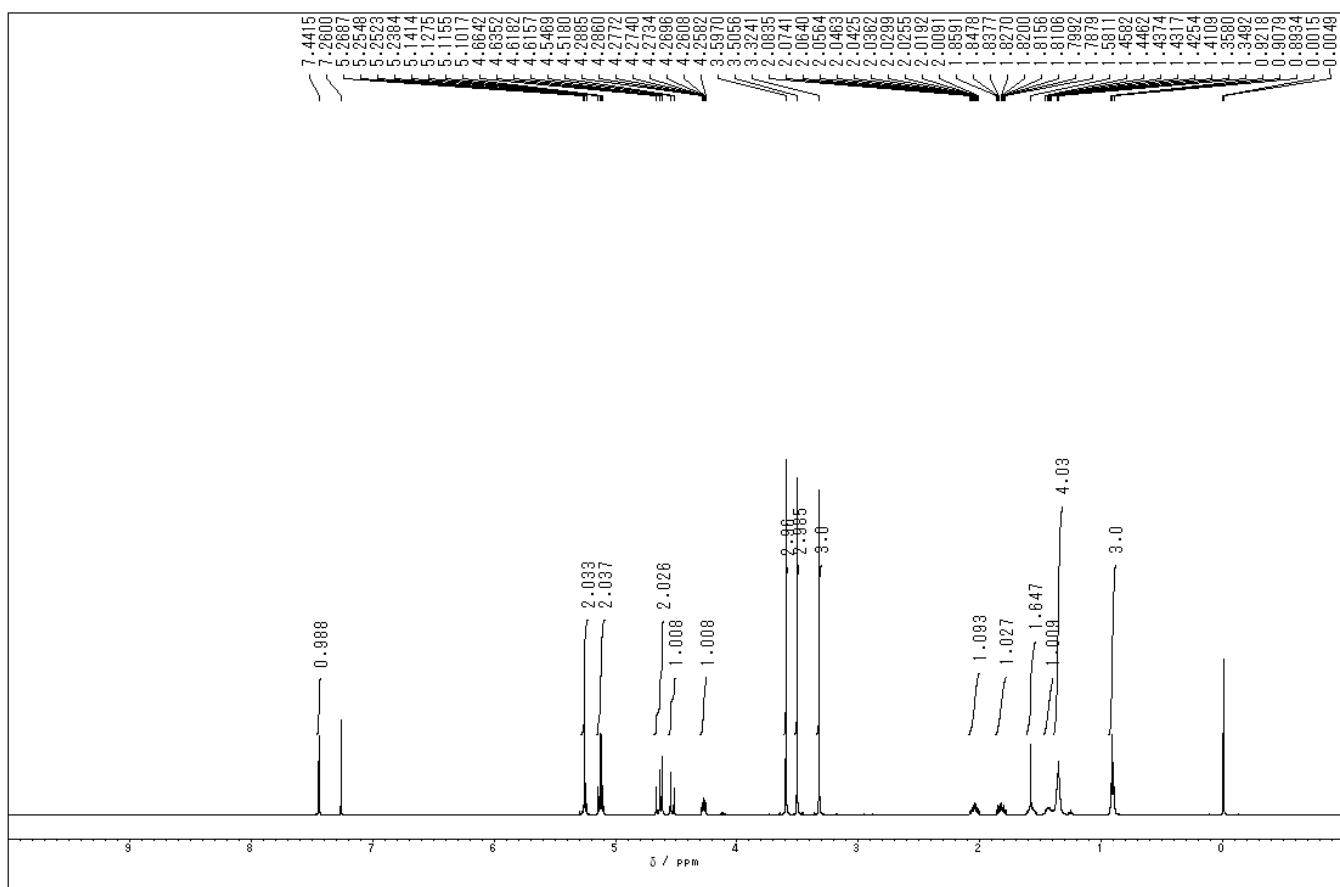


<sup>13</sup>C-NMR (CDCl<sub>3</sub>, 100 MHz)

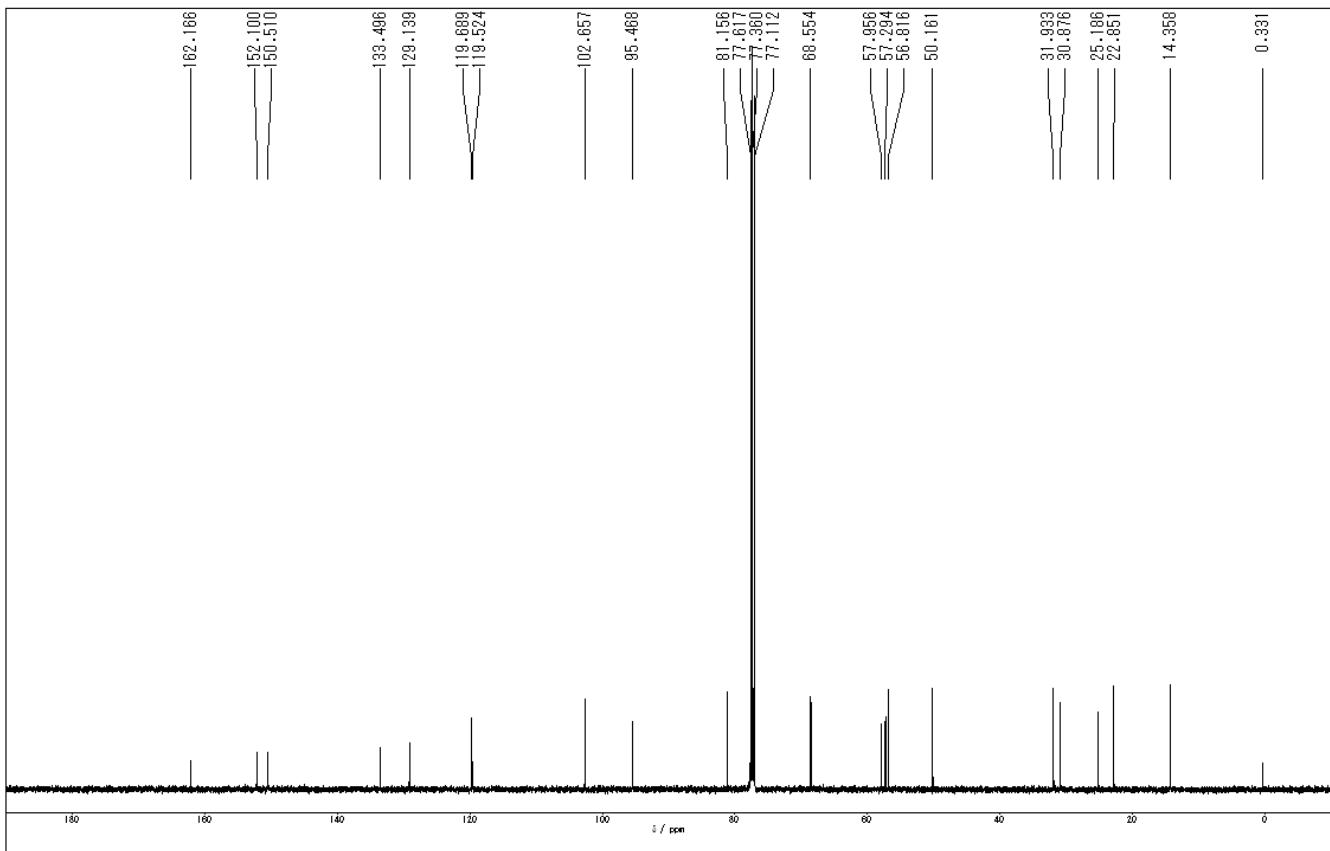


## Compound 13a

<sup>1</sup>H-NMR (CDCl<sub>3</sub>, 500 MHz)

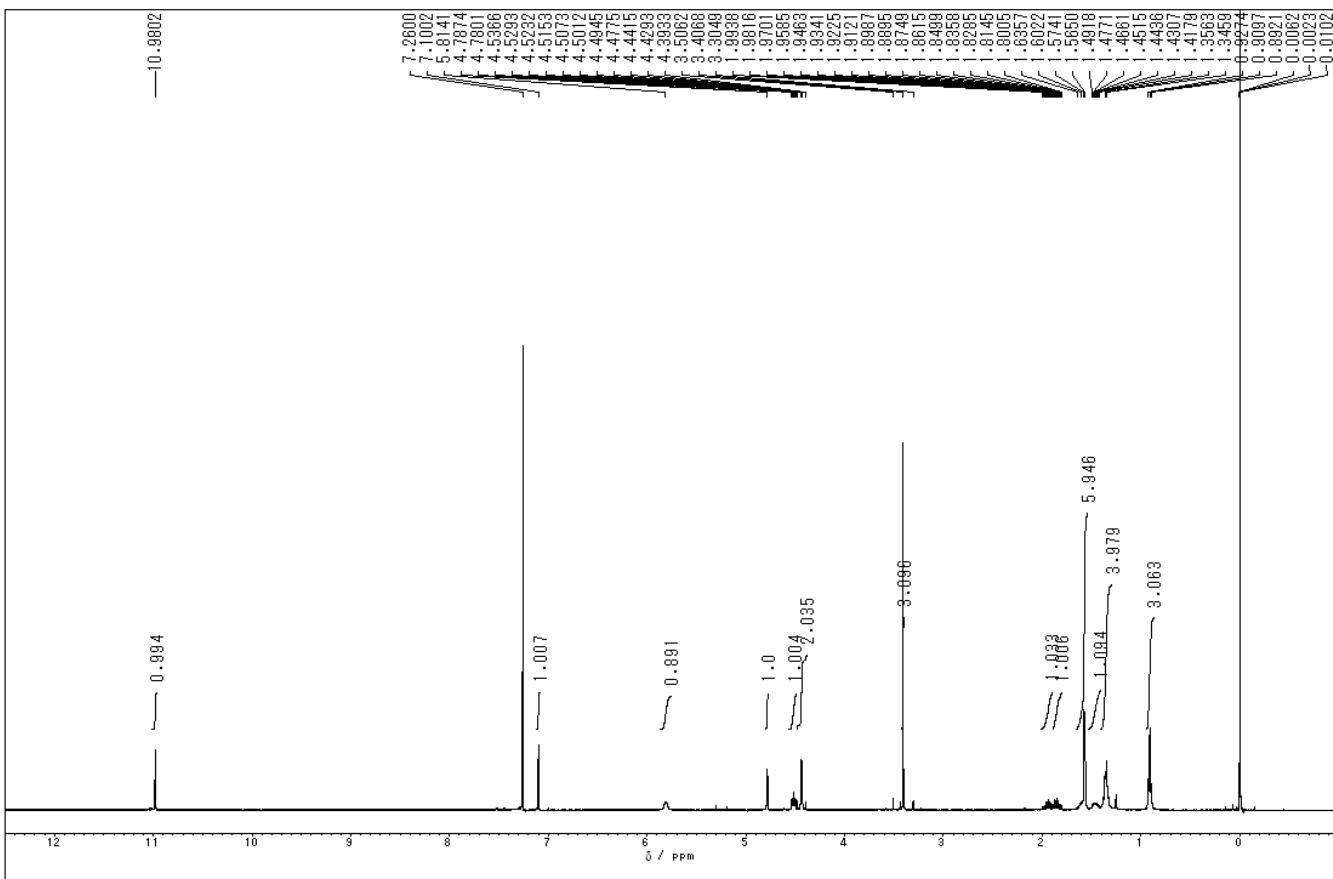


<sup>13</sup>C-NMR (CDCl<sub>3</sub>, 125 MHz)

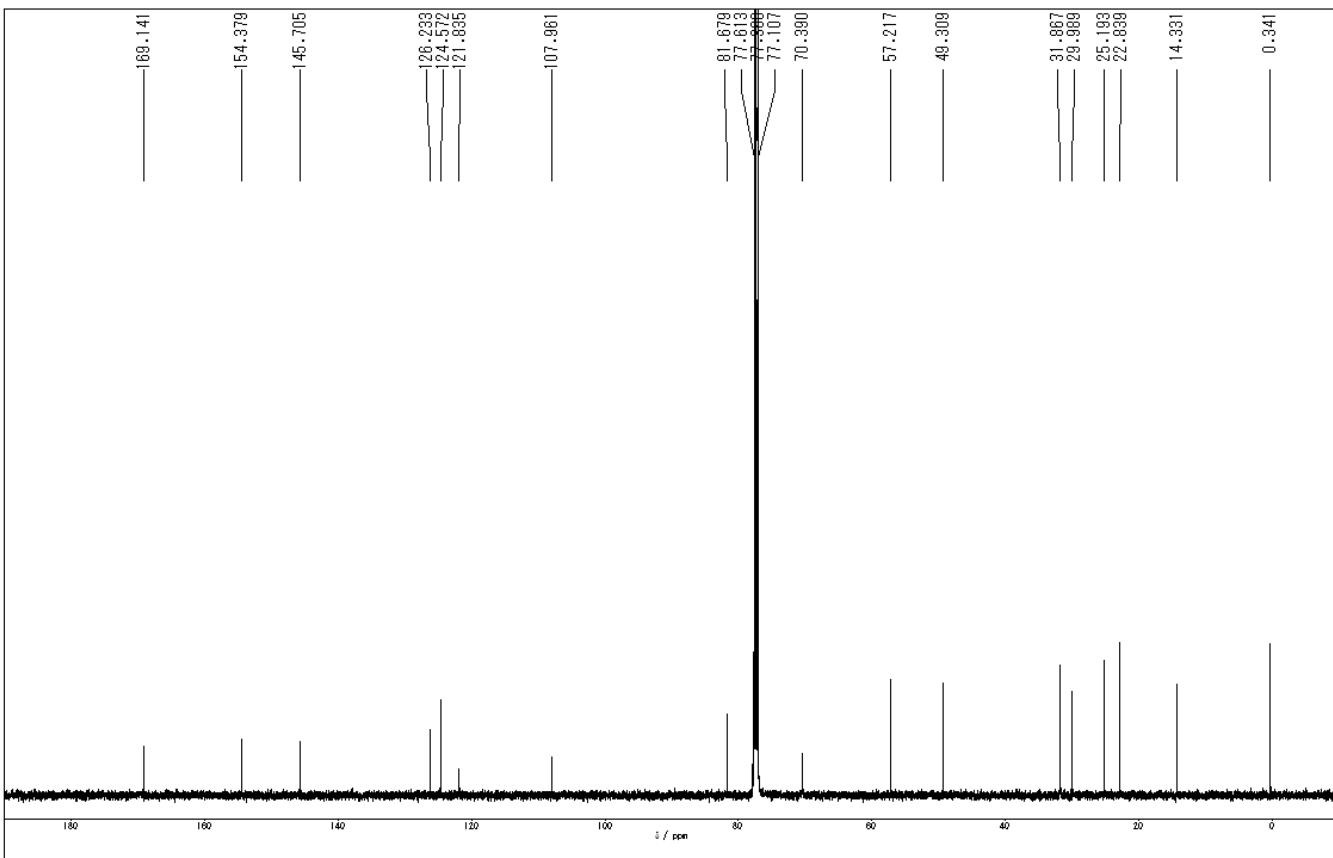


### Compound 13

<sup>1</sup>H-NMR (CDCl<sub>3</sub>, 400 MHz)

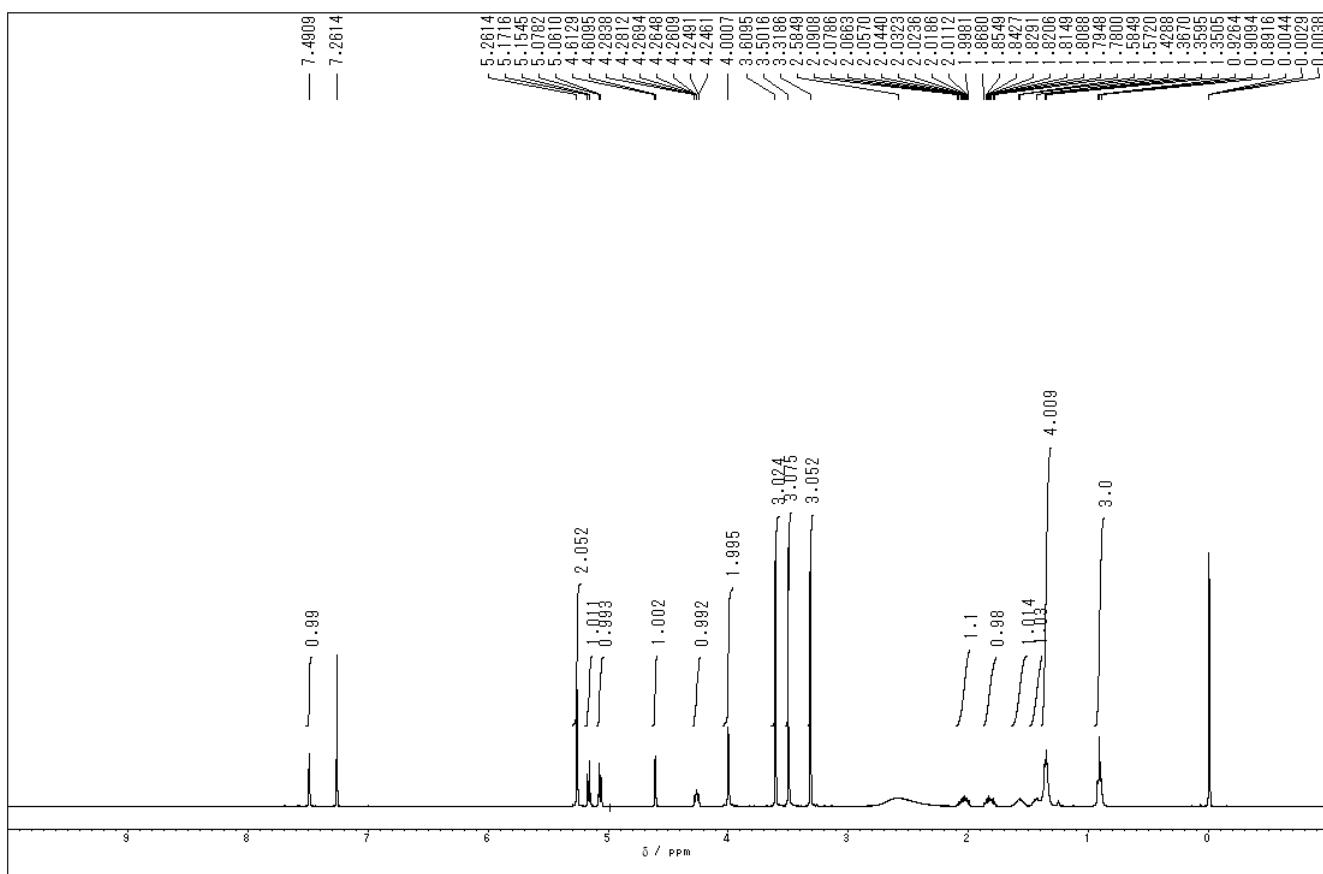


<sup>13</sup>C-NMR (CDCl<sub>3</sub>, 125 MHz)

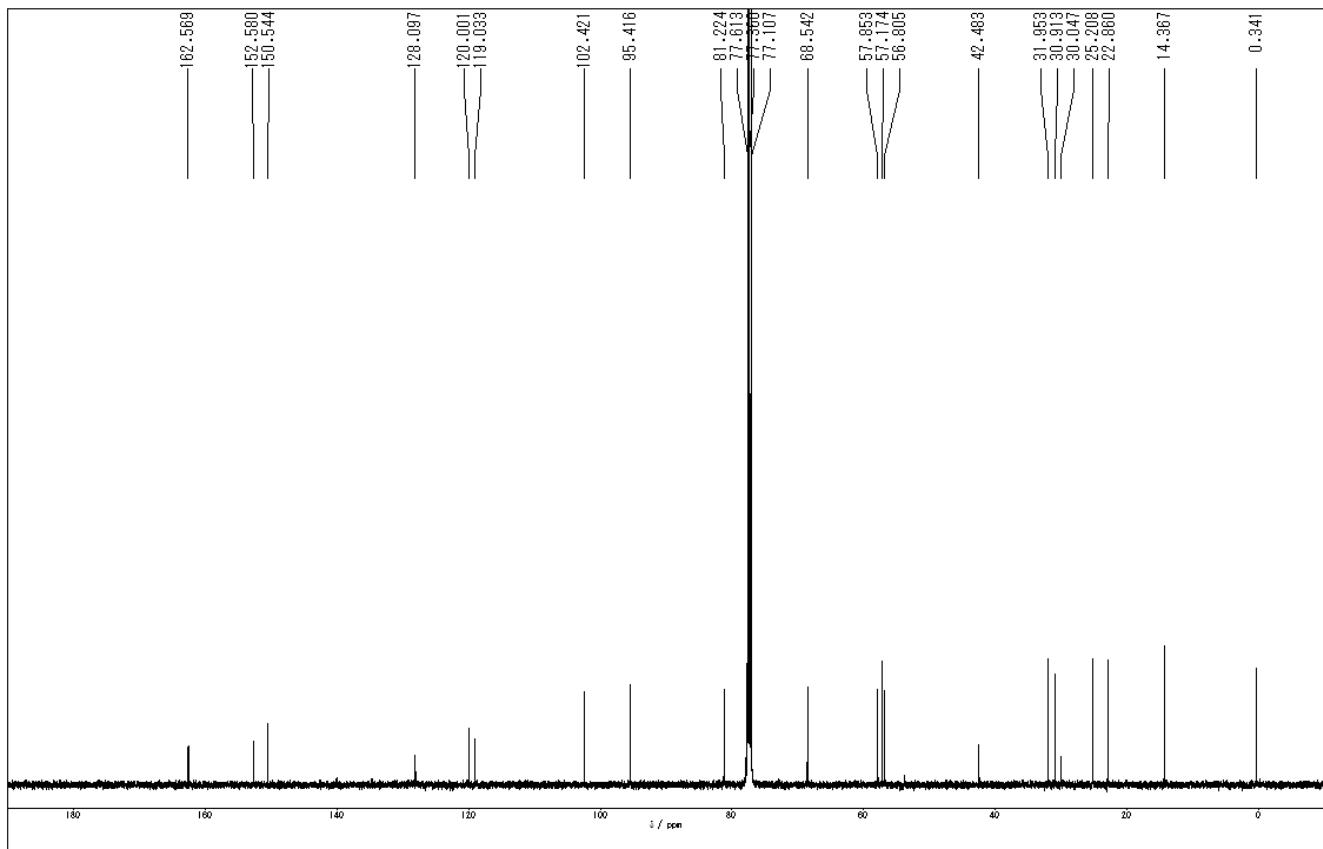


## Compound 14a

<sup>1</sup>H-NMR (CDCl<sub>3</sub>, 400 MHz)

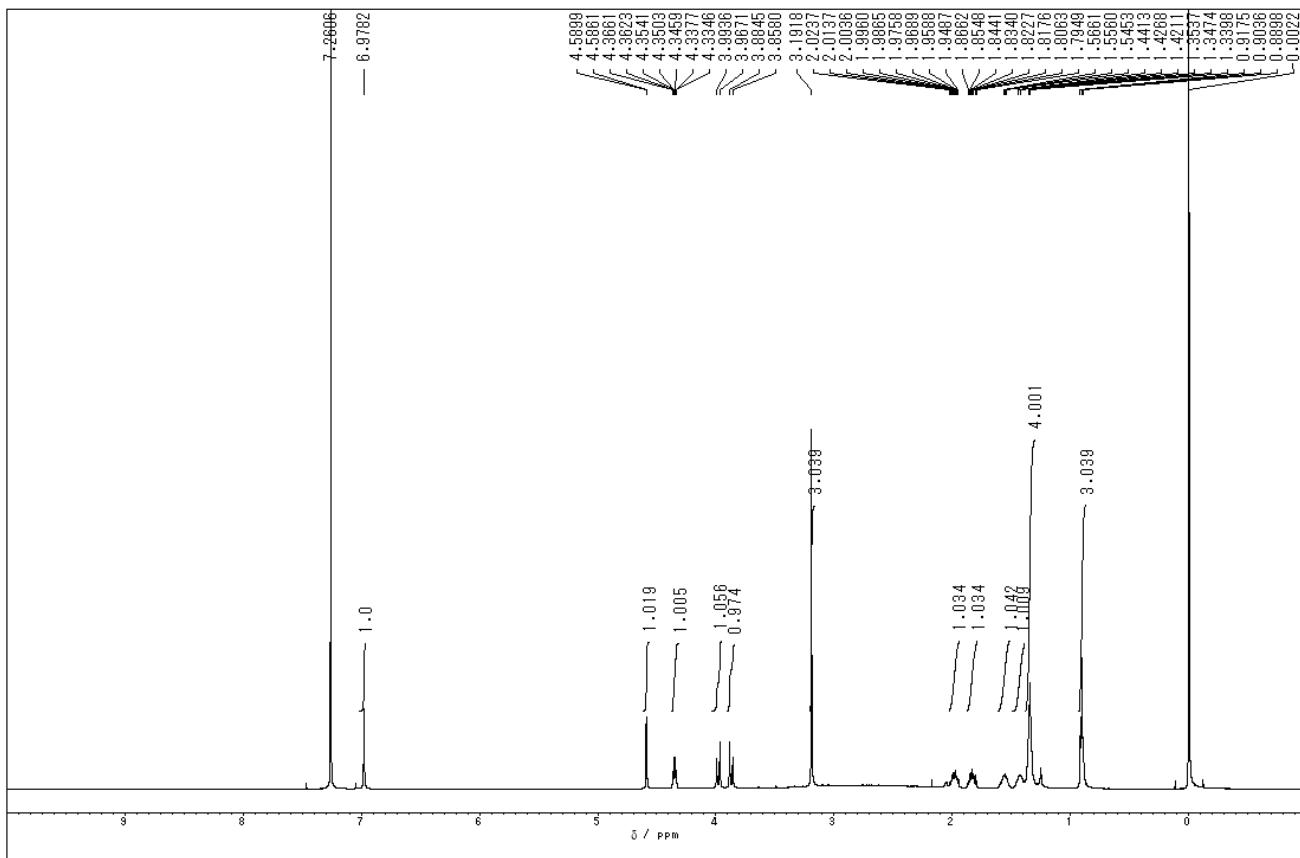


<sup>13</sup>C-NMR (CDCl<sub>3</sub>, 125 MHz)

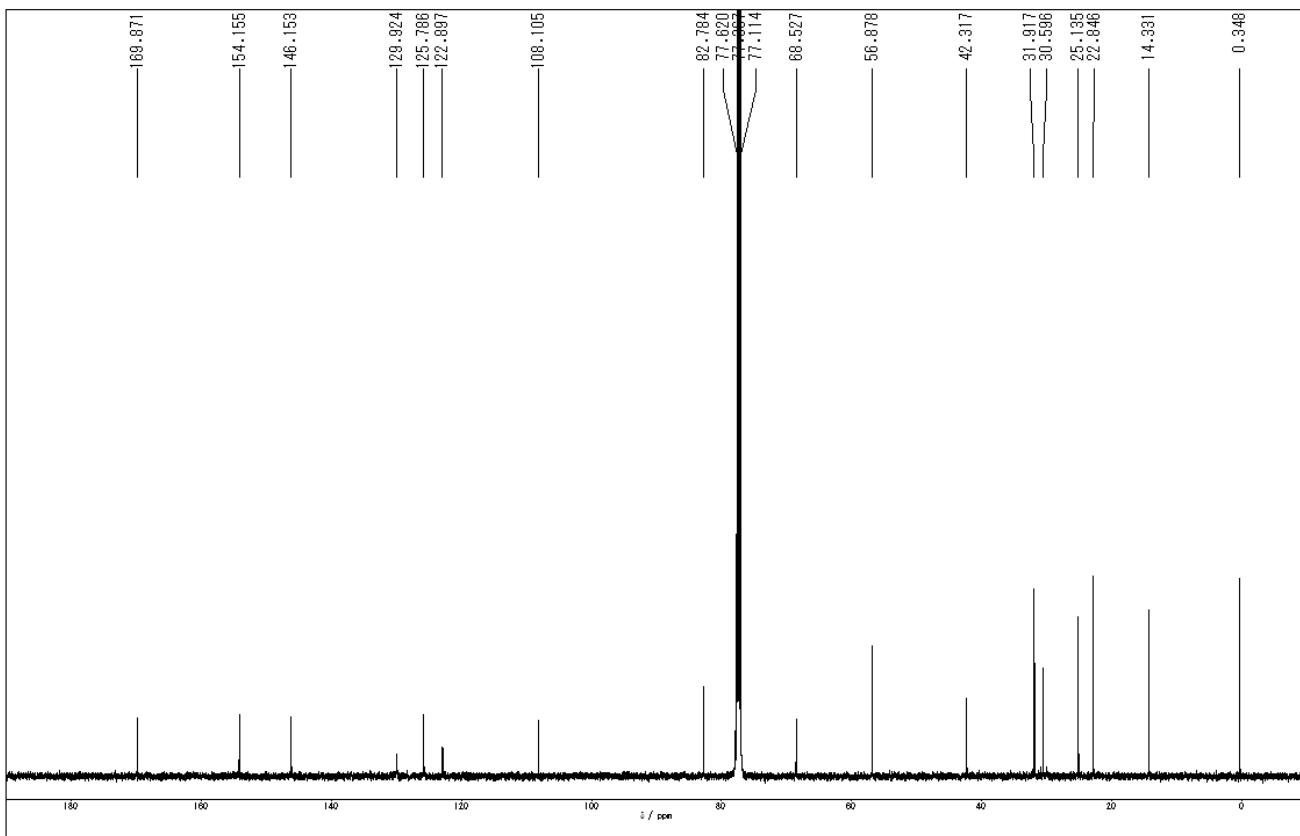


## Compound 14

<sup>1</sup>H-NMR (CDCl<sub>3</sub>, 500 MHz)

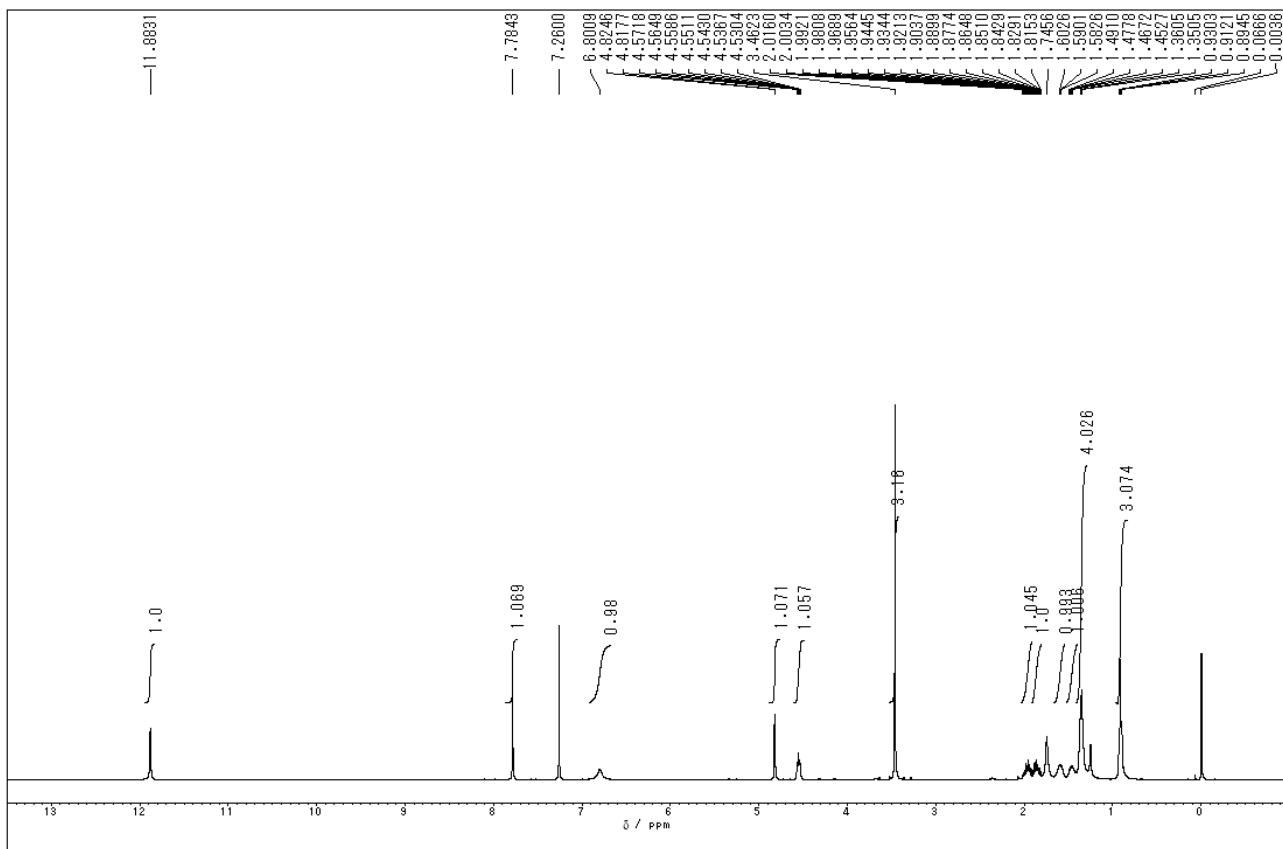


<sup>13</sup>C-NMR (CDCl<sub>3</sub>, 125 MHz)

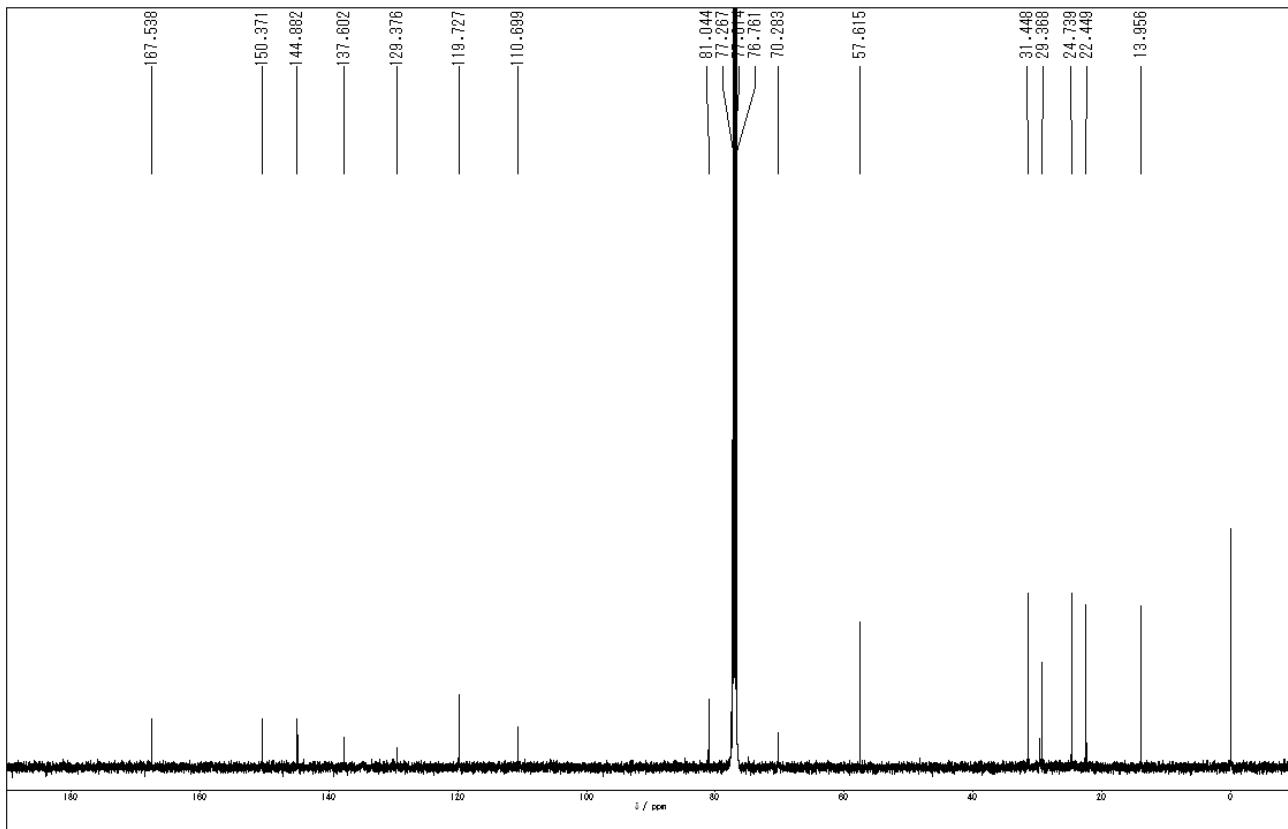


## Compound 15

<sup>1</sup>H-NMR (CDCl<sub>3</sub>, 400 MHz)

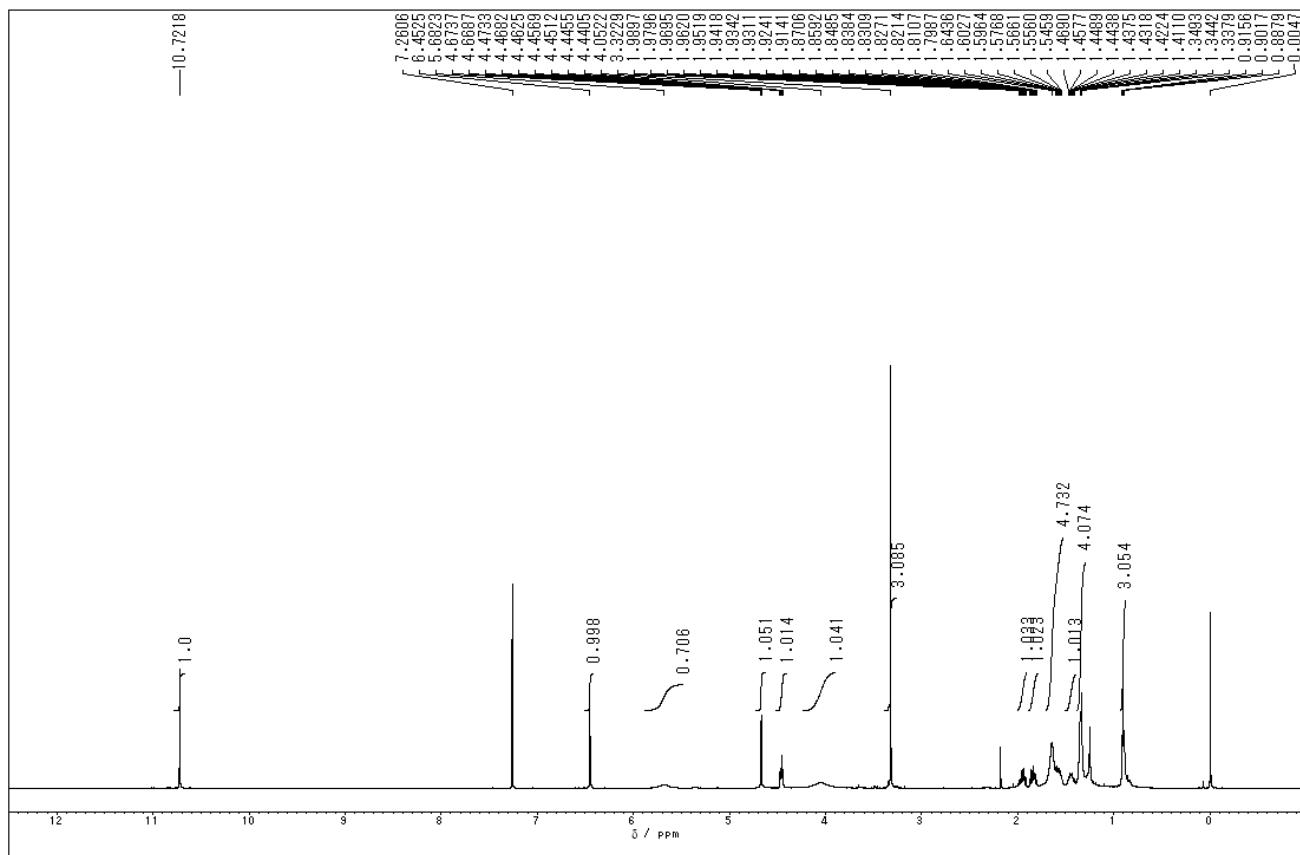


<sup>13</sup>C-NMR (CDCl<sub>3</sub>, 125 MHz)

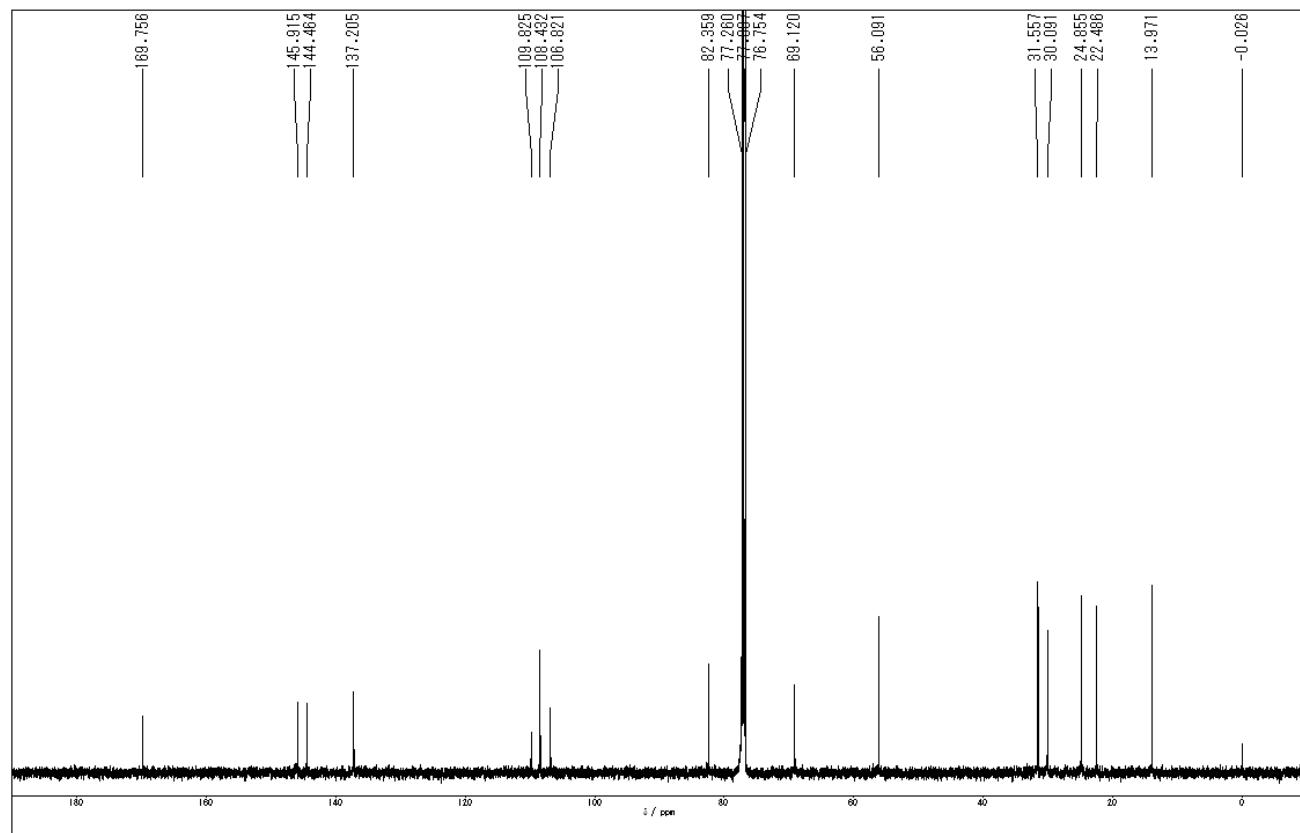


## Compound 16

<sup>1</sup>H-NMR (CDCl<sub>3</sub>, 500 MHz)

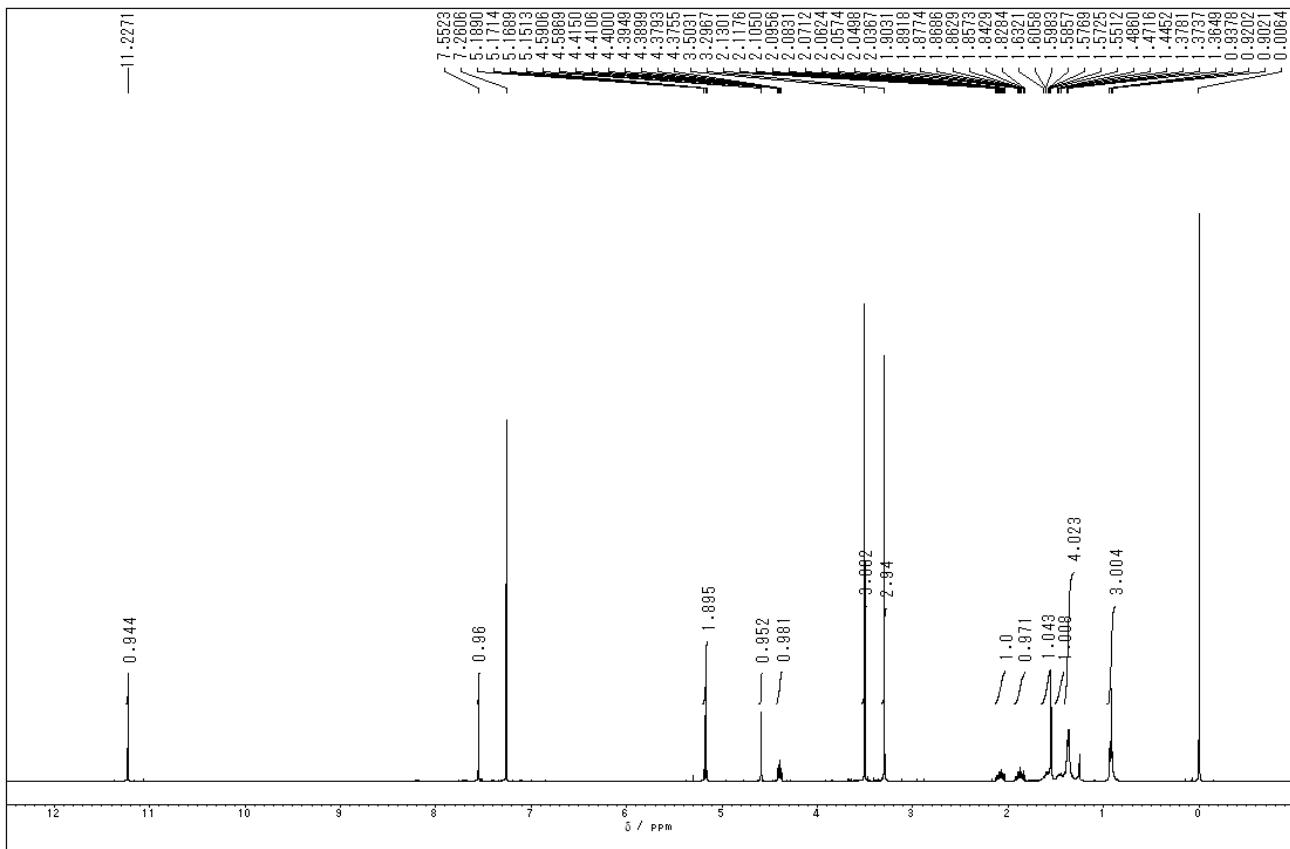


<sup>13</sup>C-NMR (CDCl<sub>3</sub>, 125 MHz)

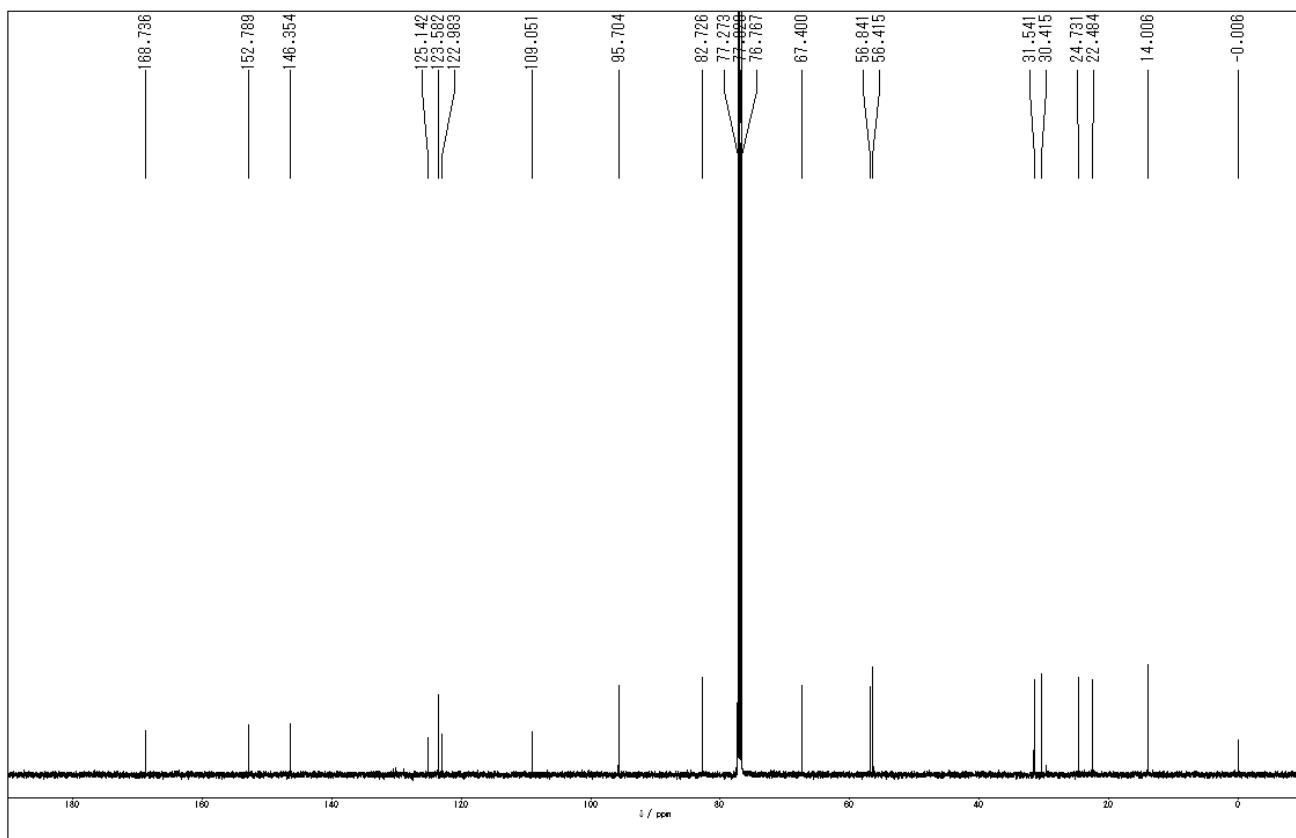


### Compound 18a

<sup>1</sup>H-NMR (CDCl<sub>3</sub>, 400 MHz)

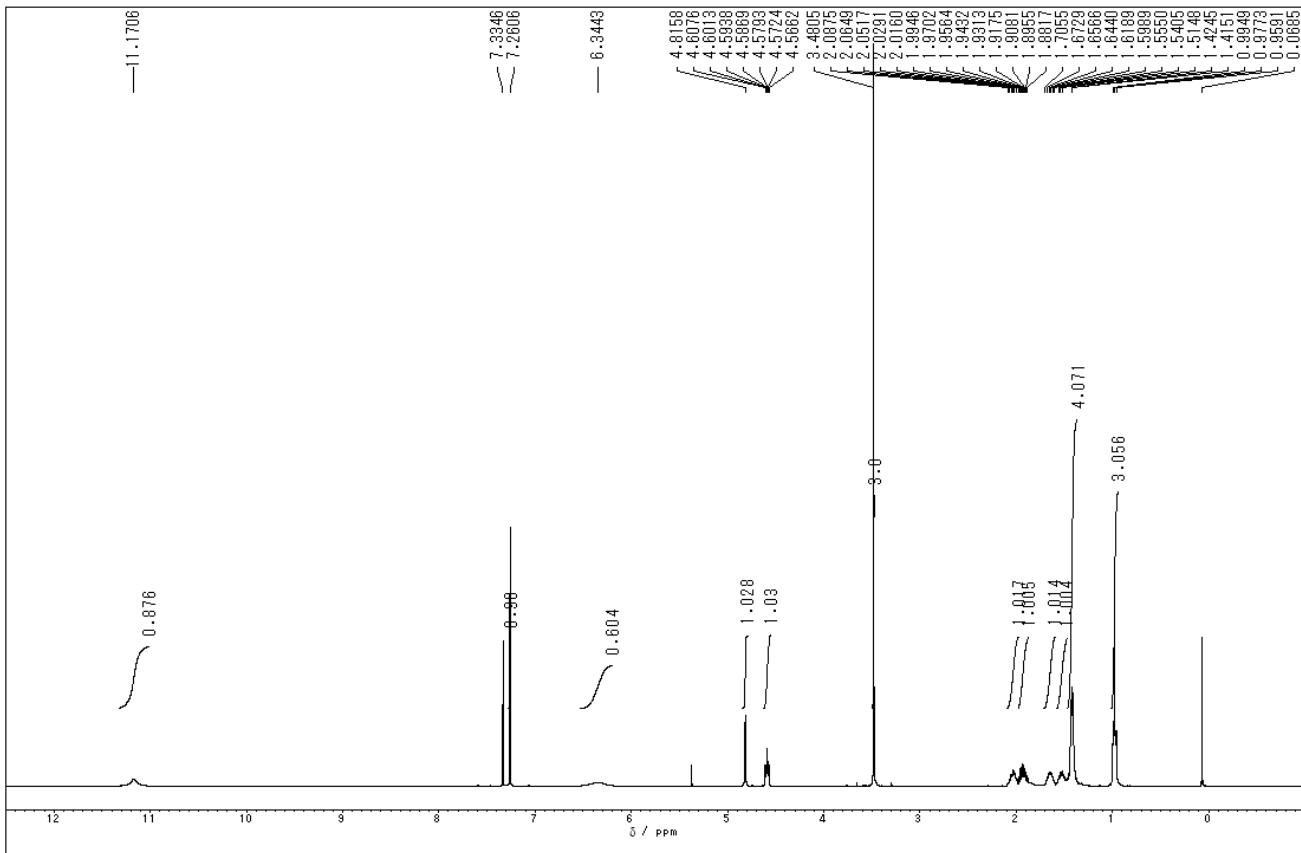


<sup>13</sup>C-NMR (CDCl<sub>3</sub>, 125 MHz)

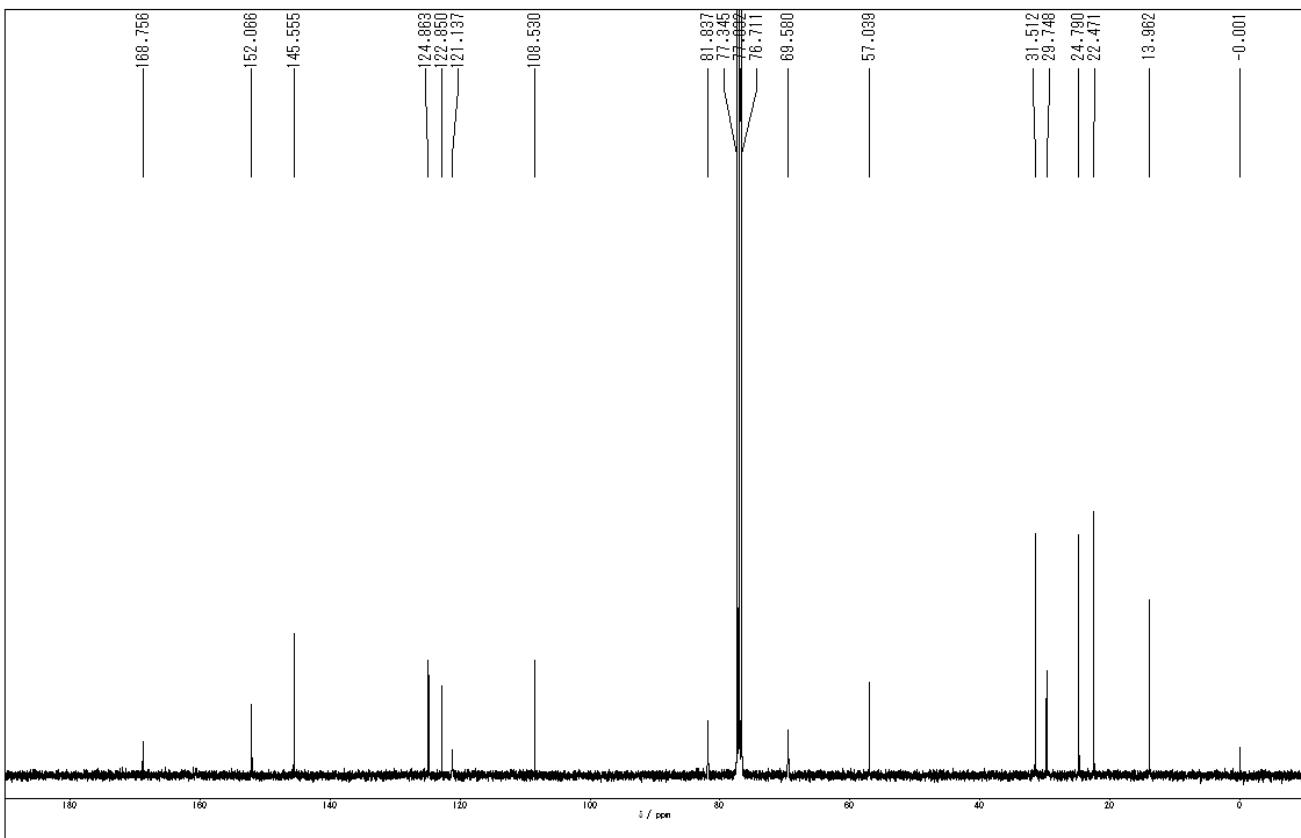


## Compound 18

<sup>1</sup>H-NMR (CDCl<sub>3</sub>, 400 MHz)

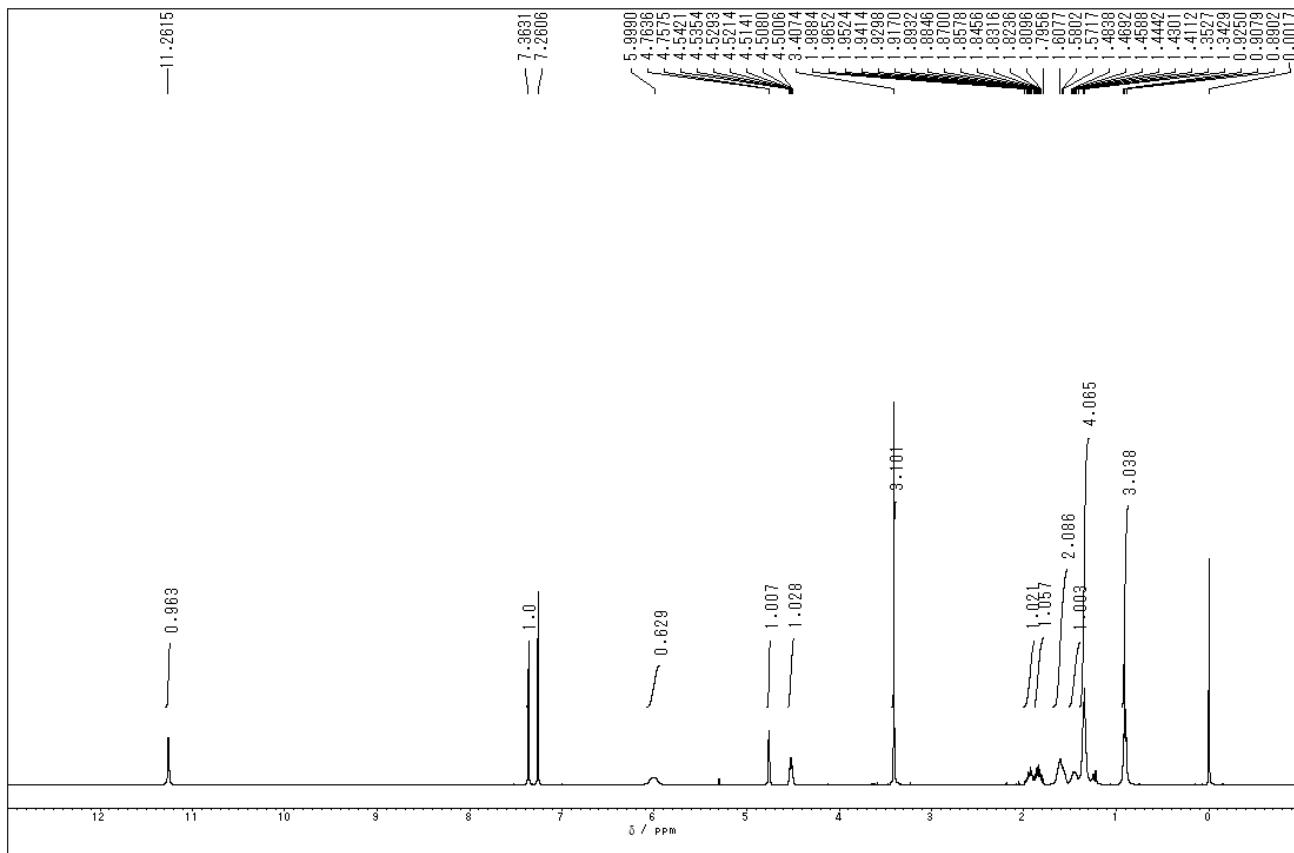


<sup>13</sup>C-NMR (CDCl<sub>3</sub>, 100 MHz)

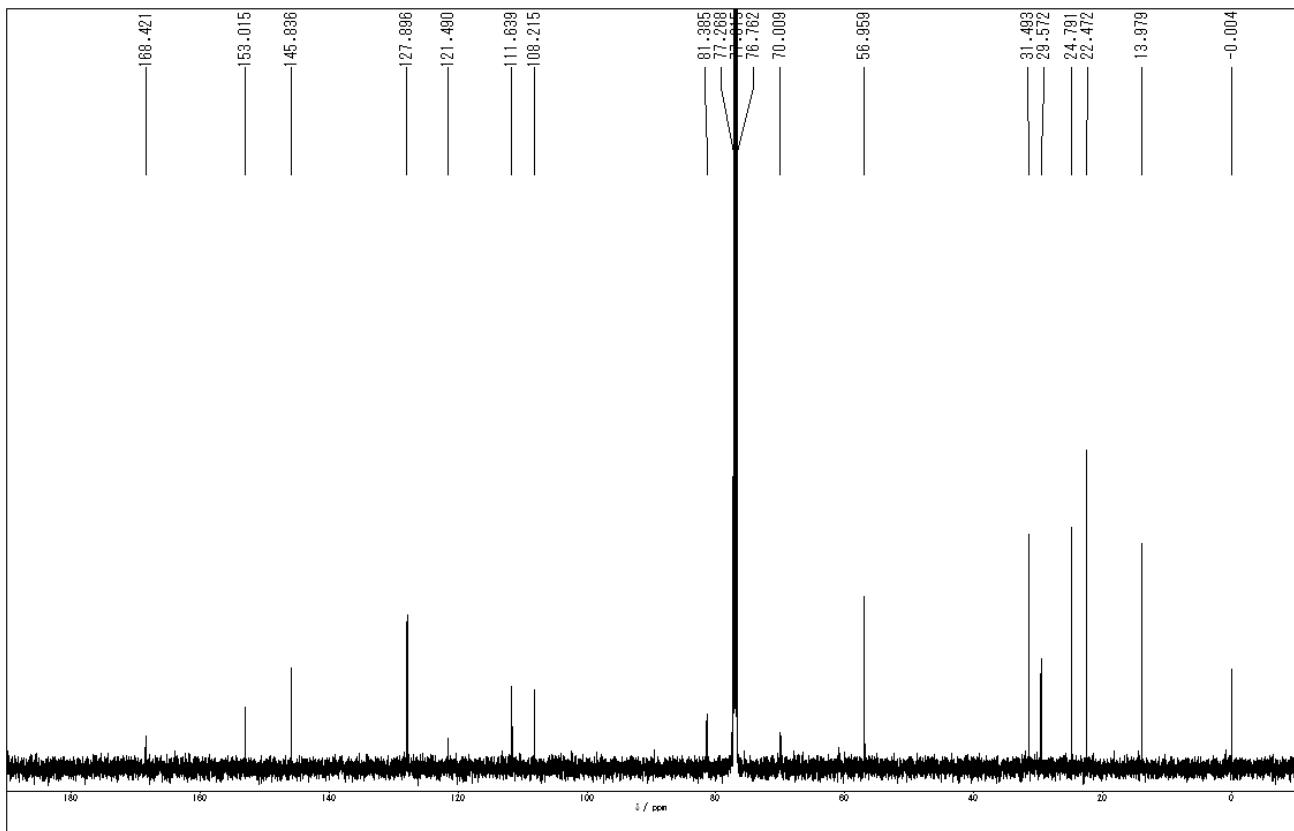


### Compound 19

<sup>1</sup>H-NMR (CDCl<sub>3</sub>, 400 MHz)

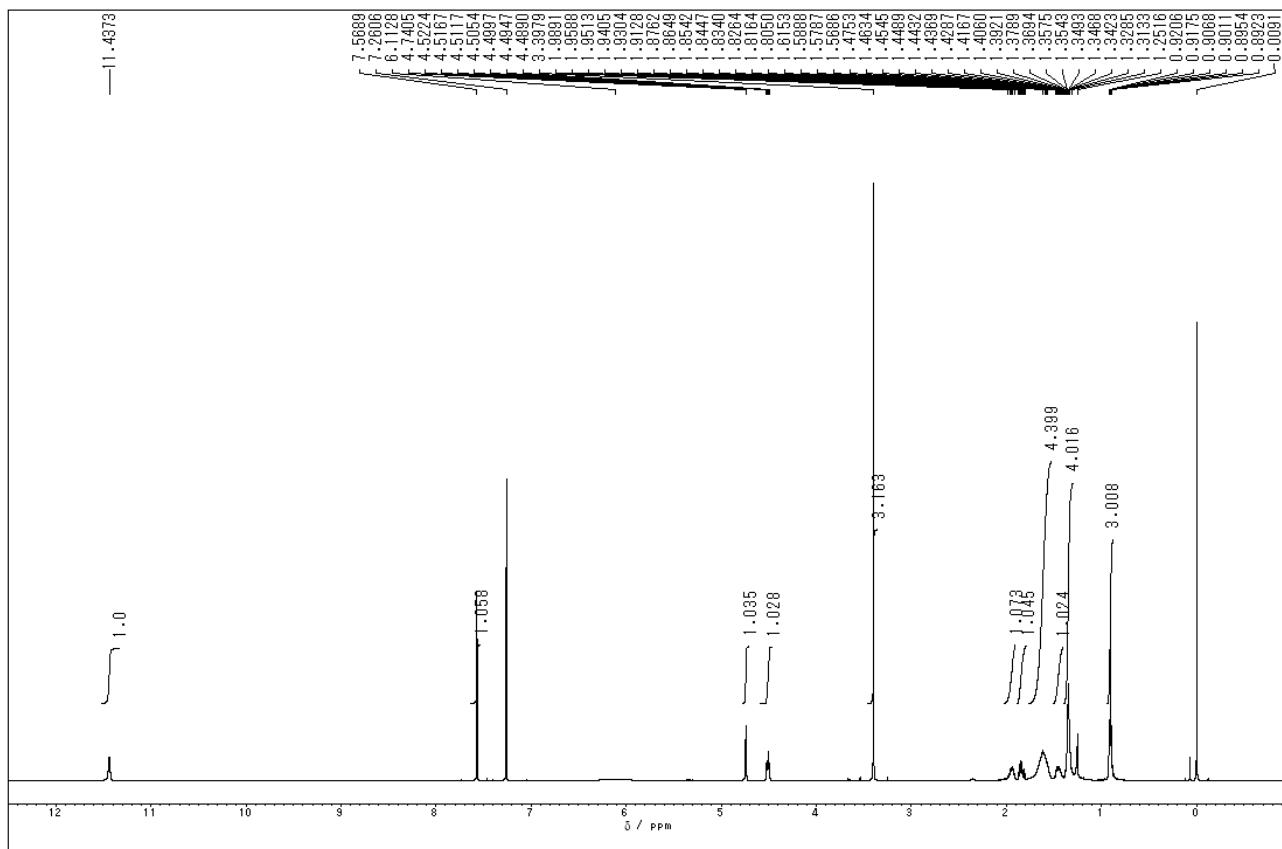


<sup>13</sup>C-NMR (CDCl<sub>3</sub>, 125 MHz)



## Compound 20

<sup>1</sup>H-NMR (CDCl<sub>3</sub>, 500 MHz)



<sup>13</sup>C-NMR (CDCl<sub>3</sub>, 125 MHz)

