

Total synthesis of haplacutines B and C

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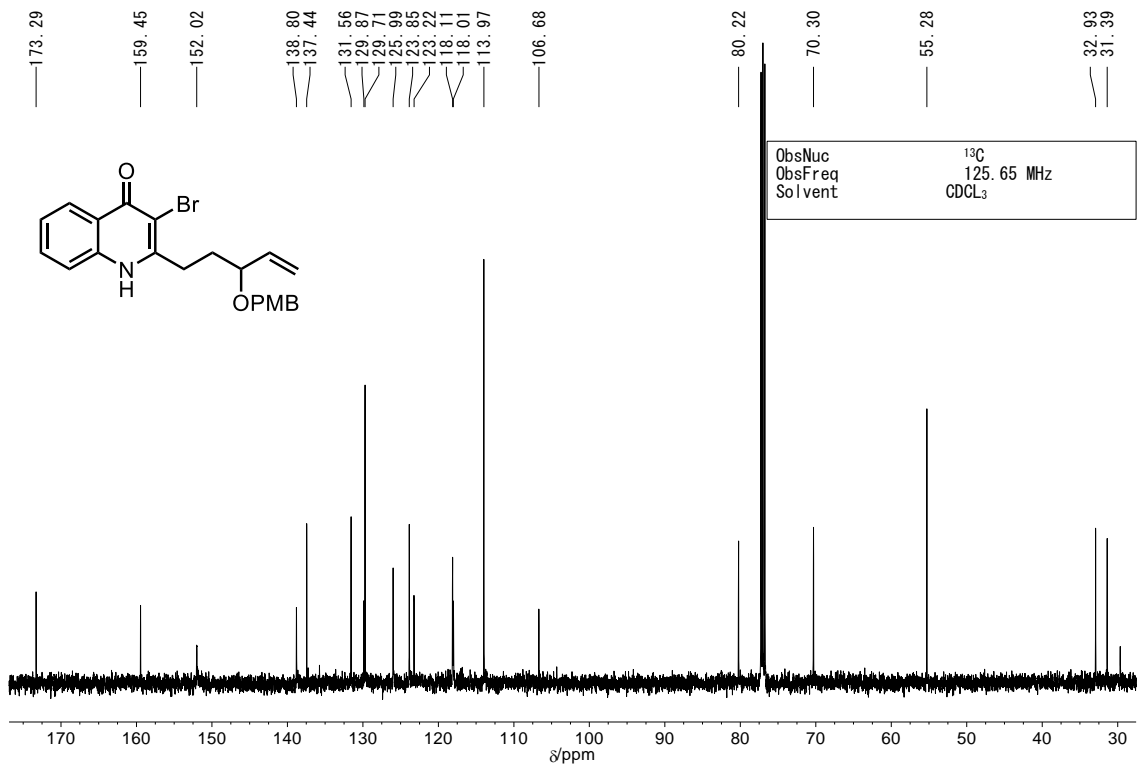
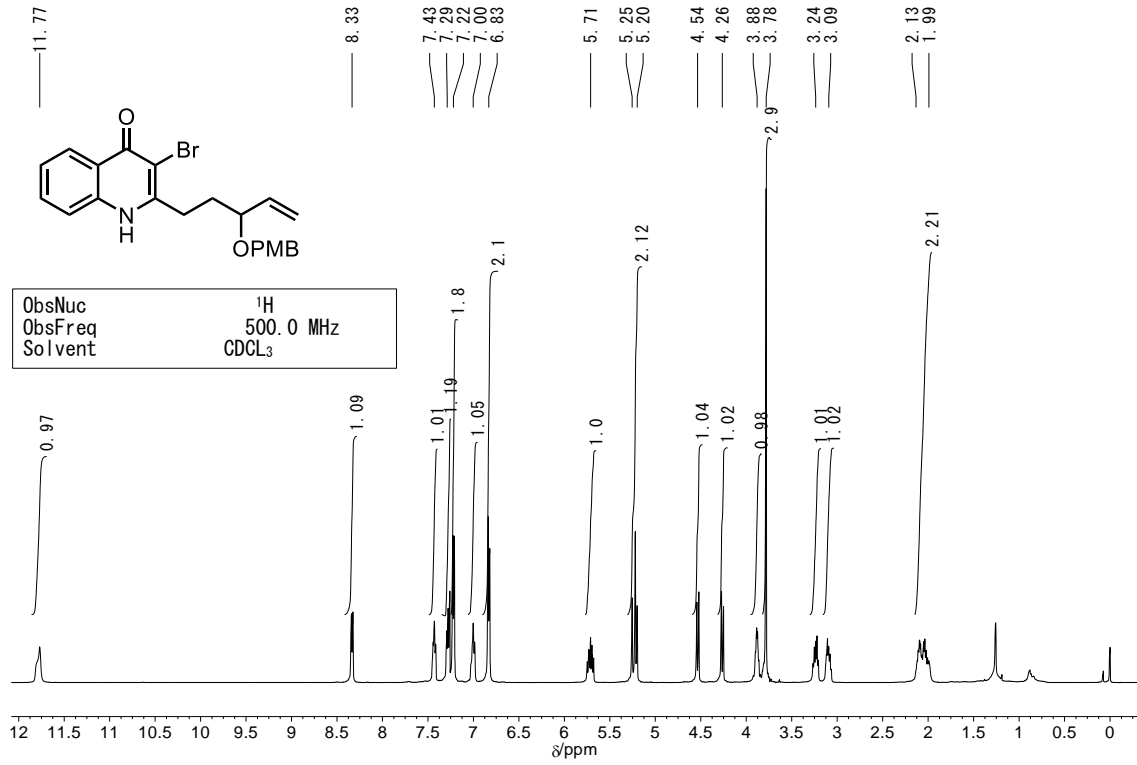
¹H and ¹³C NMR data of **12**, **14**, **22**, **23**, **3**, **31**, **27**, and **2**

The analytical data of the compounds **8**, **9**, **10**, **16**, **17**, **18**, **19**, **21**, **24**, **25**, **26**, and, haplacutine C (**3**) were reported in our brief paper.¹ Also, the analytical data of the compounds **22**,² **29**,³ and **30**⁴ have been reported.

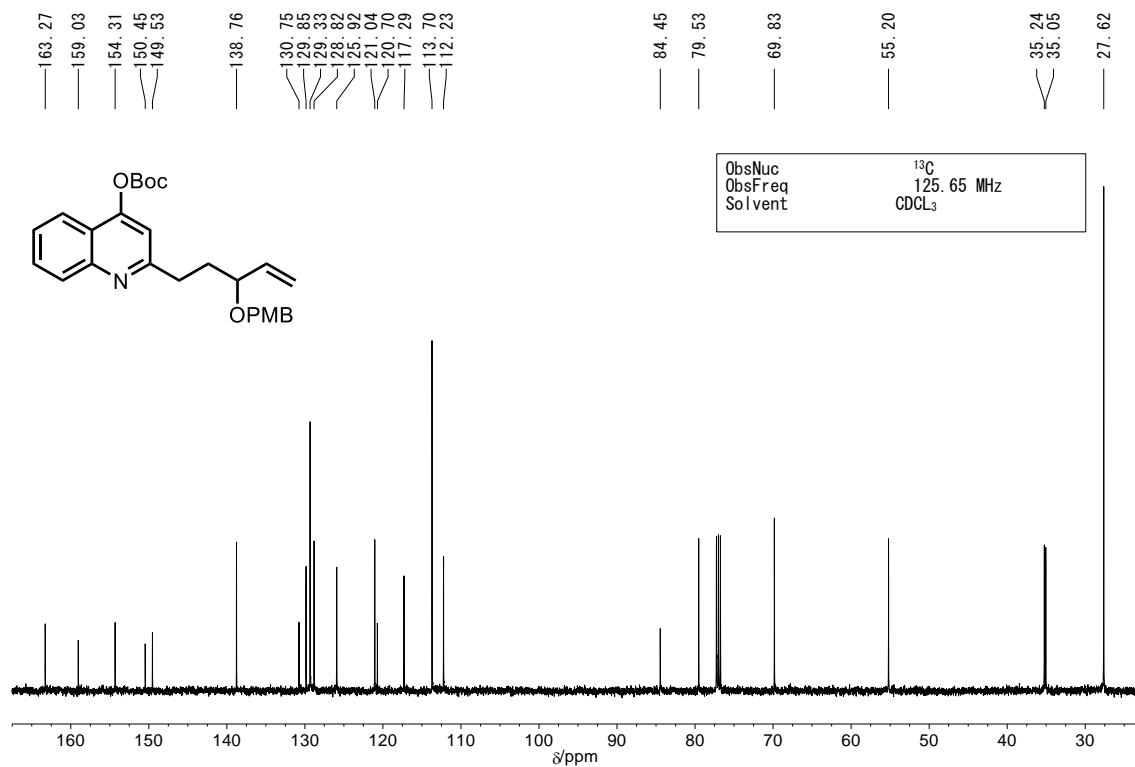
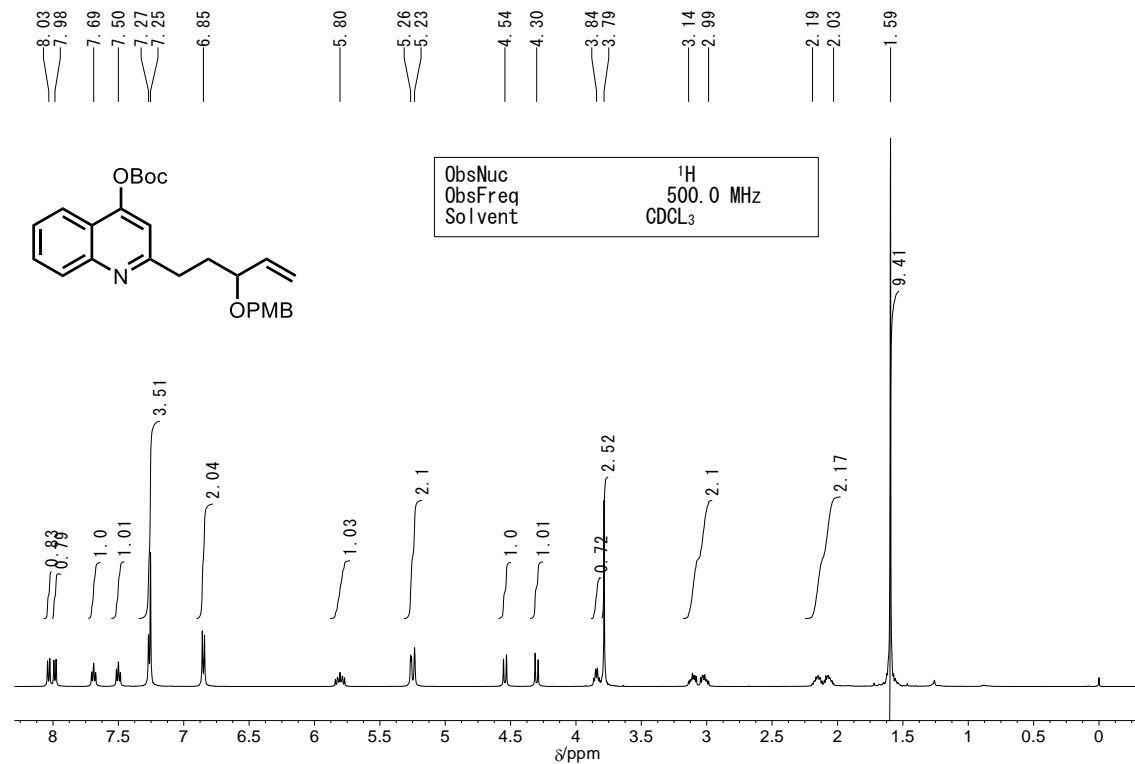
References

1. N. Kutsumura, K. Numata, T. Saito, *Tetrahedron Lett.*, **57**, 5581 (2016).
2. (a) S. K. Jackson, S. C. Banfield, M. A. Kerr, *Org. Lett.*, **7**, 1215 (2005); (b) N. Chandrasoma, N. Brown, A. Brassfield, A. Nerurkar, S. Suarez, K. R. Buszek, *Tetrahedron Lett.*, **54**, 913 (2013); (c) T. Kusakabe, Y. Kawai, K. Kato, *Org. Lett.*, **15**, 5102 (2013).
3. (a) M. D. Cliff, S. G. Pyne, *J. Org. Chem.*, **60**, 2378 (1995); (b) M. B. Rice, S. L. Whitehead, C. M. Horvath, J. A. Muchnij, R. E. Maleczka, Jr., *Synthesis*, **2001**, 1495.
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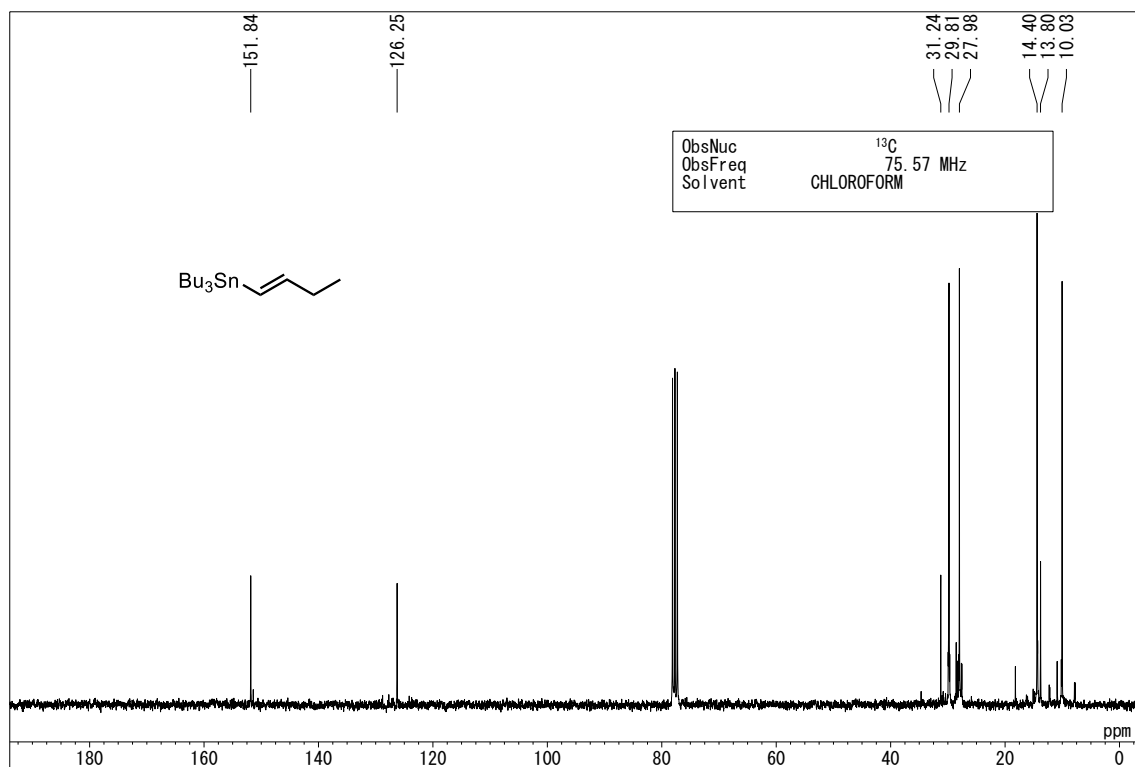
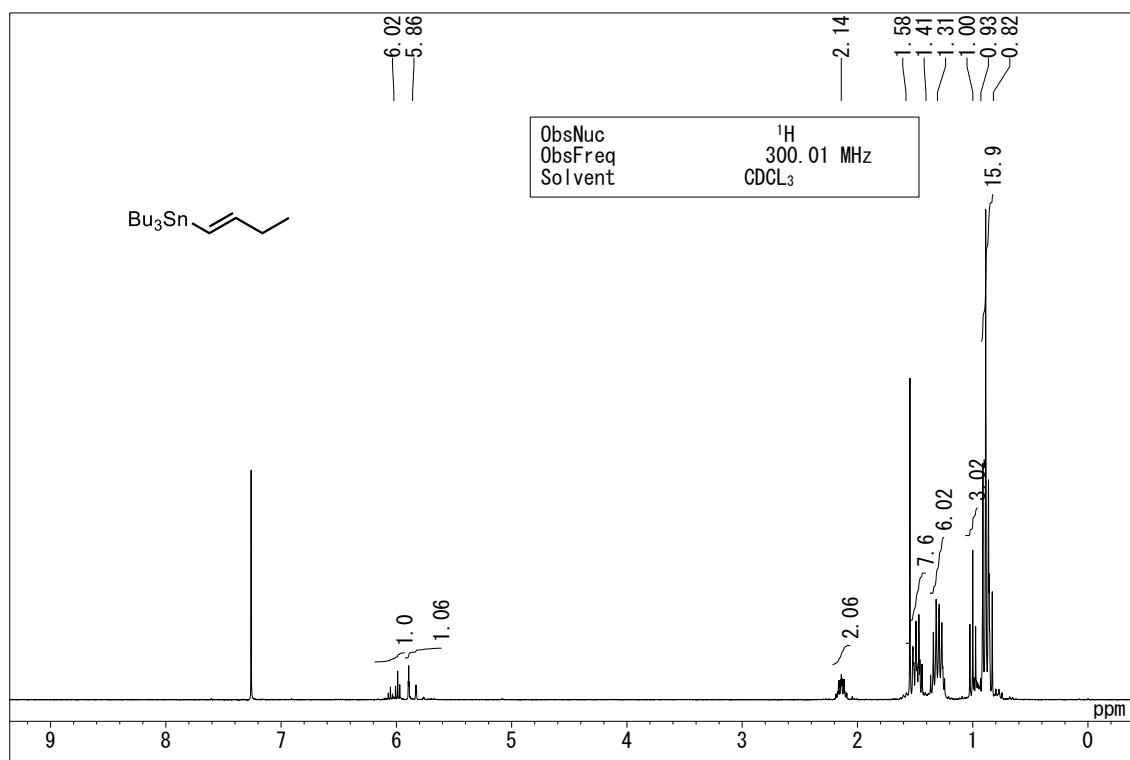
3-Bromo-2-(3-((4-methoxybenzyl)oxy)pent-4-en-1-yl)quinolin-4(1H)-one (12).



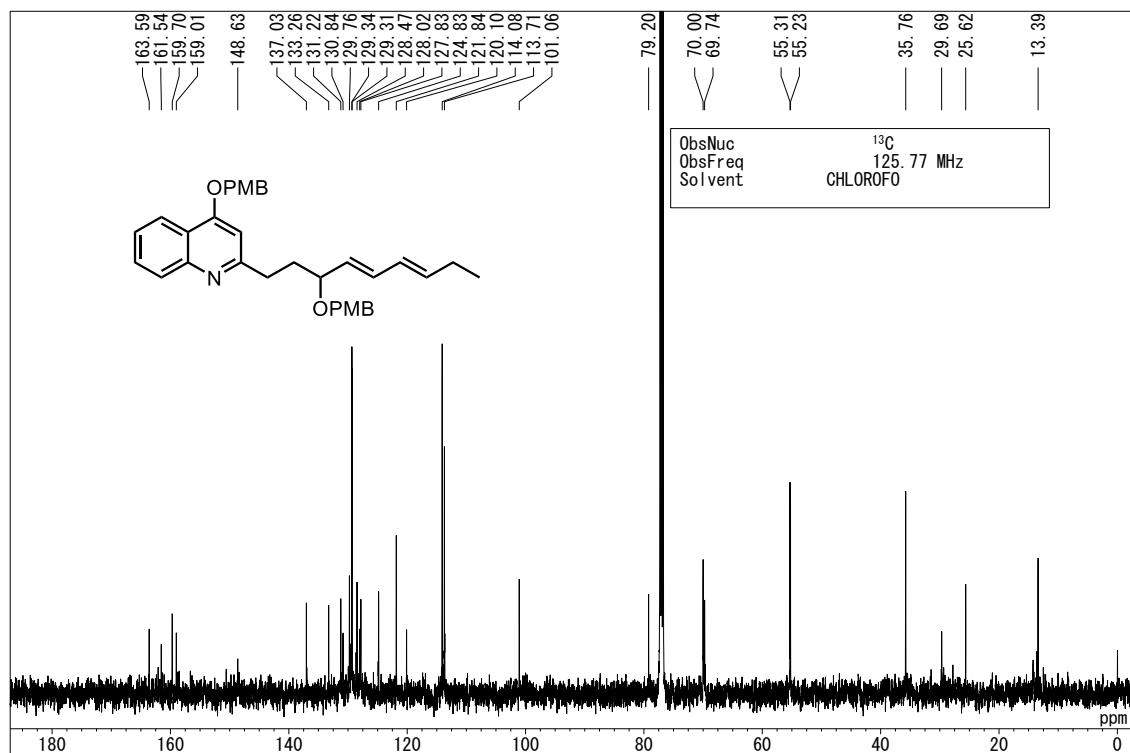
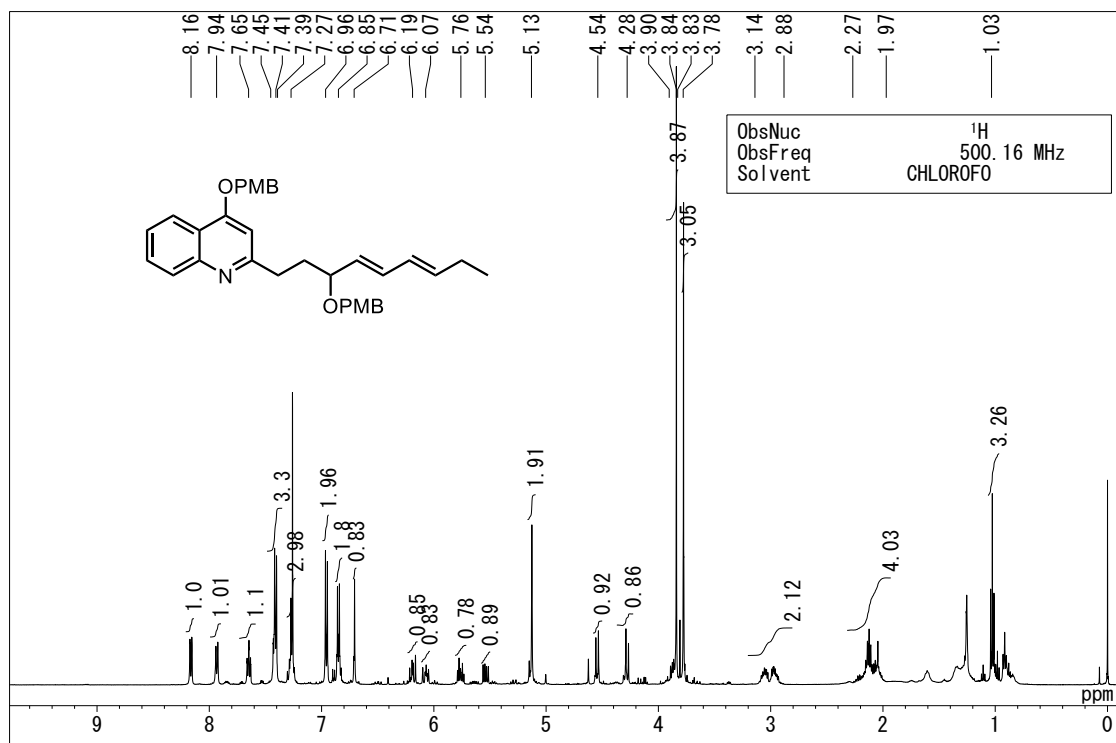
***tert*-Butyl (2-(3-((4-methoxybenzyl)oxy)pent-4-en-1-yl)quinolin-4-yl) carbonate (14).**



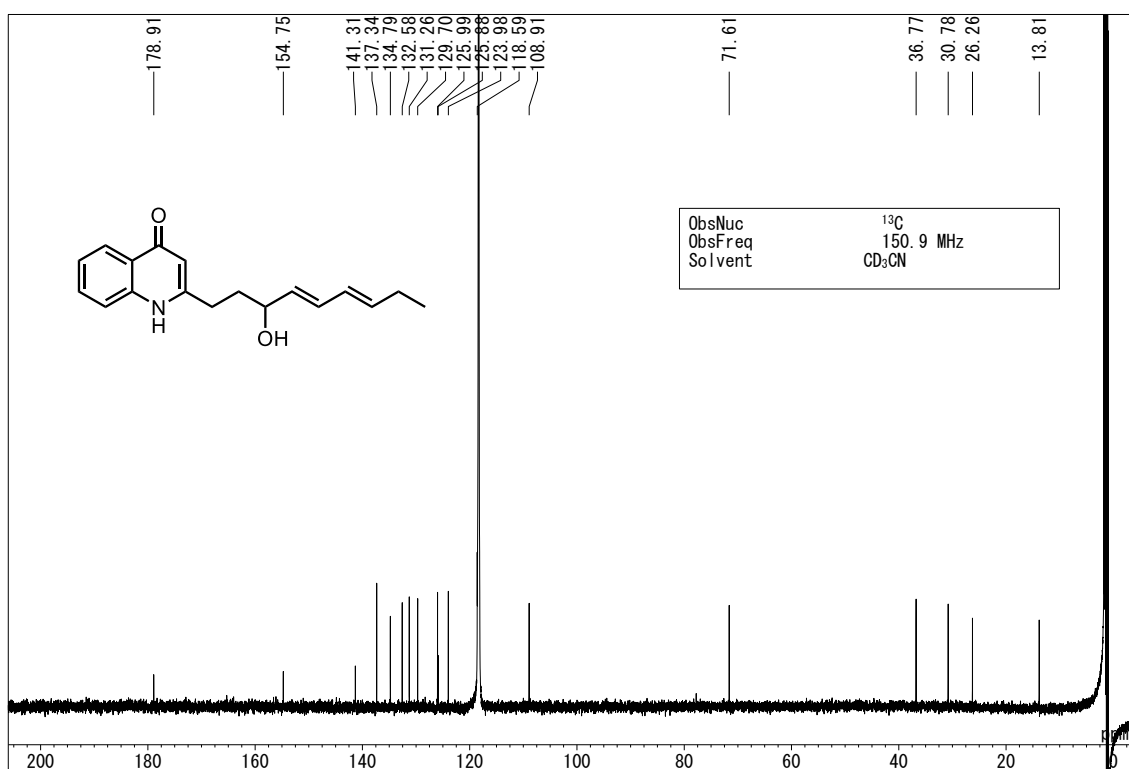
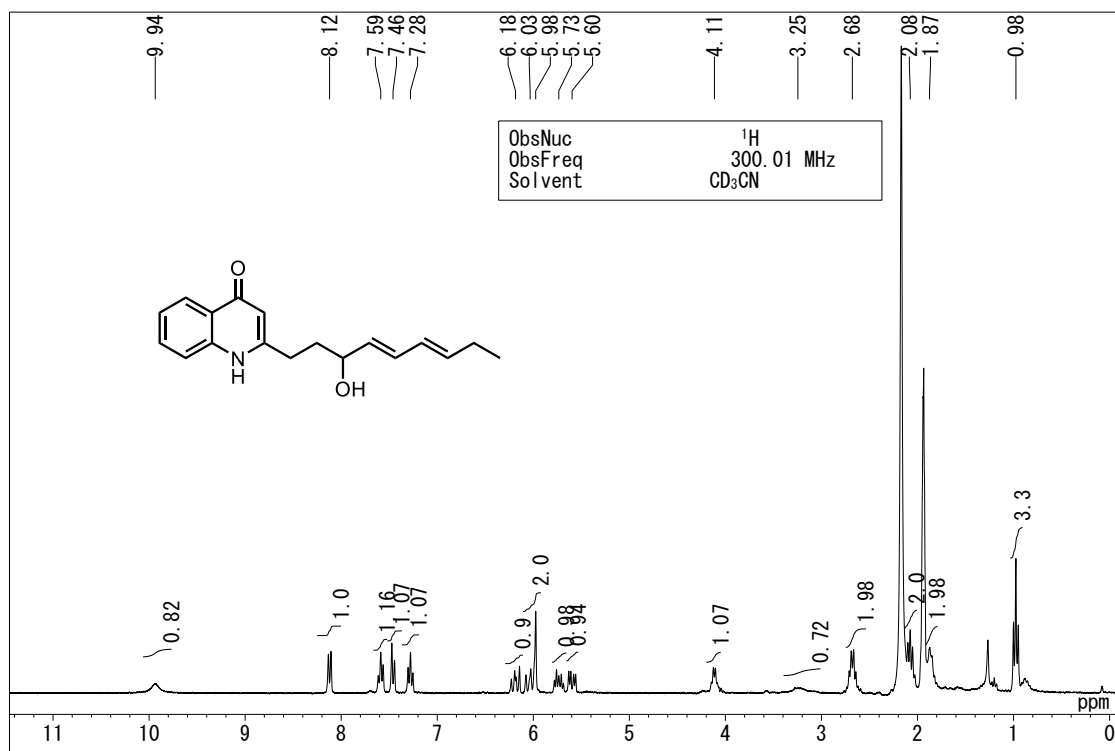
(E)-But-1-enyltributylstannane (22).²



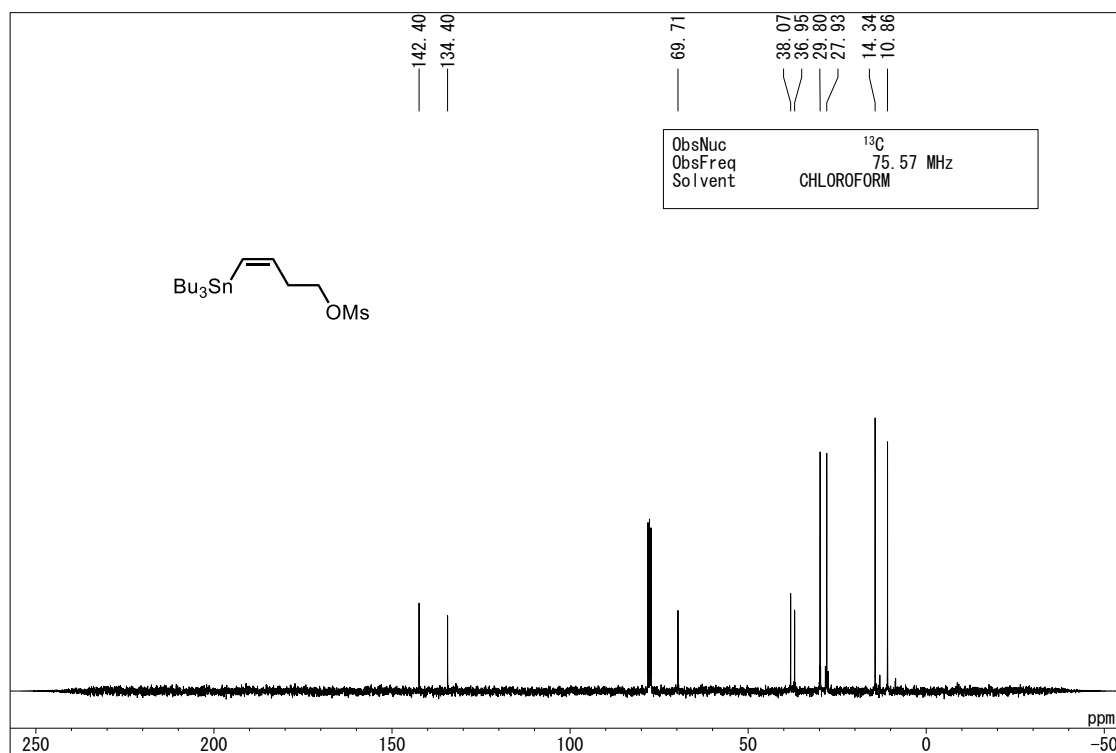
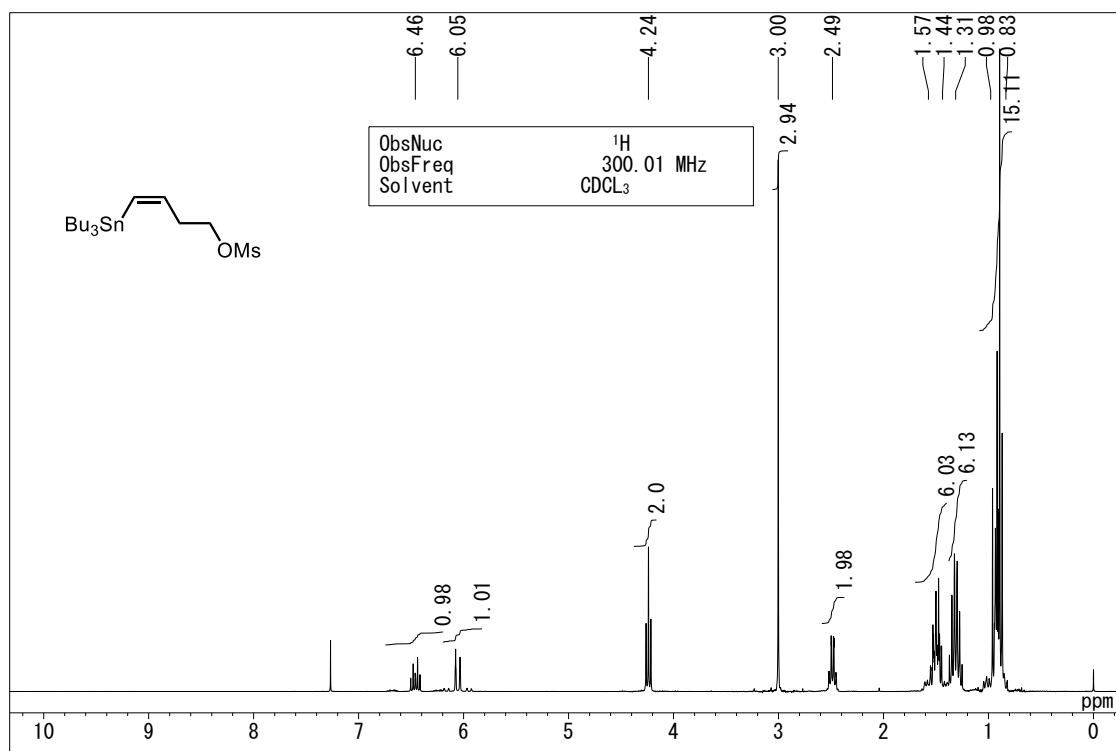
4-((4-Methoxybenzyl)oxy)-2-((4*E*,6*E*)-3-((4-methoxybenzyl)oxy)nona-4,6-dien-1-yl)quinoline
(23).



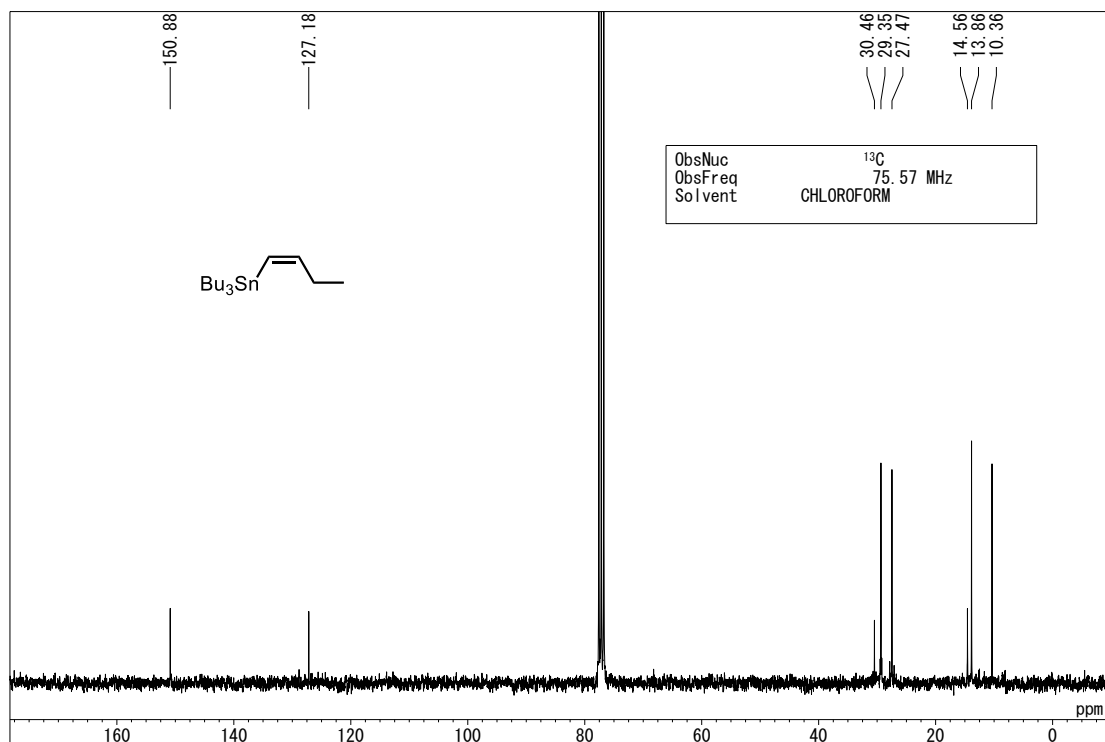
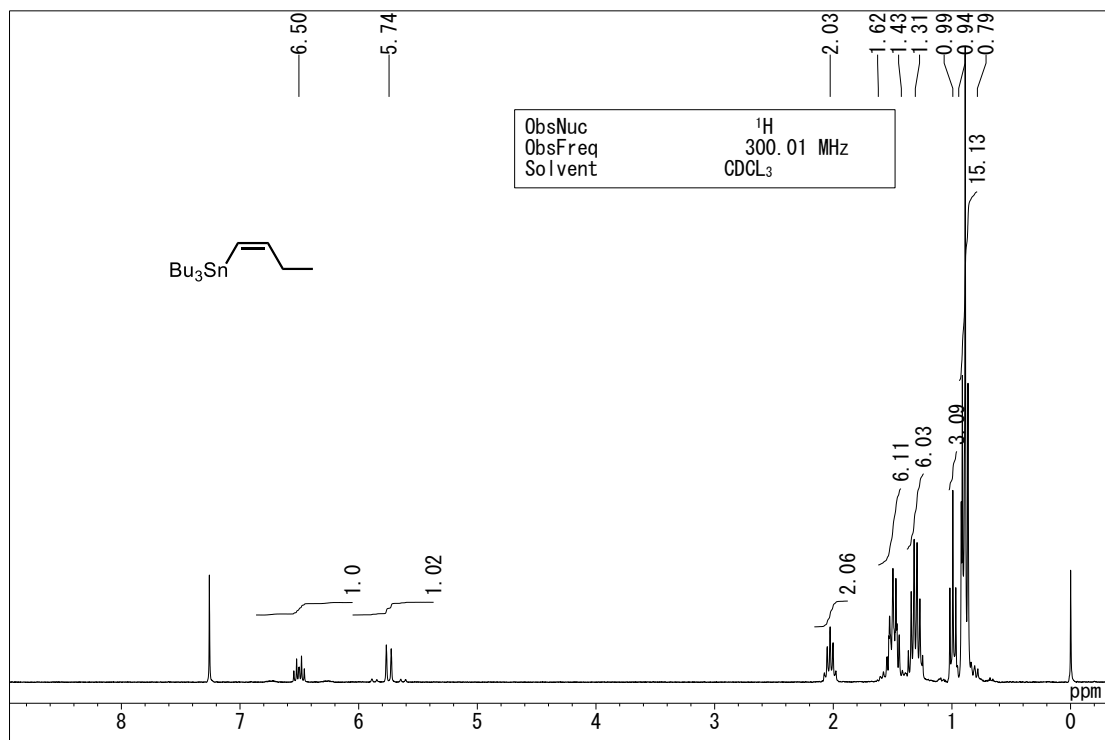
Haplacutine C (3).¹



(Z)-4-(Tributylstannyl)but-3-en-1-yl methanesulfonate (31).



(Z)-But-1-enyltributylstannane (27).



Haplacutine B (2).

