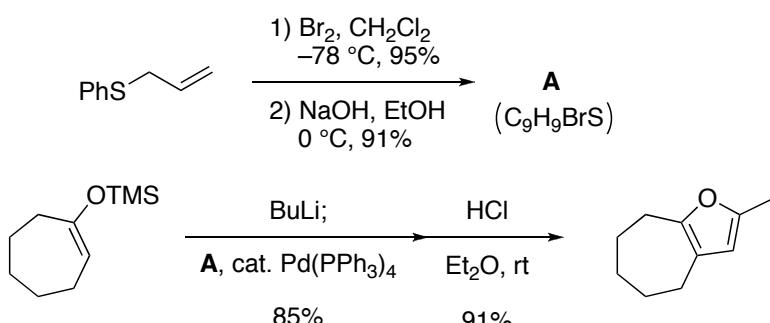


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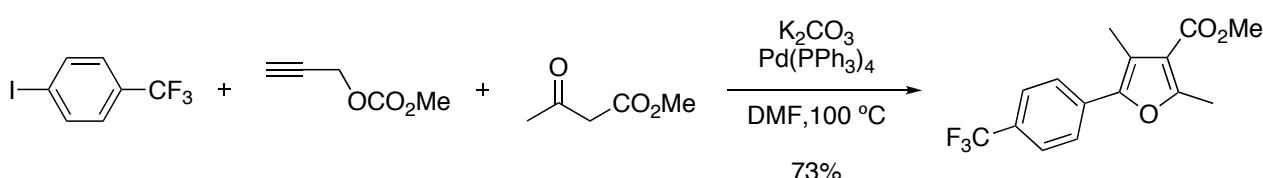
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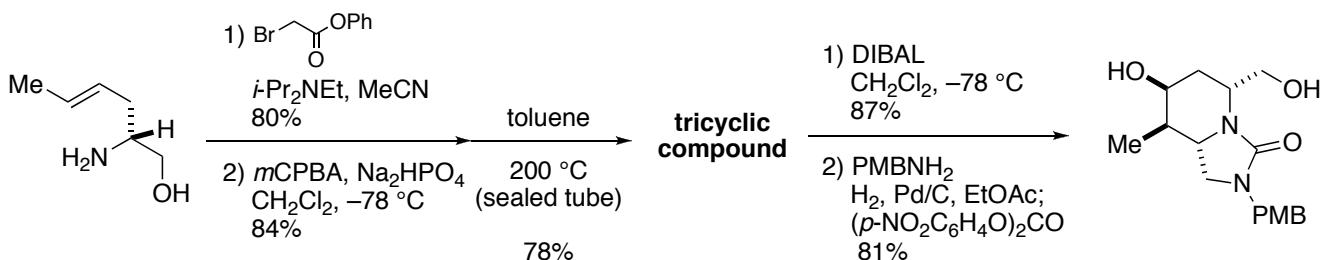
T. Cohen *et al.*, *Org. Lett.* **8**, 2087 (2006)

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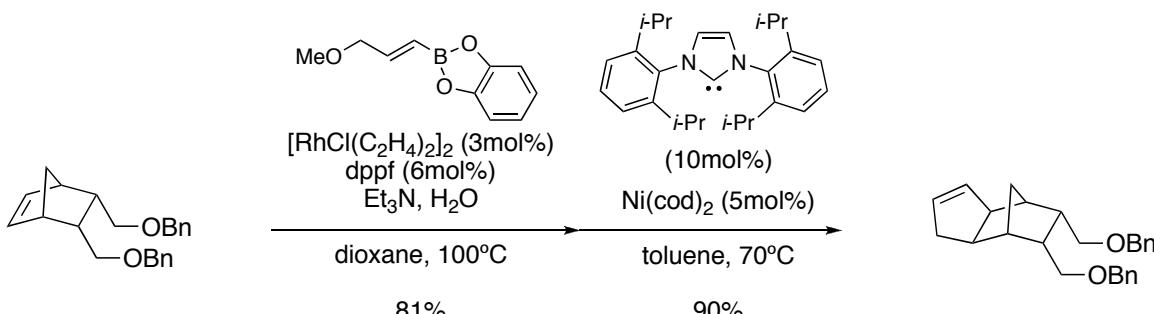
Y. Lisag *et al.*, *J. Org. Chem.* **70**, 6980 (2005)

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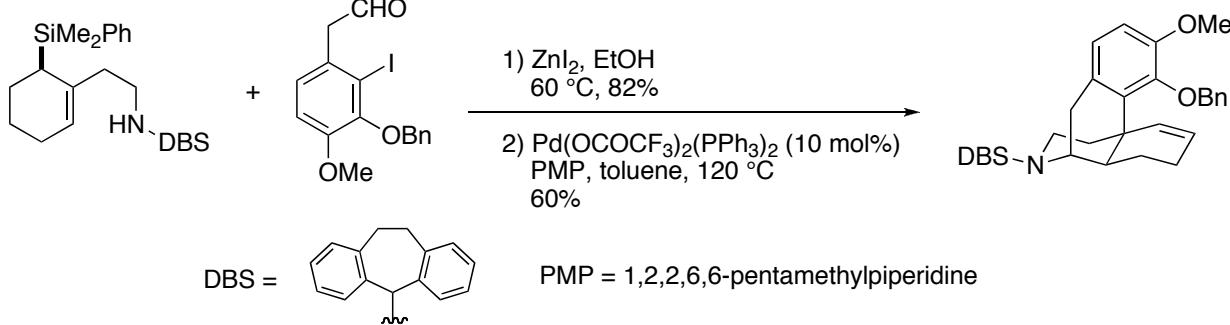
R. M. Williams *et al.*, *Angew. Chem. Int. Ed.* **43**, 2930 (2004)

4



M. Murakami *et al.*, *J. Am. Chem. Soc.* **128**, 2516 (2006)

5

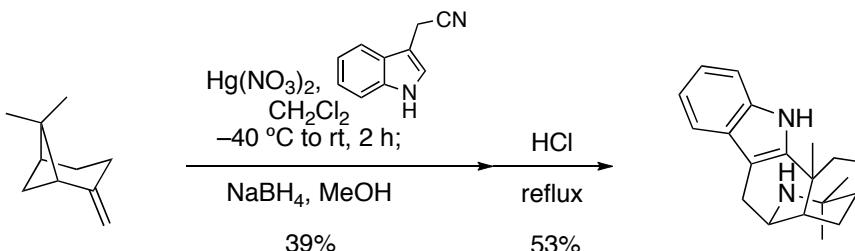


L. E. Overman *et al.*, *J. Am. Chem. Soc.* **115**, 11028 (1993)

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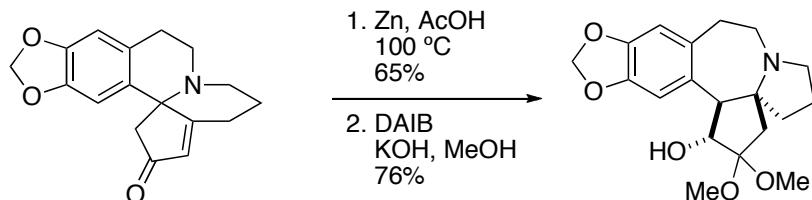
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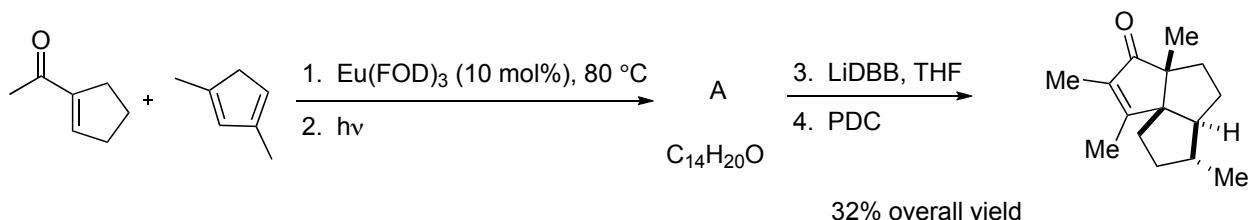
H. Heathcock *et al.*, *J. Org. Chem.*, **58**, 564 (1993)

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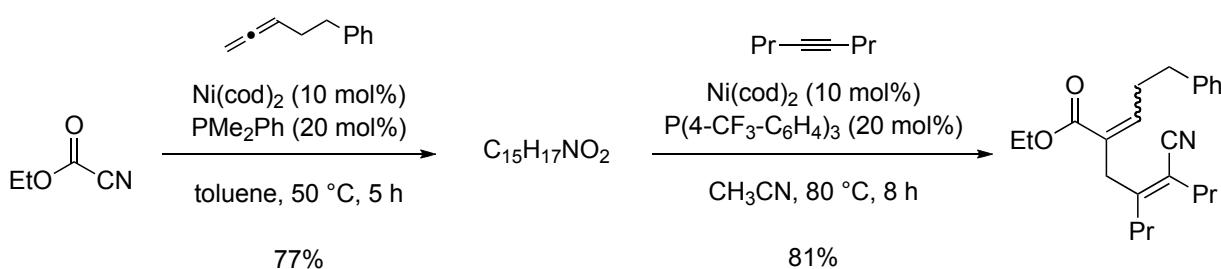
W. Z. Li *et al.*, *Org. Lett.*, **5**, 2931 (2003)

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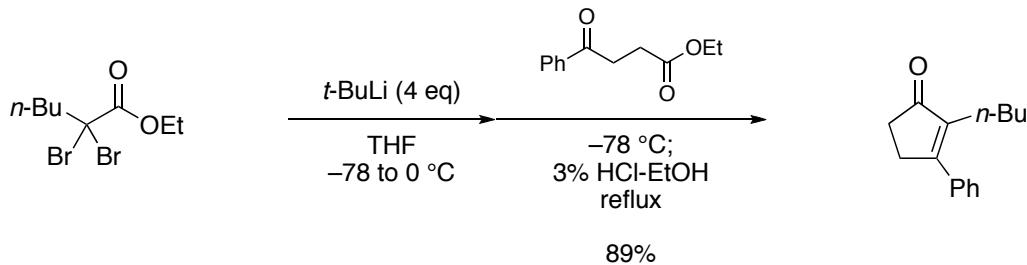
Rawal, V. H., *et al.*, *Org. Lett.*, **2**, 2711 (2000)

4



T. Hiyama *et al.*, *J. Am. Chem. Soc.*, **128**, 7420 (2006)

5

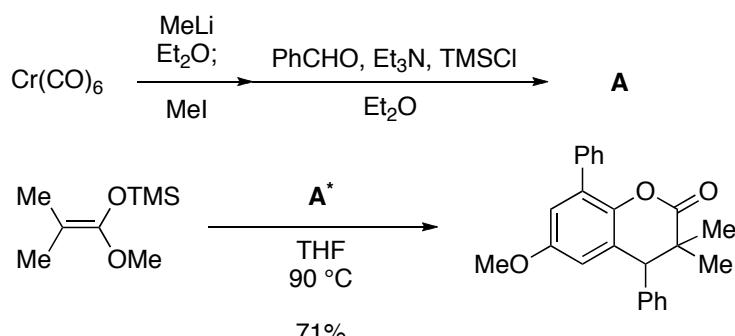


Shindo, M. *et al.*, *J. Am. Chem. Soc.*, **121**, 6507 (1999)

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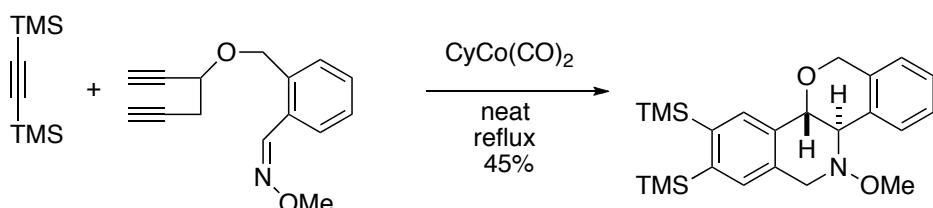
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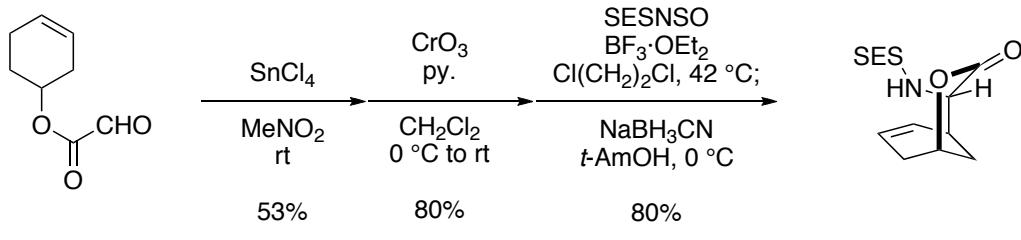
J. Barluenga *et al.*, *Org. Lett.*, **8**, 2703 (2006)

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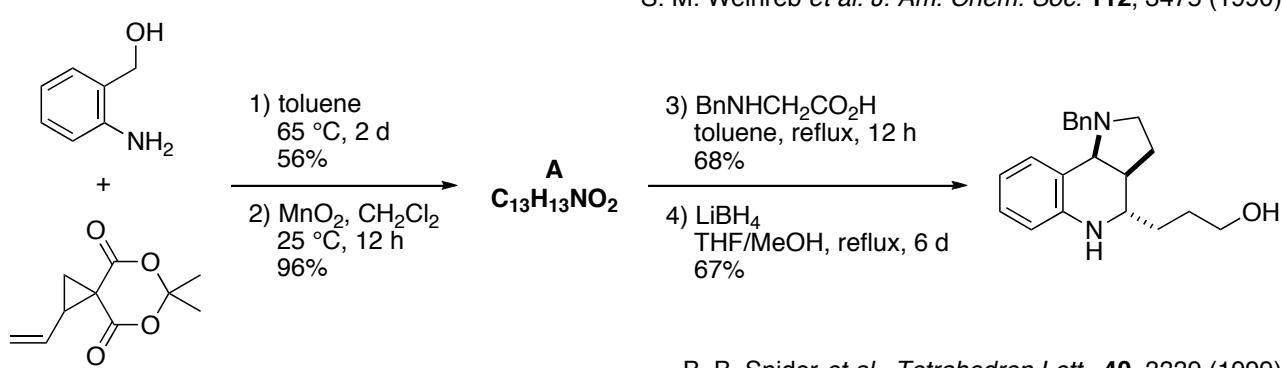
K. P. C. Vollhardt *et al.*, *J. Am. Chem. Soc.*, **98**, 6755 (1976)

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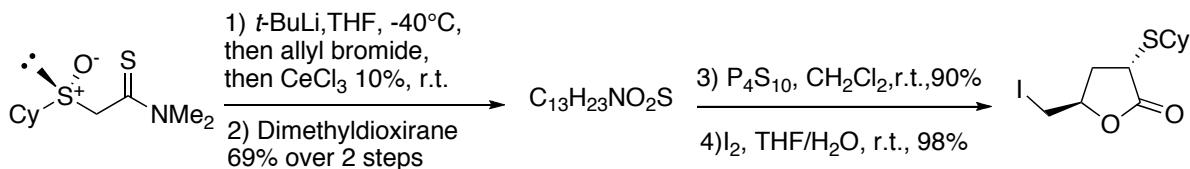
S. M. Weinreb *et al.*, *J. Am. Chem. Soc.*, **112**, 3475 (1990)

4



B. B. Snider *et al.*, *Tetrahedron Lett.*, **40**, 3339 (1999)

5



P. Metzner *et al.*, *Eur. J. Org. Chem.*, 1934 (2006)