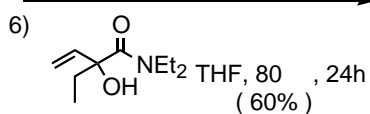
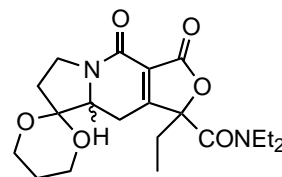


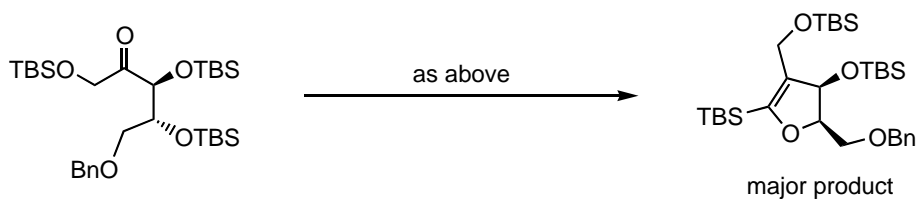
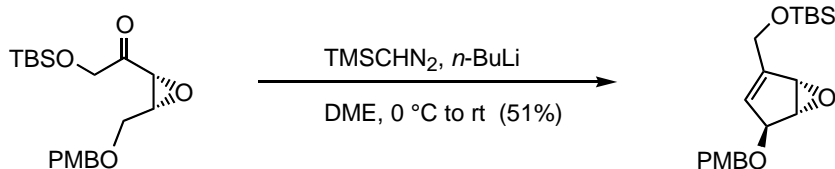
- 1) HO(CH₂)₃OH, TsOH, ClCH₂CH₂Cl,
- 2) LiAlH₄, (60% for 2 steps)
- 3) MsCl, Et₃N, CH₂Cl₂
- 4) NH₂OH, Et₃N (50% for 2 steps)
- 5) HgO, CH₂Cl₂, 0 °C, 24h (70%)



- 7) Zn AcOH, THF, H₂O
- 8) EtO₂CCH₂CO₂H,
1-ethyl-3-(3-dimethylaminopropyl)
carbodiimide
; K₂CO₃, EtOH (75 % for 2 steps)
- 9) swern oxid.
- 10) KO^tBu, EtOH, 25 °C, 1h
(55% for 2steps)



Yu, J.; DePue, J.; Kronenthal, D.
Tetrahedron Lett. **2004**, 45, 7247

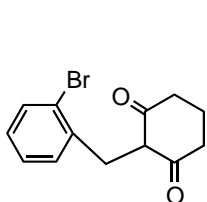


Akiyama, M.; Awamura, T.; Kimura, K.; Hosomi, Y.; Kobayashi, A.; Tsuji, K.; Kuboki, A.; Ohira, S.

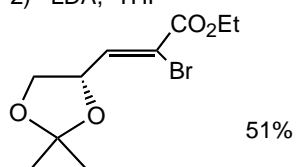
Tetrahedron Lett. **2004**, 45, 7133

TS

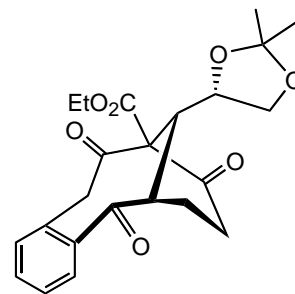
9.25



- 1) Et₃OBF₄, CH₂Cl₂, 79%
- 2) LDA, THF



- 3) *tert*-BuLi, THF,
- 4) 15% HCl, CH₂Cl₂, 59%
- 5) O₃, MeOH, -95°C, then Me₂S, 81%



H.-J. Gutke, N.A. Braun and D. Spitzer
Tetrahedron, **2004**, 60, 8137.