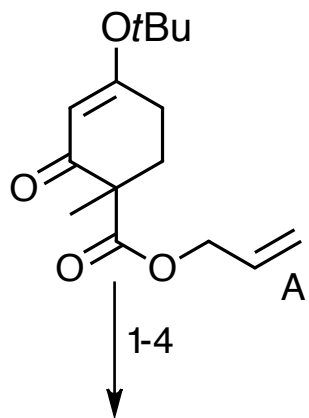


Synthesis Challenge # 41

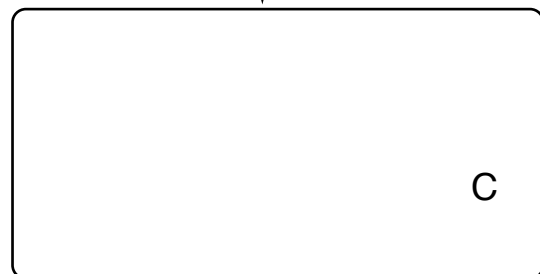
AG Wegner

12.11.2015



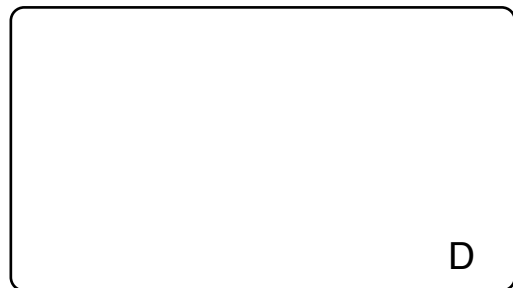
- 1) (*S*)-*t*Bu-PHOX, Pd₂(pmdba)₃, toluene, 50°C
- 2) LiAlH₄, Et₂O, rt, then H₂SO₄
- 3) LDA, TBSCl, HMPA, THF, -78°C
- 4) Pd(OAc)₂, O₂, DMSO, 65°C

5-8

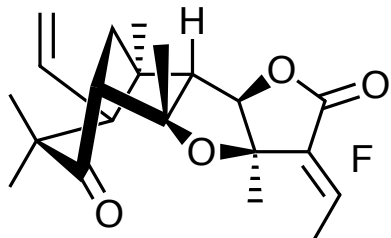


- 5) vinylMgBr, CuBr*Me₂S, -40°C
- 6) NaH, MeI (excess), DME
- 7) SeO₂, *t*BuO₂H, CH₂Cl₂, RT
- 8) VO(acac)₂, *t*BuO₂H, CH₂Cl₂

9-11



12-14



- 9) DMP, CH₂Cl₂
10) 2-TMS-furan, nBuLi, Et₂O
11) LiBHEt₃, THF, 60°C

- 12) DMP, CH₂Cl₂, RT
13) MeMgBr, THF, -40°C
14) *m*-CPBA, CH₂Cl₂, RT

- 15) DBU, CH₂Cl₂, RT
16) LDA, CH₃CHO, THF, -78°C
17) MsCl, Et₃N, DMAP, CH₂Cl₂

In step 15) are two isomers formed.
Which ones, and why?