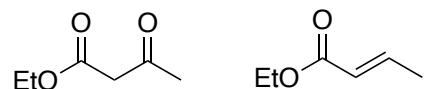


Synthesis Challenge 97

AG Wegner

01.07.2021



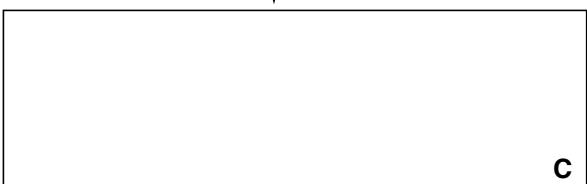
↓
1-3

A



↓
4-8

B



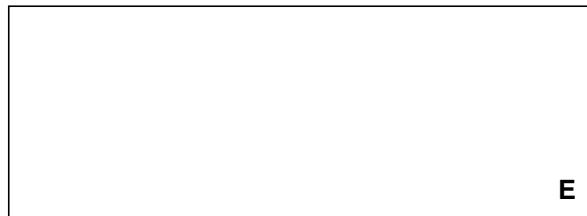
↓
9-11

C



↓
12-13

D

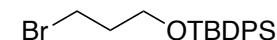


1) Na, EtOH, reflux
2) CSA, toluene, iPrOH, reflux
3) Cs_2CO_3 , NaI, I, CH_3CN

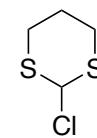
4) LiAlH₄, Et_2O , Et_2O , then 2 M HCl
5) NaBH₄, $\text{C}_2\text{Cl}_3 \cdot 7\text{H}_2\text{O}$, MeOH, 0°C
6) TBSCl, imidazole, CH_2Cl_2 , 0°C
7) DMP, NaHCO_3 , CH_2Cl_2 , rt
8) 2M HCl, THF

9) $\text{Cu}(\text{OTf})_2$, MgSO_4 , *i*PrOH/ CH_2Cl_2
10) TBAF, THF, rt
11) TEMPO, PIDA, CH_2Cl_2

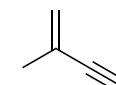
12) **II**, *n*BuLi, THF, -78°C
13) DMP, NaHCO_3 , CH_2Cl_2



I

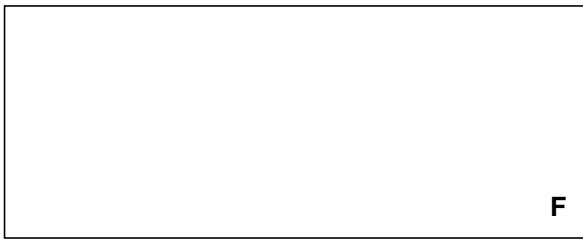


II



III

↓
14



↓
15-17



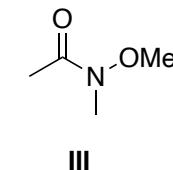
↓
18-20



↓
21-23

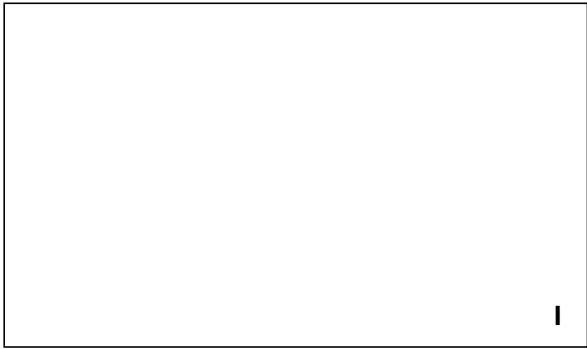
14) Co_2CO_8 , toluene, 60°C

15) III, LDA, THF, -78°C
16) TMSOTf, CH_2Cl_2 , 2,6-lutidine, 0°C
17) LiAlH₄, THF, 0°C



18) TBSOTf, 2,6-lutidine, CH_2Cl_2 , 0°C
19) CH_2CHMgBr , THF, 0°C
20) DMP, NaHCO_3 , CH_2Cl_2

21) Grubbs II, toluene, reflux
22) TBAF, THF, 0°C
23) MsCl, Et_3N , DMAP, CH_2Cl_2 , rt



↓
24-26

- 24) BuSnH, AIBN, toluene, reflux
25) TsOH, 50°C, Me₂CO/H₂O
26) Ag₂CO₃/Celite, toluene, reflux

