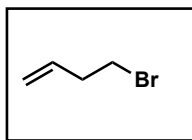
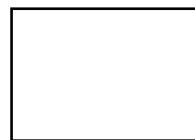


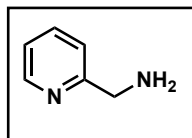
Comp. A



Comp. B



Comp. C



Comp. D



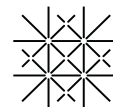
4 NAME ?

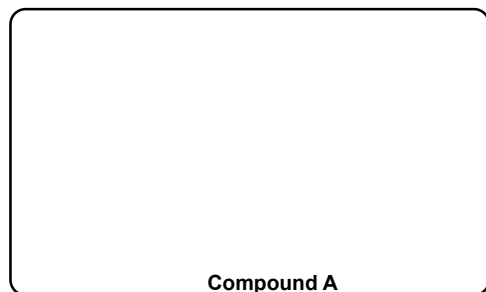
5 NAME ?

10 NAME ?

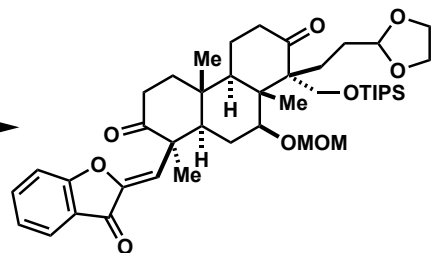
15 NAME ?

29 NAME ?

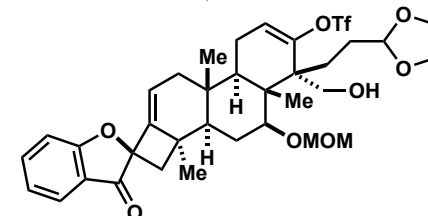




20 E, LDA
then Comp., THF
21
22

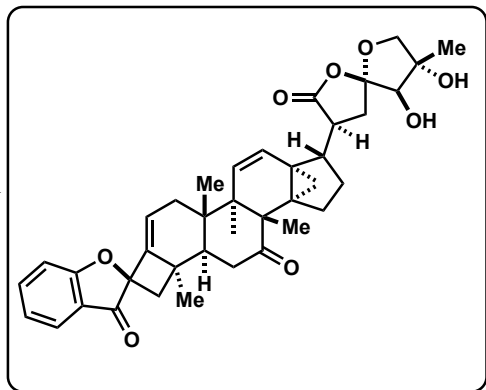


23
24
25
26

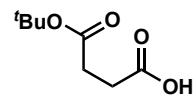
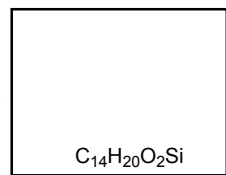


30 Ni(cod)₂, LiBr, Et₃N, MeCN, rt
31 DMP, NaHCO₃
32 TBAF, AcOH

Hint to 30: 2 rings, 3 stereocenters



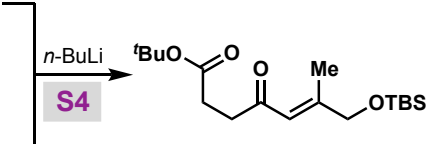
S10



S1

S2

S3



S5

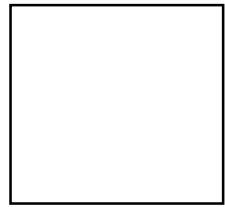
S6 TBAF

S7 TFA, DCM

and

TFA, DCM

27 TsCl, Et₃N, DMAP, DCM
28 HCl, AcOH, H₂O, 60°C
29 F, DIPEA, LiCl, MeCN



S8 TMSCl, imid.
S9 (EtO)₂POCl, LDA, THF

