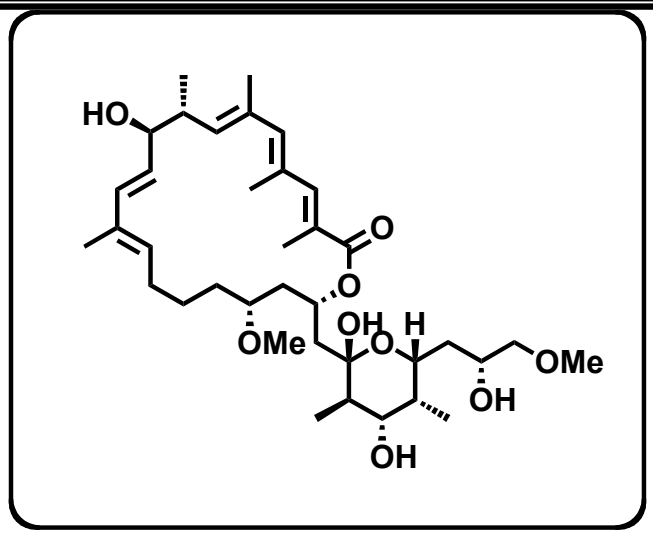
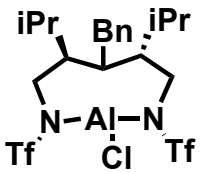
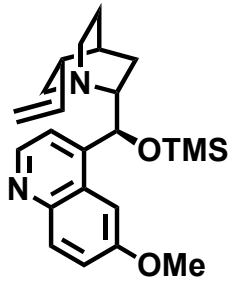
Angew. Chem. Int. Ed. 2010, 49,Earlyview



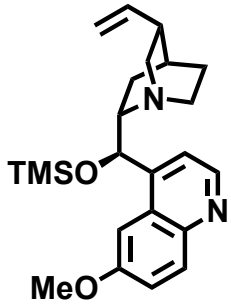
1. Total synthesis of Apoptolidin C Aglycone



Catalyst 1

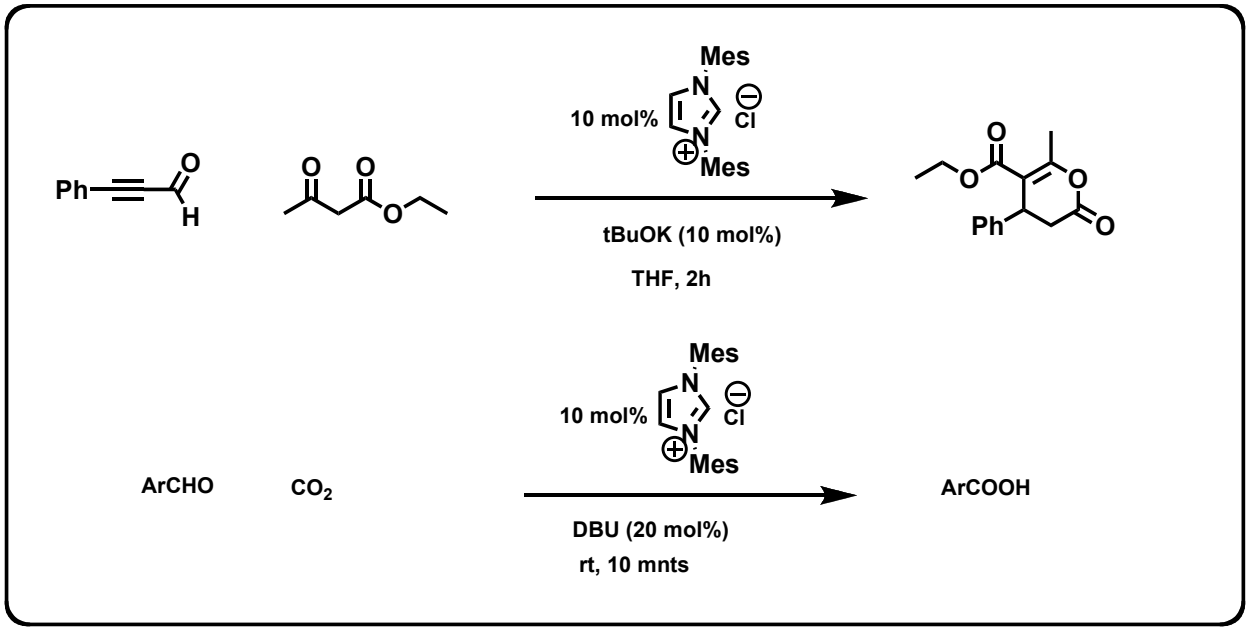


Catalyst 2

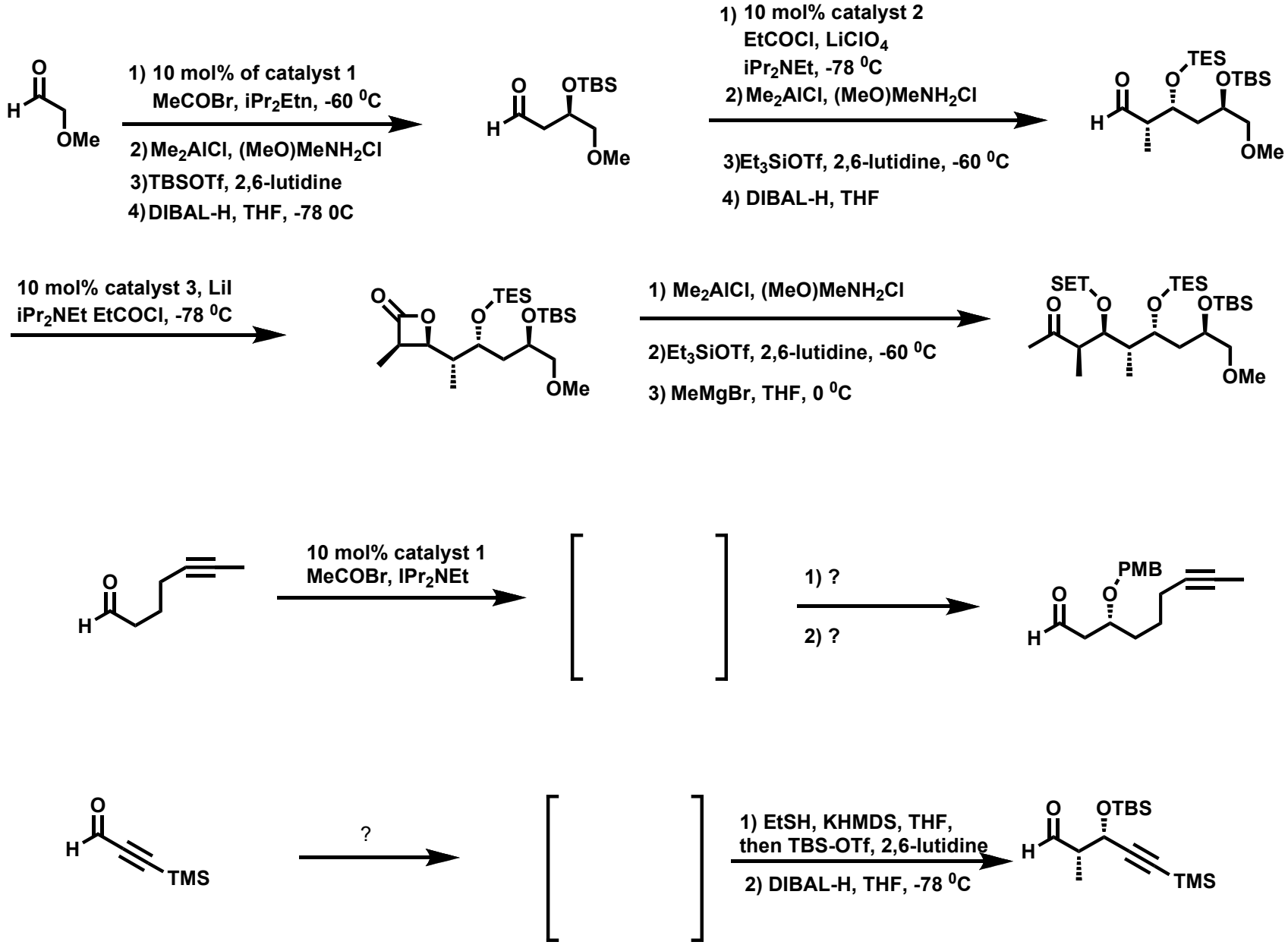


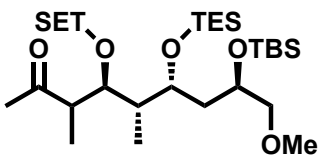
Catalyst 3

2. Mechanism problems…



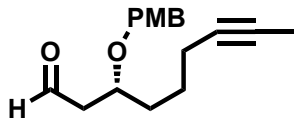
Construction of fragments..





1) NaHMDS, THF, TMSCl,
2,6-lutidine

2)



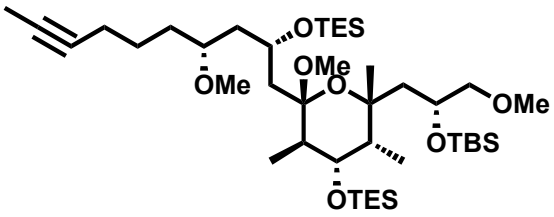
$BF_3.OEt_2$, DCM, -78 ^{0}C

1) TFA, MeOH:DCM (1:1)

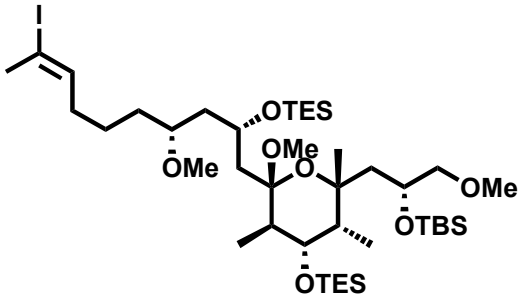
2) TESOTf, 2,6-lutidine

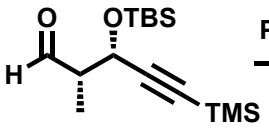
3) DDQ, DCM,
pH 7 Phophate buffer

4) Meerwin's reagent
proton sponge, DCM

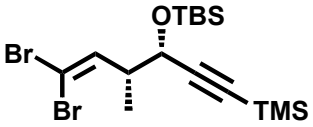


Cp_2ZrHCl, 2,6-lutidine
THF, then I_2

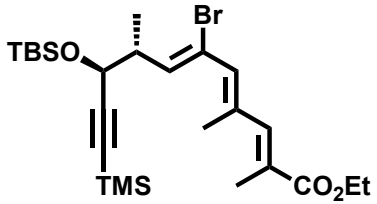


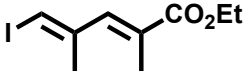


PPh_3, CBr_4, DCM

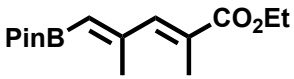


10 mol%$Pd(PPh_3)_4$, TlOEt,
aq. THF

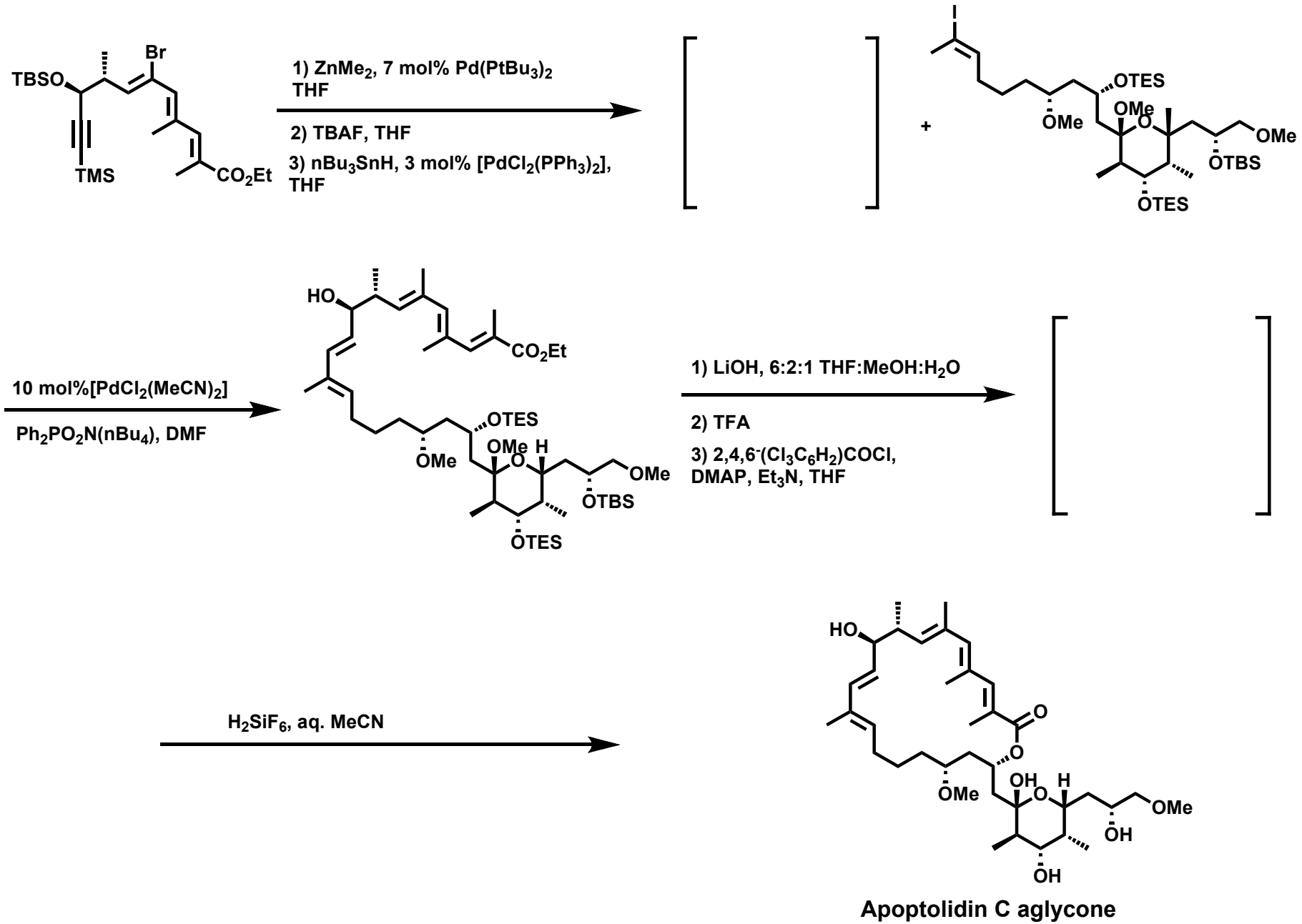




$(pinB)_2$, 3 mol% $[Pd(dppf)Cl_2]$
KOAc, DMSO, 85 ^{0}C



Completion of the synthesis....



Apoptolidin C aglycone