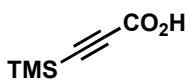
Denksport

24.01.18



A

1a.) PivCl, Et_3N
THF, -25 °C

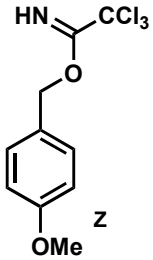
b) Oppolzer sultam (**Y**)
LiCl, -20 °C
2.) TBAF, THF/H_2O

B + D

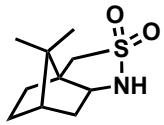
3.) $HC(OEt)_3$, EtOH,
PPTs, 90 °C

4.) Add to Li^0, $Fe(NO_3)_3$
in $H_2N(CH_2)_2NH_2$, 0°C

C



Z



Y

5.) $ZrCl_4$, DCM, reflux

E

6.) L-Selectride, toluene, -78 °C
then H_2O_2, phosphate buffer

7.) $LiAlH_4$,THF, 0 °C
8.) TsCl, Et_3N, DMAP, DCM, 0 °C
9.) KCN, DMSO, 80 °C

F

10.) HCl_{aq}/silica gel, DCM, 40 °C
11.) VinylMgBr, toluene, -78 °C
12.) 5M HCl, THF, 70 °C

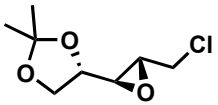
13.) OsO_4, NMO, H_2O, ^tBuOH, 0 °C
14.) TBDPSCl, Et_3N, DMAP, DCM, 0 °C

G

15.) DMP, DCM, 0 °C
16.) $NaBH_4$, MeOH, 0 °C

17.) MPMOC(=NH)CCl_3 (**Z**)
TFA, Et_2O

H



I

18.) 3 eq ^nBuLi, THF, -35 °C
then 2 eq MeI and HMPA

19.) pTsOH,
MeOH, 60 °C

J

20.) Bu_3SnH, $Pd(PPh_3)_2Cl_2$,
THF, RT

21.) I_2, DCM, 0 °C
22.) $NaIO_4$/silica, DCM, 0 °C

K

23.) NaH, THF, -78 °C then **K**
24.) MOMCl, DiPEA, DCM, 0 °C
25.) TBAF, AcOH, THF, 0 °C
26.) DMP, DCM, 0 °C

L

27.) $NiCl_2$, $CrCl_2$, DMSO
28.) Ms_2O, DMAP,
pyridine, 0 °C

29.) DDQ, phosphate buffer
30.) $Pd_2(dba)_3$, P^nBu_3,
dioxane then $NaBH_4$

M

31.) DiBAL-H, THF, 0 °C
32.) DBU, THF, 0 °C

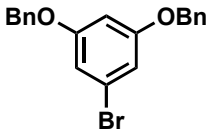
33.) $CeCl_3$, $NaBH_4$,
MeOH, 0 °C

N

34.) BzCl/pyridine
0 °C

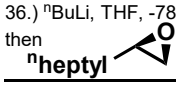
35.) TES-Cl, DMAP
Et_3N, DCM, 0 °C

O



P

36.) ^nBuLi, THF, -78 °C
then



37.) H_2, Pd/C, MeOH/AcOH
38.) $KHCO_3$, CO_2, glycerol, 150 °C
39.) MeI, $NaHCO_3$, DMF, 0 °C

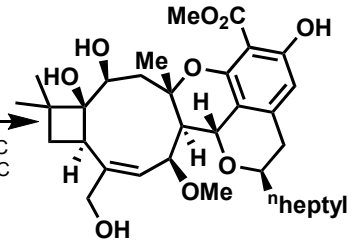
Q

40.) $(EtO)_3CH$,
TFA, 0 °C

R

41.) **O**, 100 °C, toluene

42.) DiBAL-H, DCM, -78 °C
43.) HF•pyridine, THF, 0 °C



S