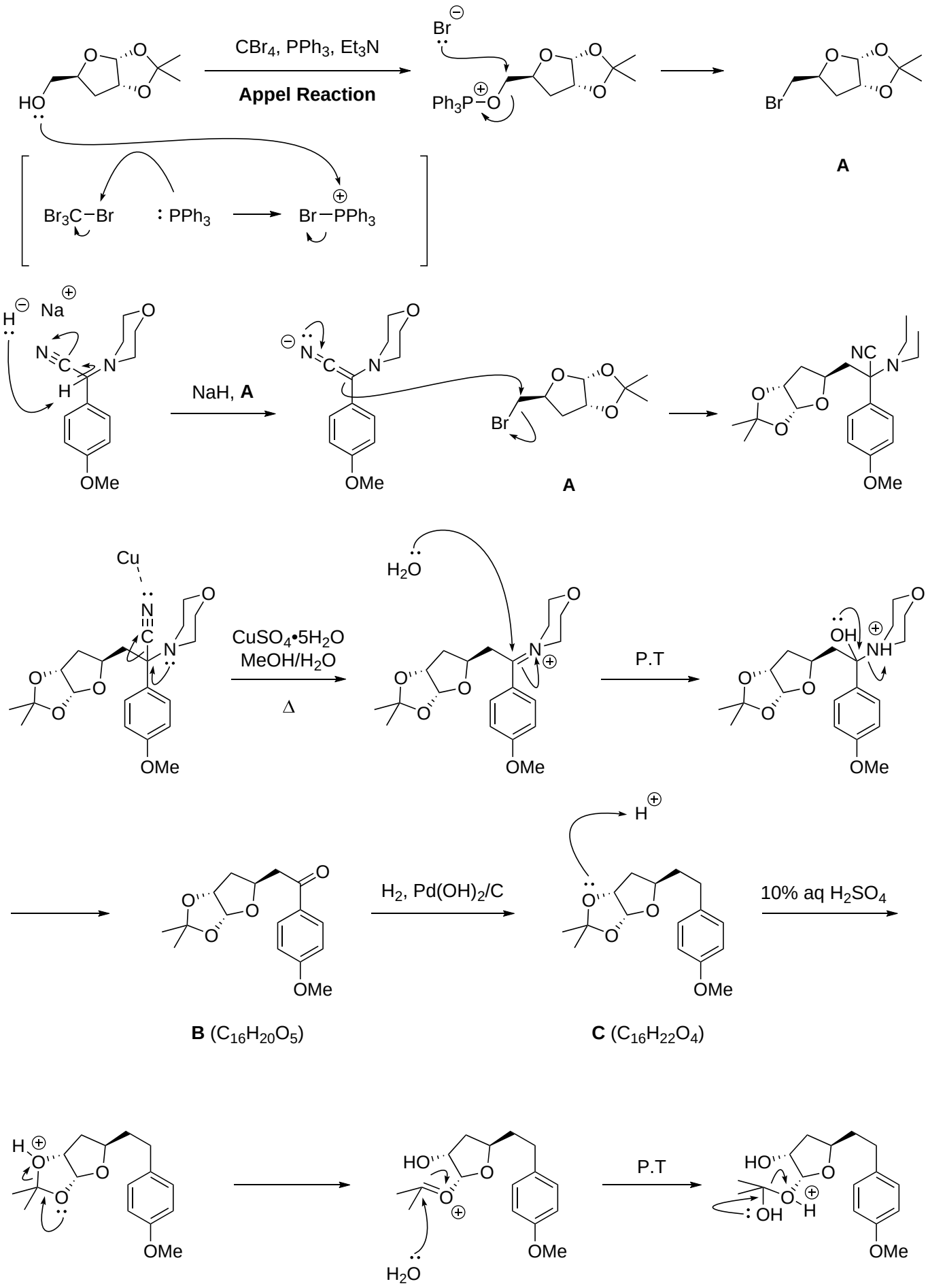
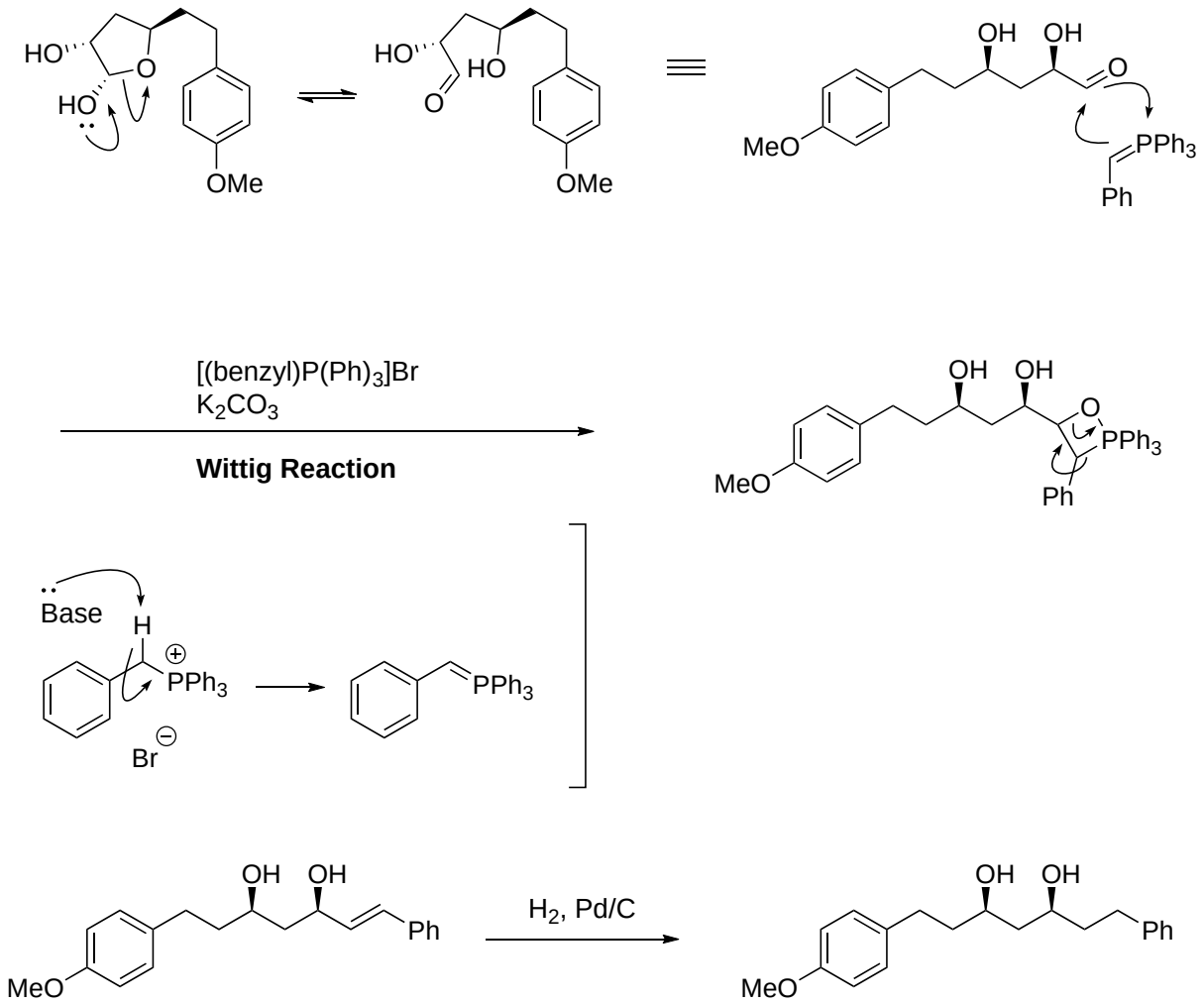
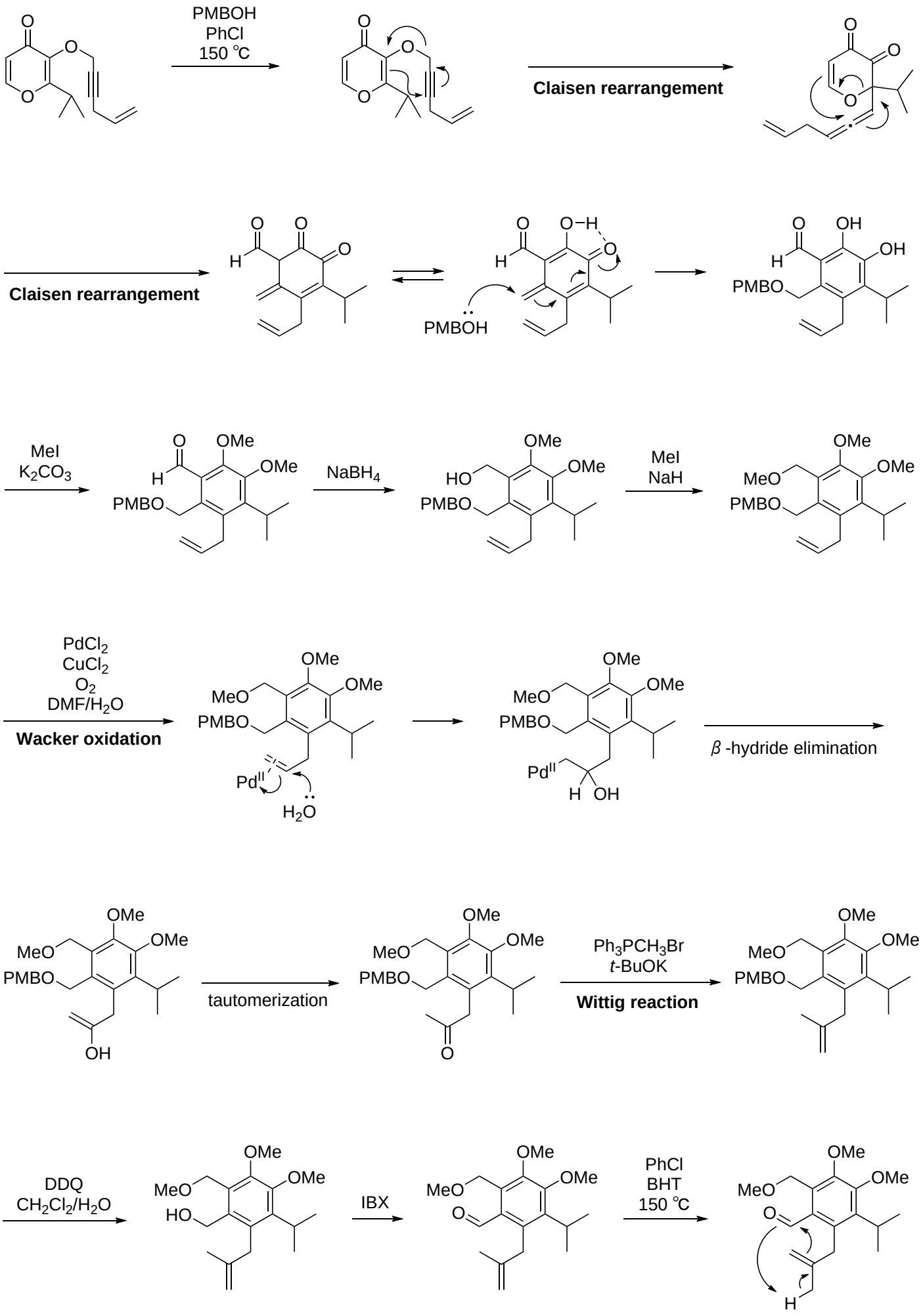
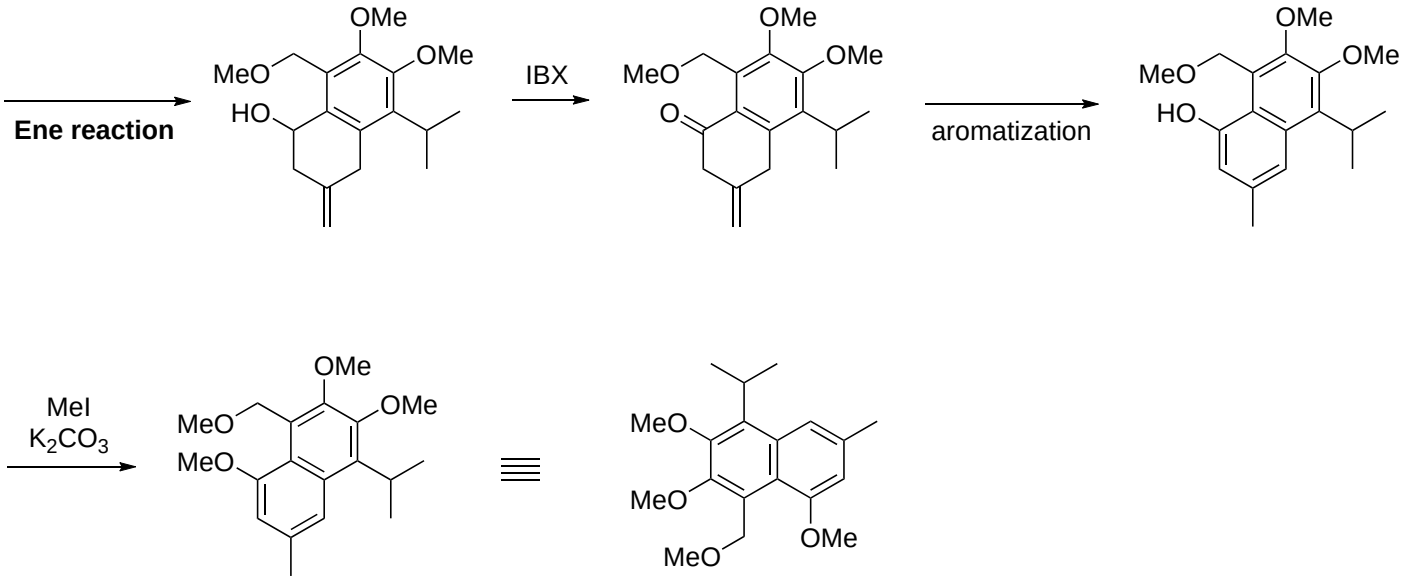

CBr4, PPh3, Et3N
Appel Reaction
A
NaH, A
A
CuSO4•5H2O
MeOH/H2O
Δ
P.T
H2, Pd(OH)2/C
10% aq H2SO4
B (C16H20O5)
C (C16H22O4)
P.T


HO
O
HO
OMe
HO
HO
O
OMe
OH
OH
O
MeO
PPh3
Ph
[(benzyl)P(Ph)3]Br
K2CO3
Wittig Reaction
OH
OH
O
PPh3
MeO
Ph
Base
H
PPh3
Br
PPh3
OH
OH
Ph
MeO
H2, Pd/C
OH
OH
Ph
MeO


PMBOH
PhCl
150 ℃
Claisen rearrangement
Claisen rearrangement
PMBOH
MeI
K2CO3
NaBH4
MeI
NaH
PdCl2
CuCl2
O2
DMF/H2O
Wacker oxidation
Pd^II
H2O
β -hydride elimination
tautomerization
Ph3PCH3Br
t-BuOK
Wittig reaction
DDQ
CH2Cl2/H2O
IBX
PhCl
BHT
150 ℃


Ene reaction
OMe
MeO
OMe
HO
IBX
OMe
MeO
OMe
O
aromatization
OMe
MeO
OMe
HO
MeI
K2CO3
OMe
MeO
OMe
MeO
MeO
MeO
MeO
OMe