

1) NaOH (2 equiv)
CO₂
2) MeI (2 equiv)

N

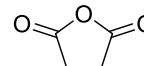
MeMgI (2 equiv)
then H₃O⁺

O

120 °C
-H₂O

P

H₂ PtO₂



AlCl₃

Q

T
C₁₄H₂₀O₃
1) Zn(Hg), HCl
2) KOH, Me₂SO₄

S
C₁₄H₁₈O₄
KOH (excess)
Me₂SO₄

R
C₁₃H₁₆O₄

1) SOCl₂
2) AlCl₃

U
C₁₄H₁₈O₂

1) NaOMe
2) HCO₂Et

V
C₁₅H₁₈O₃

1) *t*-BuOK
2) KOH

W
C₁₈H₂₂O₂

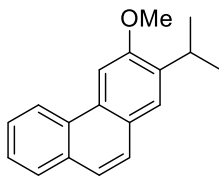
1) LiAlH₄
2) H₃O⁺

X
C₁₈H₂₄O₂

Δ
CaCl₂

Y
C₁₈H₂₂O

DDQ



6
C₁₈H₁₈O