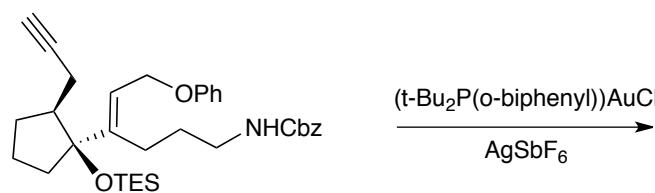
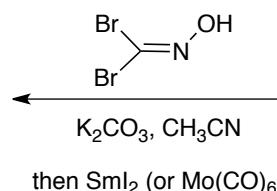
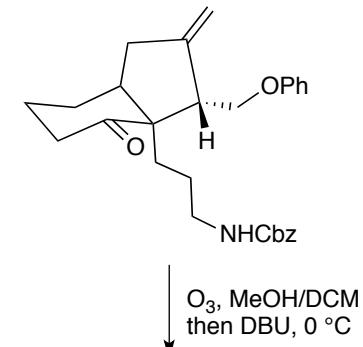


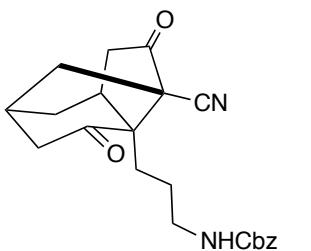
OL 2001, 3, 115.
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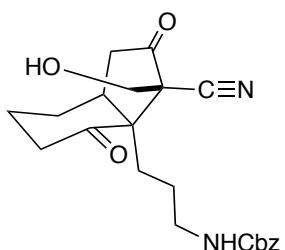
Tetrahedron 2009, 65, 1880.
JACS 2010, 132, 7876.



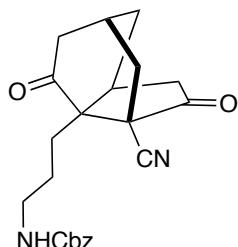
JACS 2009, 131, 17066.
TL 1984, 25, 487.



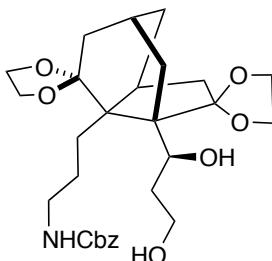
1. IBX, DMSO
2. NaH , CS_2 , MeI
then benzene, Δ



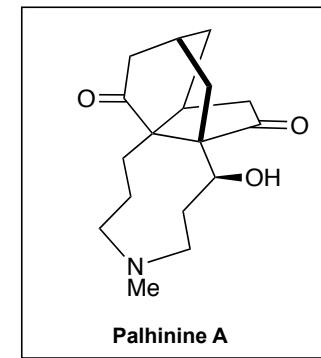
IBX oxidation: JACS 2000, 122, 7596.
for selectivity in IBX oxidation: JACS 2002 124, 2245.
for radical cyclization: OL 2007, 9, 2677.
J. Chem. Soc., Chem. Commun. 1994, 25.
for selectivity in radical cyclization: JOC 1990, 55, 4883.
TL 1992, 33, 4843.



1. ethylene glycol,
Otera's catalyst
2. vinyl lithium
3. CBS reduction
4. BH_3 then H_2O_2



1. CBr_4 , PPh_3
2. NaH , Δ
3. LiAlH_4
then H^+



Appel's reaction: JOC 2005, 70, 9013.

Otera's catalyst: Tetrahedron 1992, 48, 1449.
Vinyl lithium addition on to nitrile: JACS 1995, 117, 5245.
JOC 1994, 59, 3270.
CBS reduction: JOC 2009, 74, 6825.

Highlights:

- Au(I)-catalyzed enyne cyclization - formation of 5,6-cis system
- olefin functionalization through [3+2] nitrile oxide cycloaddition
- radical mediated formation of bicyclo[2.2.2]octane