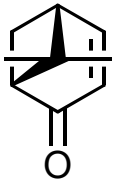
Synthesis Challenge # 58

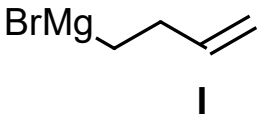
Total Syntheses of (−)-Hibiscone C and Lysergine: A Cyclization/ Fragmentation Strategy,
Y. Lu, H. Yuan, S. Zhou, T. Luo, *Org. Lett.* **2017**, *ASAP*, DOI: 10.1021/acs.orglett.6b03778
02.02.2017



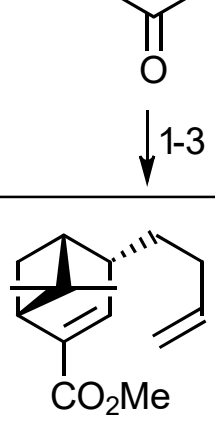
A

1-3

1) **I**, CuI, THF, −30ºC
2) LDA, Then $PhNTf_2$
3) [Pd], CO, MeOH



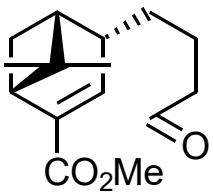
I



B

4-5

4) 9-BBN, then H_2O_2
5) Swern-Oxidation

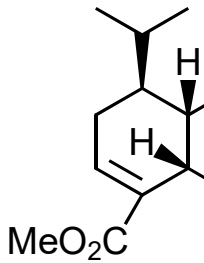


C

6

6) cat. ACCN, $(TMS)_2SiH$, toluene, 100ºC

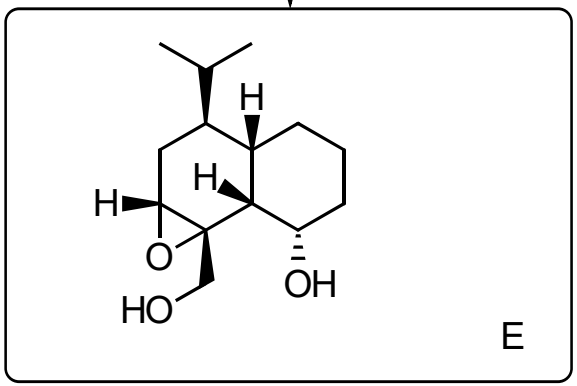
ACCN = 1,1′-azobis(cyclohexyl)-carbonitrile



D

7-9

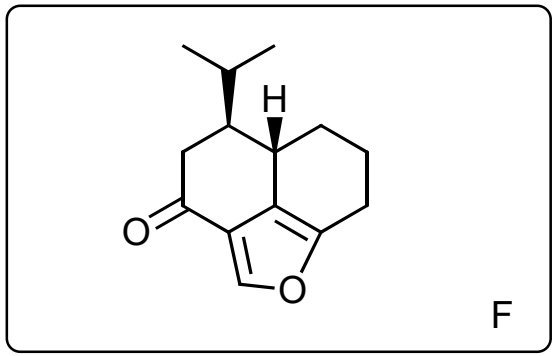
7) $LiAlH_4$
8) TBSCl, TEA
9) *m*CPBA



E

10-11

10) DMP, CH_2Cl_2, then TsOH
11) Swern Oxidation



F

12-14

12) NBS, AIBN
13) Swern Oxidation
14) LiHMDS, THF, –78ºC, then MeI