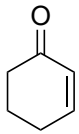
Total Synthesis of Hypersampsone M

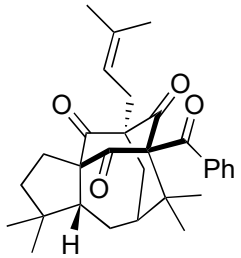
Samkian, A. E.; Virgil, S. C.; Stoltz, B. M. Total Synthesis of Hypersampsone M. *J. Am. Chem. Soc.* **2024,** 146 (28), 18886–18891.



1–10

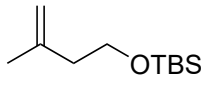
A

11–16

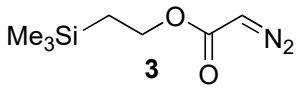


Hypersampsone M

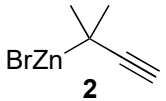
1) **1**, $Fe(acac)_3$, $PhSiH_3$
2) NaH, $O=C(OMe)_2$, THF , reflux
3) PhSeCl, py *then* H_2O_2, DCM, 0°C
4) **2**, DME, 0 *to* 40 °C *to* 80 °C
5) Pd/C, H_2, EtOAc
6) LDA, **3**, THF -78 °C
7) $Rh(TFA)_4$,
8) NaH, prenyl bromide, THF, 0°C
9) TBAF
10) DMP



1



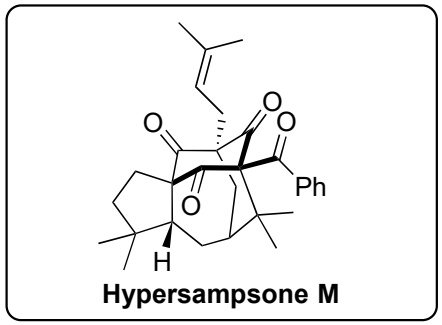
3



2

11) $TsOH{\cdot}H_2O$
12) $PhNH_2{\cdot}HCl$, $AlMe_3$, toluene
13) DMP
14) Me_3OBF_4, 2,6-di(-*t*-Bu)py, DCM
15) EtOAc/HCl
16) LiTMP, BzCl -78 °C

5) *Hint:* double bond reduction only
6) *Hint:* LDA reacts first with diazoacetate
7) *Hint:* Consider Ring expansion rearrangement



Hypersampsone M