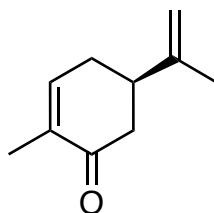


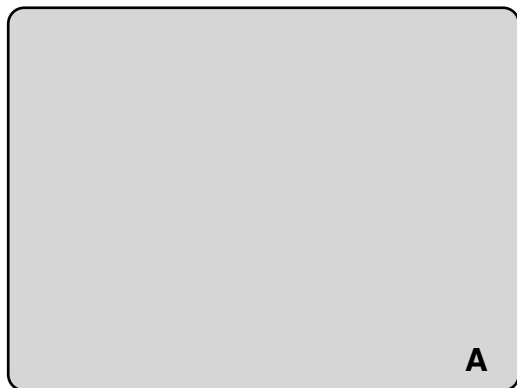
Total Synthesis of (+)-Aberrarone

Wang, Y.; Su, Y; Jia, Y.*

J. Am. Chem. Soc. **2023**, *145*, 9459–9463



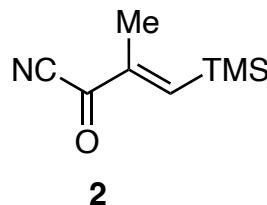
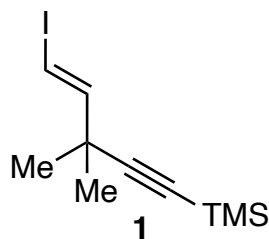
1-5



6-13

(+)-Aberrarone

- 1) $\text{NaBH}_4, \text{CeCl}_3$
- 2) $\text{CuCl (S)-DTBM-SegPhos, KO}^t\text{-Bu, HBPIn}$
- 3) $\text{NaBO}_3 \cdot 4\text{H}_2\text{O}$
- 4) $\text{PPh}_3, \text{I}_2, \text{imidazole}$
- 5) **1**, $\text{NiI}_2, \text{Mn, terpyridine}$



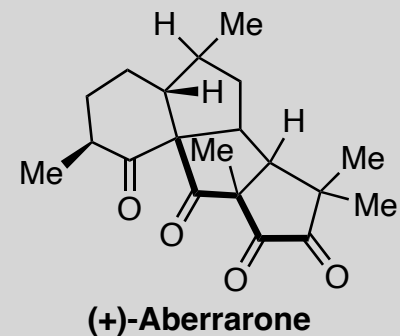
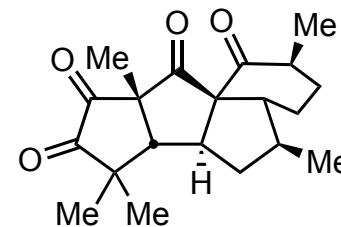
- 6) IBX
- 7) LiHMDS, 2
- 8) $\text{Mn(OAc)}_3 \cdot 2\text{H}_2\text{O EtOH}$
- 9) TBAF, AcOH
- 10) TFA
- 11) *m*-CPBA, then H_5IO_6
- 12) Ra Ni, H_2
- 13) $\text{SeO}_2 100^\circ\text{C}$

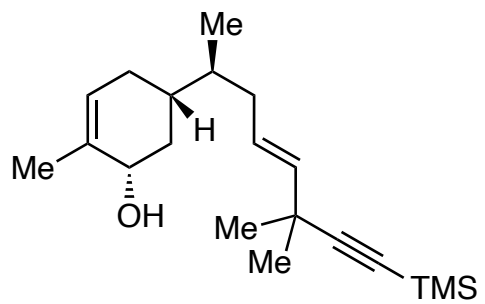
8) *Hint*: Most acidic proton is also most homolytic

9-10) *Hint*: β -Si effect

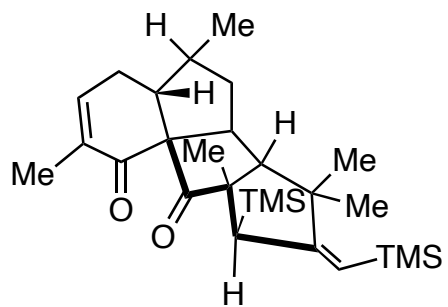
10) Name of reaction?

For reference: Carreira group's drawing of (+)-Aberrarone

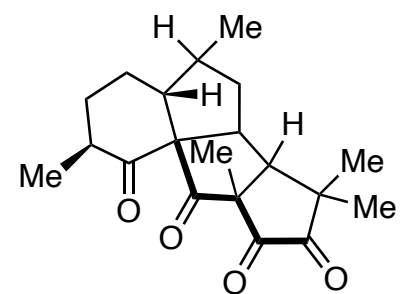




A



After rxn 8



(+)-aberrarone