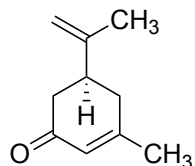
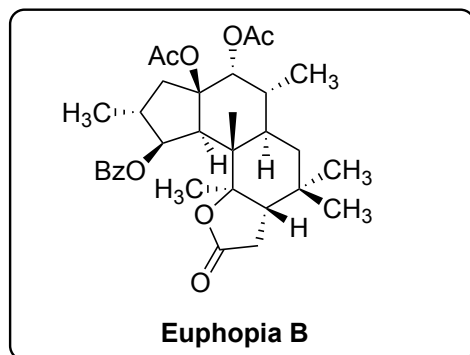


Total Synthesis of Euphoria B

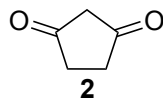
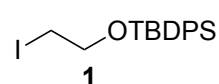
Chaoyun Xue, Ze Zhang, Zhongpeng Ding, Guobin Xie, Runqin Liu, Fenglin Wang, Jizhuo Yu,
Tao Wang, Fei Xue, Hao Song, Qifeng Chen and Yong Qin, *J. Am. Chem. Soc.* 2026, 148, 16359–16366



1-24



- 1) NaH, **1**, DMF
- 2) MeLi, TMSCl, CuBr·SMe₂
- 3) Comins' reagent, NaHMDS
- 4) Pd(OAc)₂, S-Phos, CO, Et₃N, MeOH
- 5) HBpin, CuCl, *t*-BuOK, (S)-DTBM-Segphos
- 6) DIBAL
- 7) **2**, DMEAD, PPh₃
- 8) NMP, 200 °C
- 9) Ag₂O, CH₃I
- 10) NaBO₃·4H₂O
- 11) DMP
- 12) SmI₂, *t*-BuOH, THF, -30 °C
- 13) MsCl, DIPEA
- 14) CsOAc, 18-Crown-6
- 15) K₂CO₃, MeOH
- 16) TESCl, imidazole
- 17) TBHP, Triton B
- 18) LDA, HMPA, CH₃I
- 19) LiAlH₄, then TBDPSCI, DIPEA
- 20) BzCl, py
- 21) Ac₂O, Al(OTf)₃
- 22) Mn(dpm)₃, PhSiH₃, O₂, *i*-PrOH
- 23) HF·py
- 24) [Cu(MeCN)₄]OTf, bipyridine, TEMPO, NMI, O₂



Name the starting compound

3) Structure of the Comins' reagent

7) Name of the reaction

8) Name of the reaction

17) Type of the reaction and name 2 alternatives

22) Type of the reaction

24) Name of the reaction

