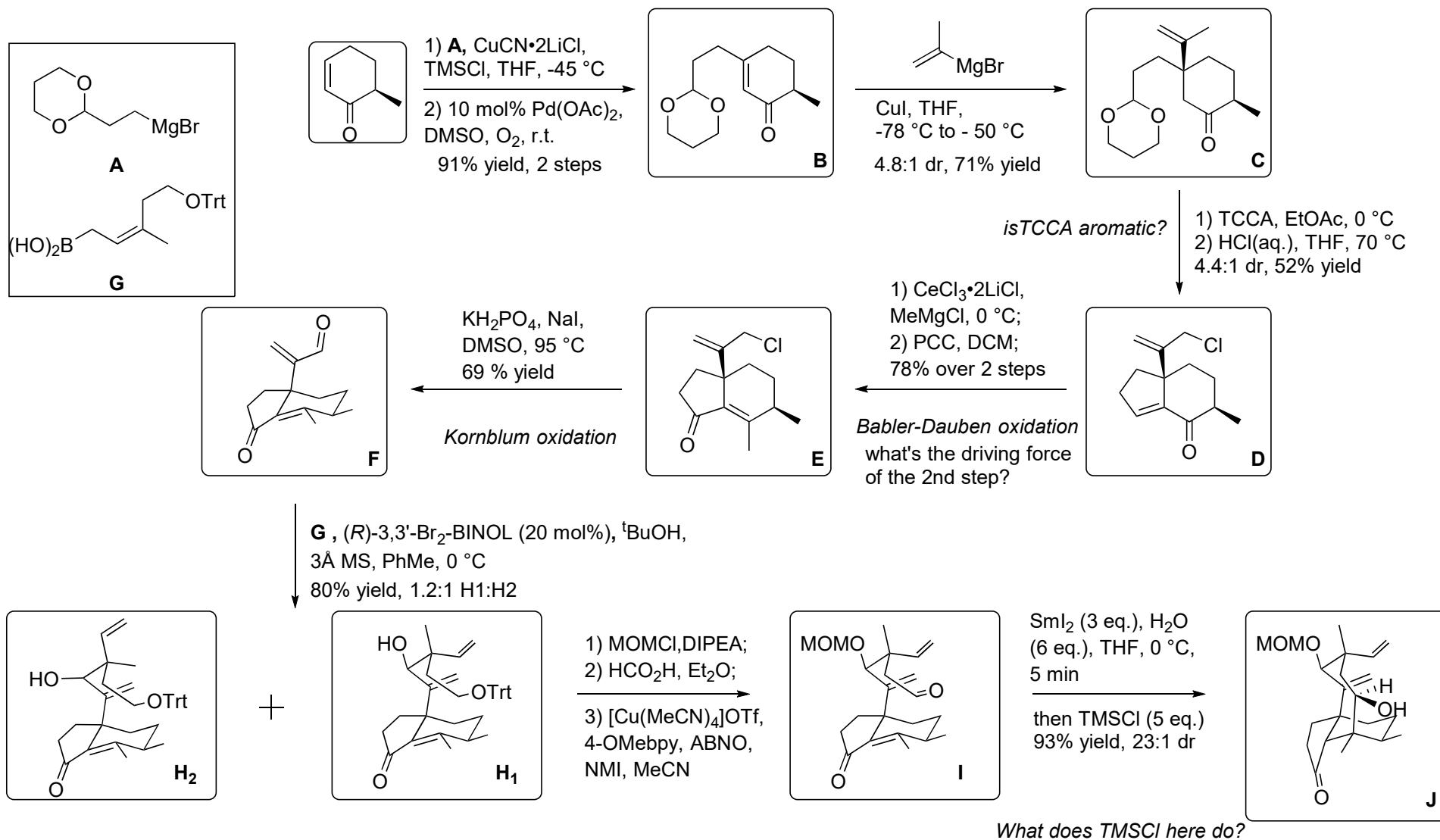
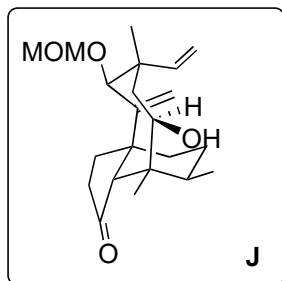




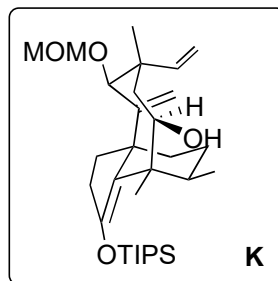
Total synthesis of (+)-Pleuromutilin

J. Am. Chem. Soc. 2018, 140, 4, 1267–1270



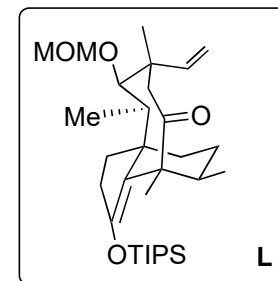


LiHMDS, TIPSOTf,
THF, -78 °C to 0 °C



Mn(dpm)₃ (13 mol%), PhSiH₃, TBHP, ⁱPrOH, r.t.
55% yield, single diastereomer

transannular redox relay



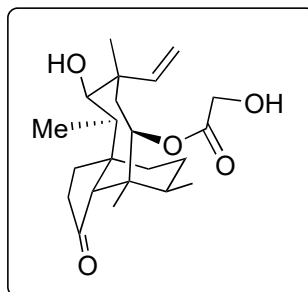
What does TBHP usually do in HAT reaction catalysed by weak-field metal hydrides?

Li/NH₃, EtOH, Et₂O, -78 °C
61% yield, 14:1 dr

TBHP: *tert*-butyl hydroperoxide

N: TFAO-CH₂-CO₂H

EDCI = EDC: 1-Ethyl-3-(3-dimethylaminopropyl) carbodiimide



N, EDCI, DMAP, DCM, r.t., 1 h

then MeOH, TEA;
then HCl/THF, 50 °C

