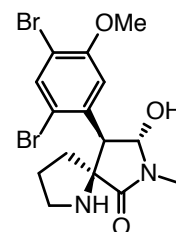
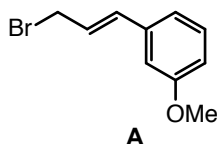


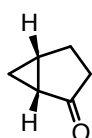
1. **A** (2 eq.), MeCN, rt, 48 h in dark;
tBuOK (2.0 eq.), rt, 2 h, 88% (dr = 96:4)
2. O₃, CH₂Cl₂-MeOH, -78 °C to rt;
NaBH₄ (5.0 eq.), 0 °C to rt, 4 h, 90%
3. 2 M HCl in Et₂O, MeOH (1 : 4), reflux, 12 h, 96%
4. Br₂ (3.0 eq.), ZnCl₂ (6.0 eq.), HCO₂H (15 eq.)
rt, 12 h, 71%
5. MeNH₂ (excess), EtOH, reflux, 15 h, 91%
6. AZADO (10 mol%), CuCl (10 mol %), bpy (10 mol %)
DMAP (20 mol%), rt, Air, 3 h, 23% (91% brsm)



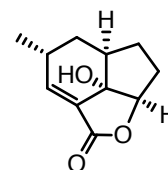
Amathaspiramide F



Hyunkyung Cho, Jae Eui Shin, Seokwoo Lee, Hongjun Jeon, Soojun Park, and Sanghee Kim,
Org. Lett. ASAP (DOI: 10.1021/acs.orglett.8b02568)



- 1) KHMDS (1.04 eq.), HMPA, **A** (1.5 eq.), THF, -78 °C, 10 min
- 2) BF₃·Et₂O (2 eq.), **B** (2 eq.), toluene, 0 °C to rt, 6 h in dark (27%, 2 steps)
- 3) ⁿBu₃SnH (2 eq.), AIBN (0.25 eq.), benzene, 80 °C, 5 h (42%)
- 4) LiOH·H₂O (1.5 eq.), THF/H₂O, rt, overnight;
then NaHCO₃ (2 eq.), NBS (1.2 eq.), DCM, 0 °C, 2 h (30%)
- 5) ⁿBu₃SnH (5 eq.), AIBN (1.8 eq.), benzene, 80 °C, 5 h (75%)

(-)-4-*epi*-Galiellalactone

Lu, Y.; Zhao, S.; Chen, S.-C.; Luo, T. *Org. Biomol. Chem.* **2018**, ASAP (DOI: 10.1039/C8OB01915K).