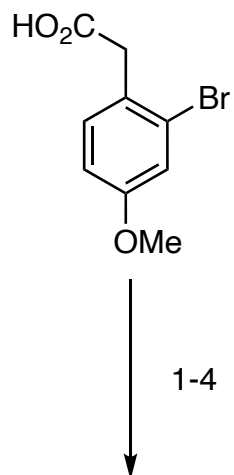


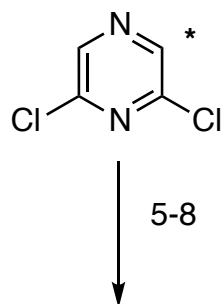
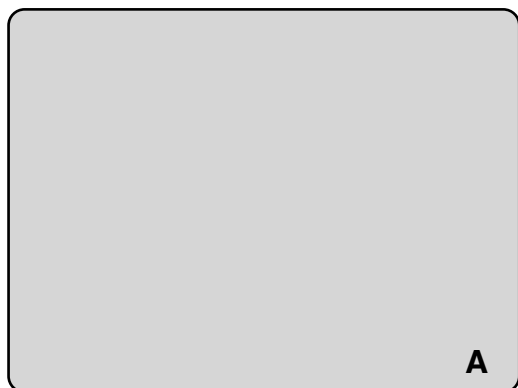
10-Step Asymmetric Total Synthesis and Stereochemical Elucidation of (+)-Dragmacidin D

Jeffrey J. Jackson, Hiroyuki Kobayashi, Sophia D. Steffens, and Armen Zakarian

Angew. Chem., Int. Ed. **2015**, *54*, 9971–9975.

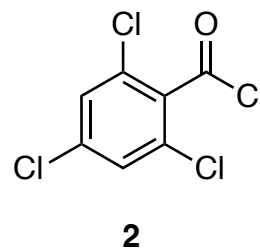
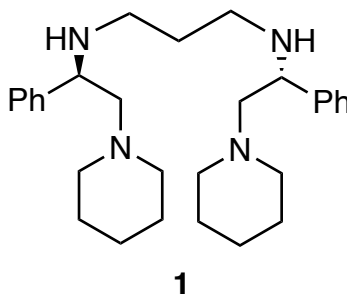


1-4

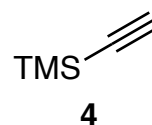
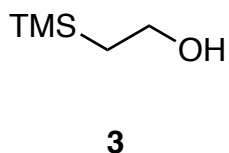


5-8

- 1) **1**, LiN(*t*Bu)SiMe₃, CH₃I
- 2) **2**, **3**, pyridine, DMAP
- 3) Cu(NO₃)₂·Ac₂O
- 4) NH₂NH₂, Pd/C



- 5)* NaI, HI, H₂O
- 6) KOH, *t*BuOH
- 7) TBSCl, NEt₃
- 8) **4**, PdCl₂(PPh₃)₂, CuI, NEt₃



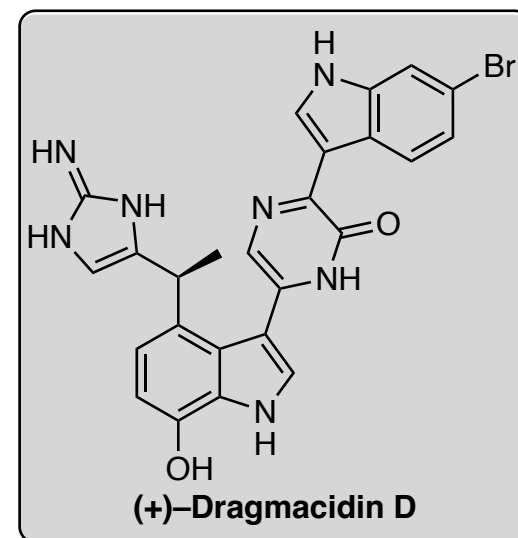
1) Name of reaction?

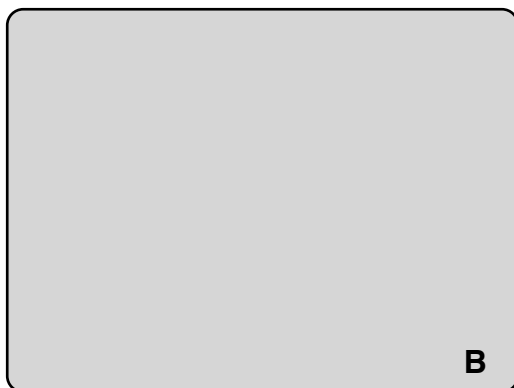
2) Name of reaction?

3) *Hint: Theoretical IR Stretch at 1573 and 1383 cm⁻¹*

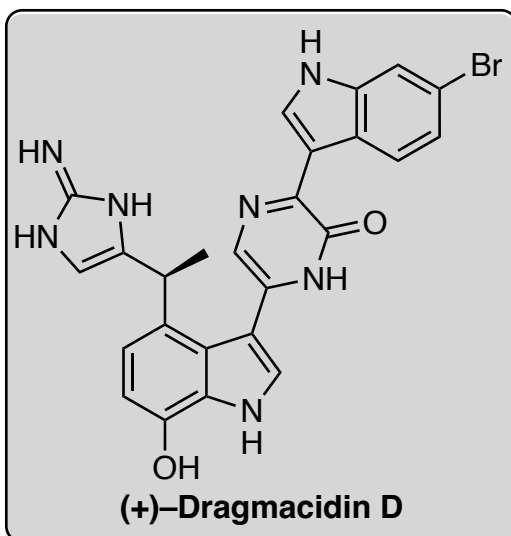
5) Name of Starting Material?

8) Name of reaction?

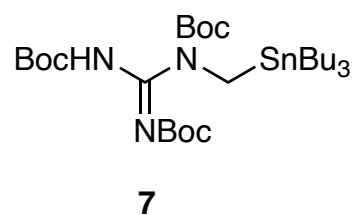
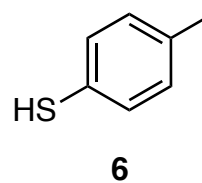
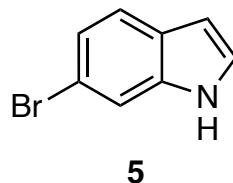




9-14



- 9) **A, B** (*t*-Bu)₂PF)PdCl₂, NEt₃ TBABr
- 10) BBr₃
- 11) **5**, CF₃SO₃H, DMF, O₂
- 12) **6**, CDI
- 13) **7**, CuOAc
- 14) CF₃CO₂H



9) Name of Reaction?