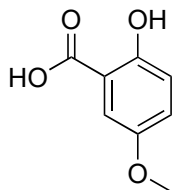
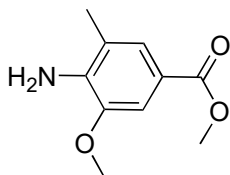


Total Synthesis of Allocyclinone A via Late-Stage Halogen Swapping

T.-H. Chao, E. B. Barrois, C. W. Johnston, H. Renata, "Total Synthesis of Allocyclinone A via Late-Stage Halogen Swapping" Angew. Chem. Int. Ed. n.d., n/a, e6162176.



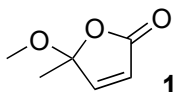
1-9



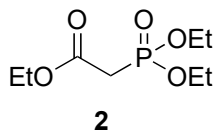
10-15



- 1) BnBr, K₂CO₃ then NaOH, H₂O
- 2) Me₂NH·HCl, Et₃N, EDCI
- 3) *n*-BuLi, TMEDA then DMF
- 4) HCl/AcOH, PhSH, PTSA
- 5) LiHMDS, **1**
- 6) TMSEOH, PPh₃, DIAD
- 7) H₂, Pd/C
- 8) Py·HBr₃
- 9) TBAB, oxone



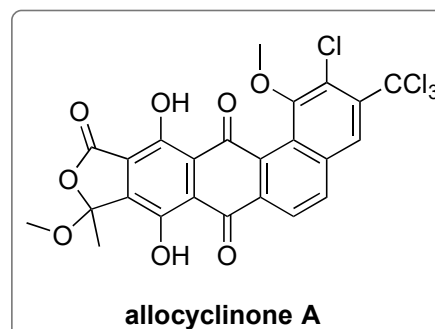
- 10) NaNO₂, CuCl, HCl
- 11) LiAlH₄
- 12) DMP
- 13) *n*-BuLi, *N,N,N'*-trimethylethylenediamine, 1,2-dibromotetrafluoroethane
- 14) NaH, **2**
- 15) NHNHTs, NaOAc then NaOH



5) Name of the reaction?

6) Name of the reaction?

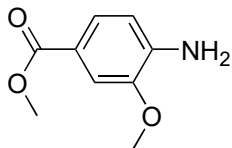
14) Name of the reaction?



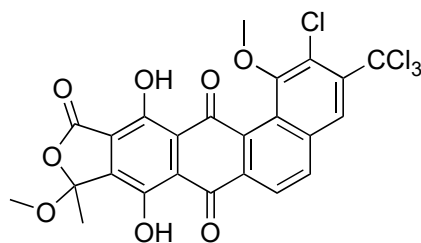
A+B

16-18

allocyclinone B



19-28



allocyclinone A

- 16) AgNO_3 , $(\text{NH}_4)_2\text{S}_2\text{O}_8$
- 17) Pd_2dba_3 , $\text{P}(\text{o-tolyl})_3$, CuTc , $(n\text{Bu}_3\text{Sn})_2$
- 18) TBAF

- 19) TBHP, NaSO_2CF_3 , $\text{Cu}(\text{OTf})_2$
- 20) NaNO_2 , CuCl , HCl
- 21) LiAlH_4
- 22) DMP
- 23) $n\text{-BuLi}$, N,N,N' -trimethylethylenediamine, dibromotetrafluoroethane
- 24) NaH , **2**
- 25) NHNHTs , NaOAc then NaOH
- 26) AgNO_3 , $(\text{NH}_4)_2\text{S}_2\text{O}_8$, **A**
- 27) Pd_2dba_3 , $\text{P}(\text{o-tolyl})_3$, CuTc , $(n\text{Bu}_3\text{Sn})_2$ then TBAF
- 28) AlCl_3