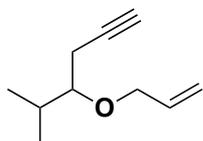


セミナー問題 (2014/6/28)

出題者: 吉村

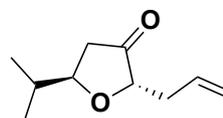


(1) $t\text{BuLi}$, THF, $-78\text{ }^{\circ}\text{C}$ then TsN_3 , 81%

(2) $\text{Rh}_2(\text{OAc})_4$ (5 mol%), PhMe, reflux

(3) wet basic alumina, PhMe, rt
83% (2 steps), dr >20:1

(3) is a hydrolysis step



A. Boyer, *Org. Lett.*, **2014**, *1*, 1660.