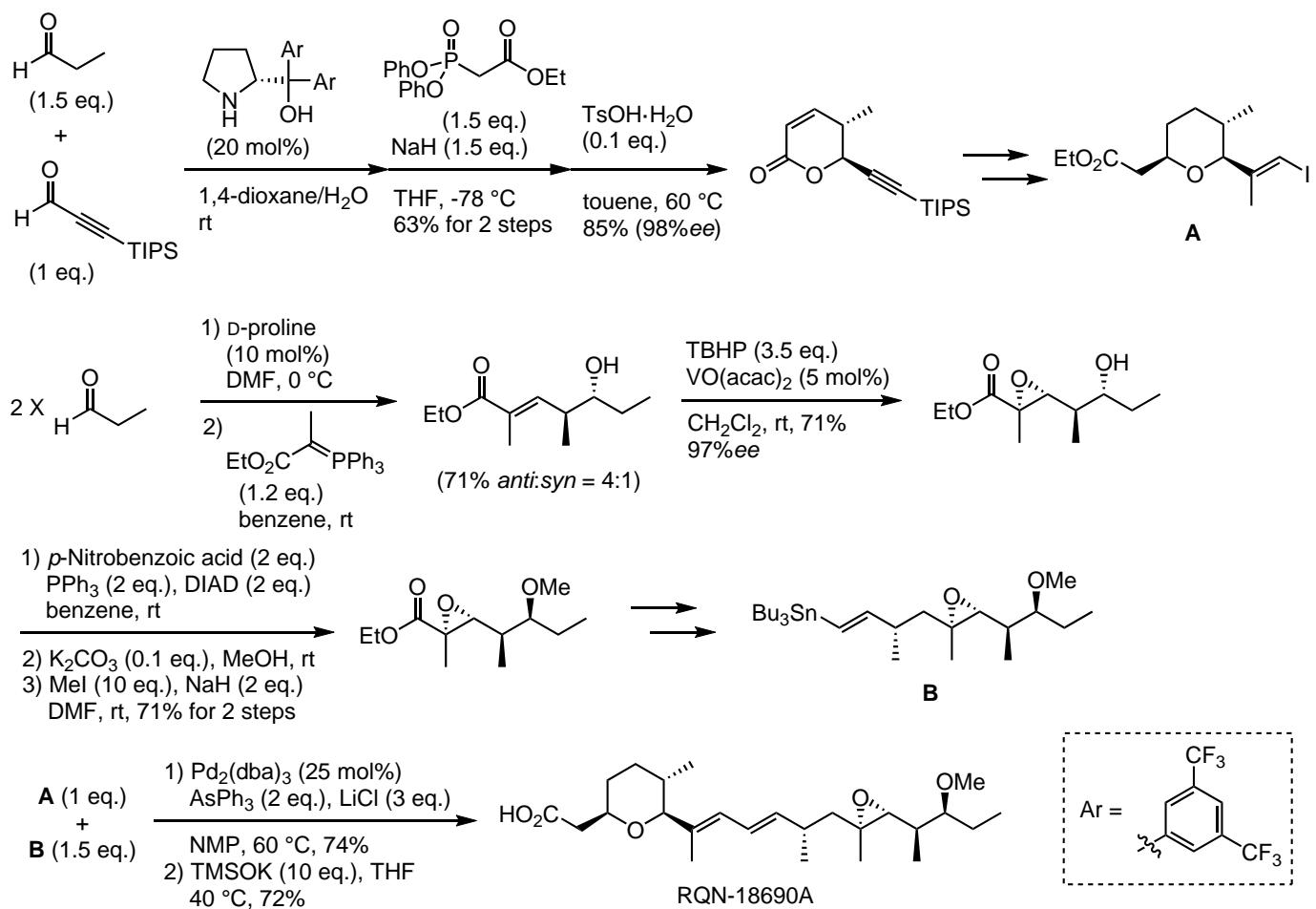


(1) Propose a synthetic route to **A**.

(In the literature, **A** is synthesized for 5 steps from a commercially available C₆ material)

(2) Propose reasonable mechanisms and intermediates from **B** to **E**.

A. Kaga, Y. L. Tnay, S. Chiba, *Org. Lett.* **2016**, 18, 3506–3508.



Y. Matsumoto*, K. Hibino, M. Yonaga, H. Kakeya and Y. Hayashi*
Org. Lett. **2016**, 18, 3382–3385