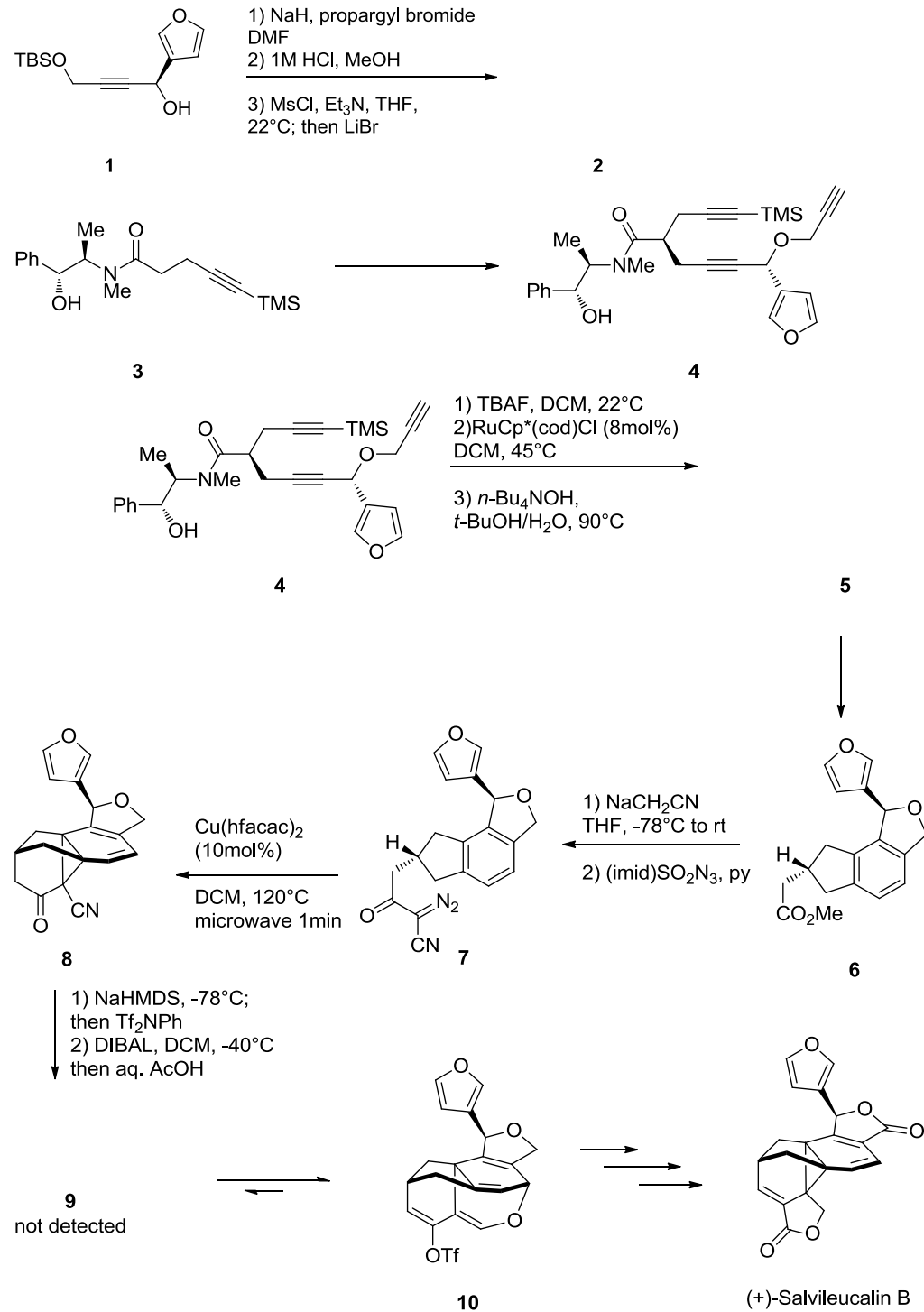


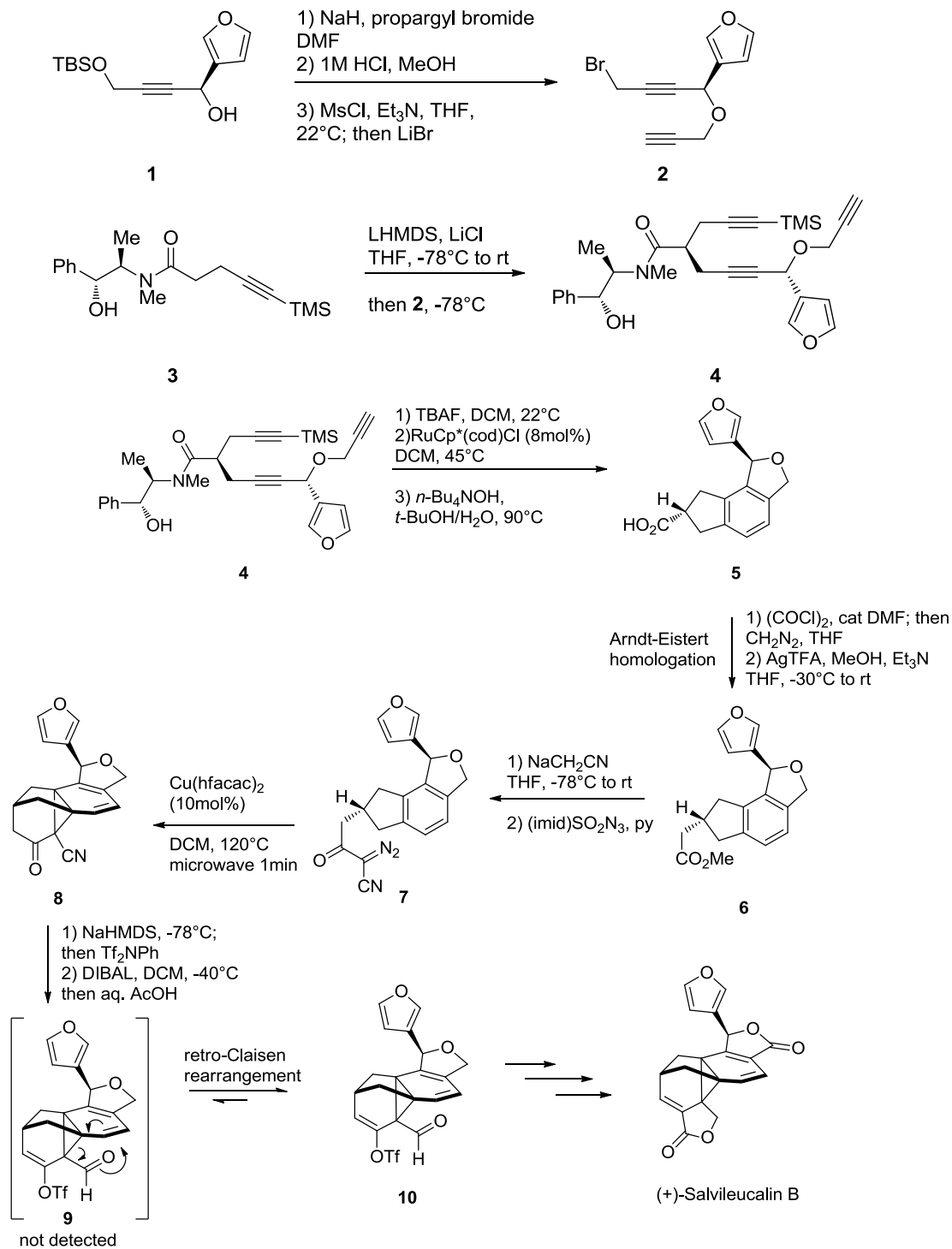
## Enantioselective Total Synthesis of (+)-Salvileucalin B

**Problem:**



1. Give the product **2**
2. What are the reaction conditions for the transformation of **3** to **4**?
3. Give the product **5** and the conditions for the reaction of **5** to **6**. What are the name and the mechanism of the Reaction?
4. What is the intermediate (**9**) of the reaction **8** to **10** and how is the reaction named to achieve **10** from **9**?

## Solution:



## References:

- S. Levin, R. R. Nani, S. E. Reisman *J. Am. Chem. Soc.* **2011**, *133*, 774-776

## Keywords:

Arndt-Eistert homologation, retro-Claisen rearrangement