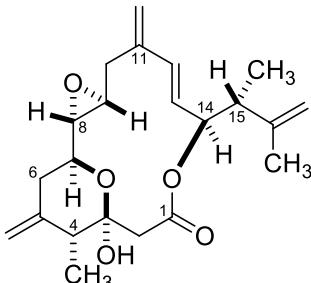


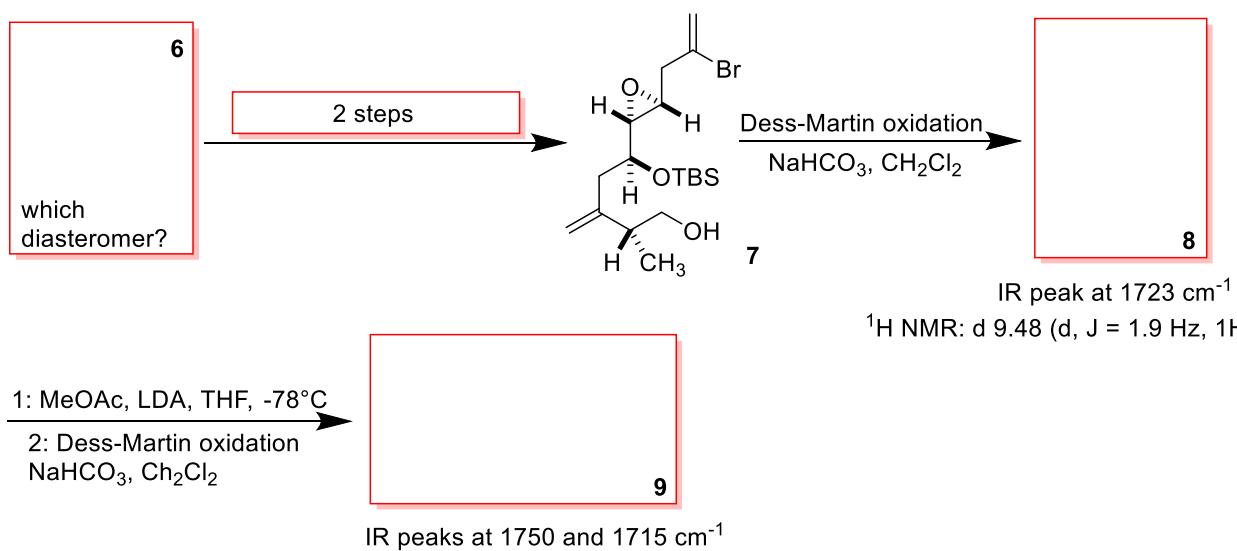
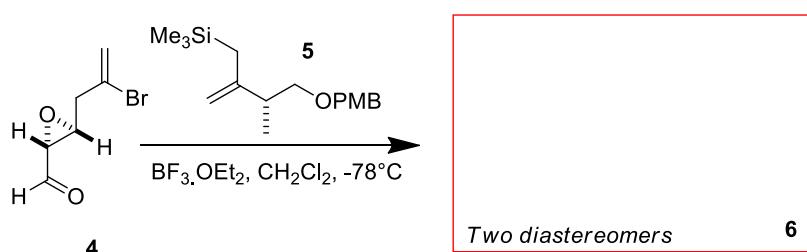
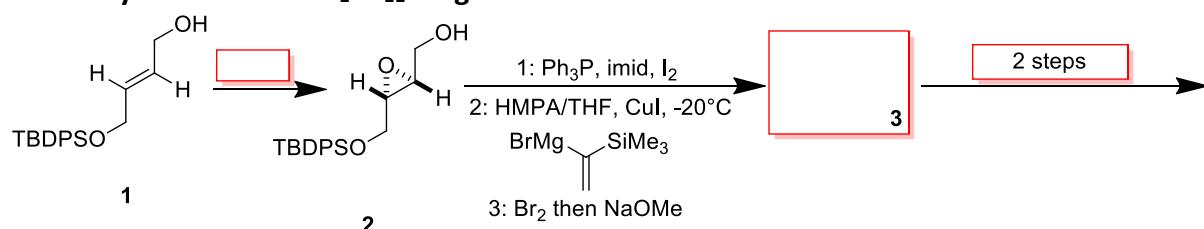
Studies for the Total Synthesis of Amphidinolide P

Amphidinolides are a family of macrocyclic molecules naturally secreted by marine planton of the genus *Amphidinium*. Many of these compounds display cytotoxic effects on various lines of cancer cells and produce sub-micromolar IC₅₀ values. However, these molecules are only available in exceedingly low quantities, making them a target for total synthesis.

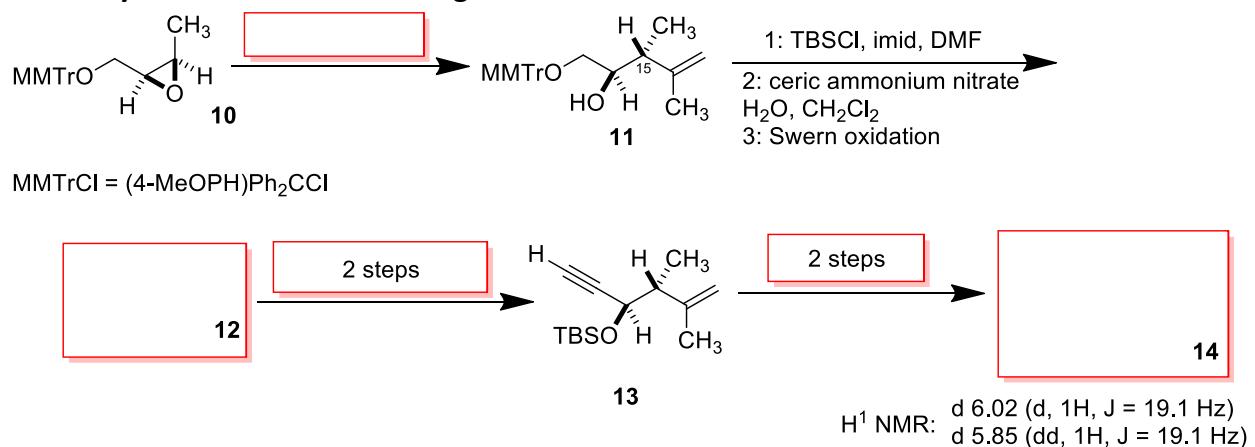


Structure of Amphidinoline P

- **Synthesis of the C₁-C₁₁ fragment.**



- **Synthesis of the C₁₂-C₁₇ fragment.**



- **Formation of the C₁₁-C₁₂ bond and completion of synthesis**

