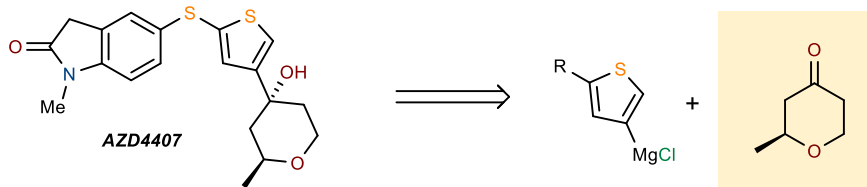
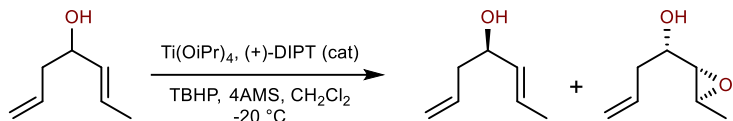


Motivation: Needed: efficient, robust, low-cost, with optical purity >99%

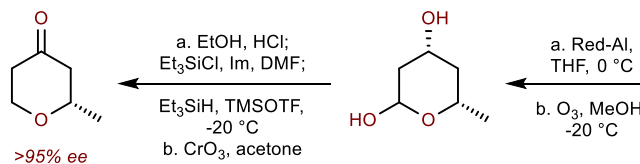


Developed for the treatment of inflammatory conditions such as inflammatory bowel disease, asthma, COPD, and psoriasis

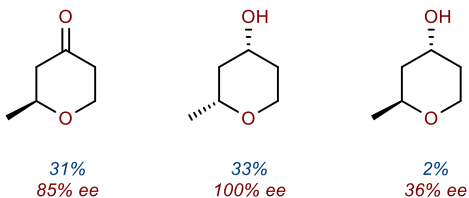
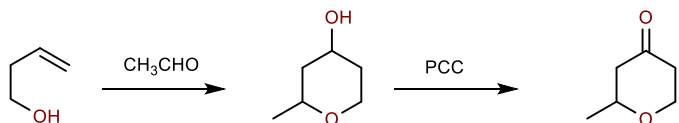
- Prior Art:



-length, starting material availability, undesirable reagents for large-scale

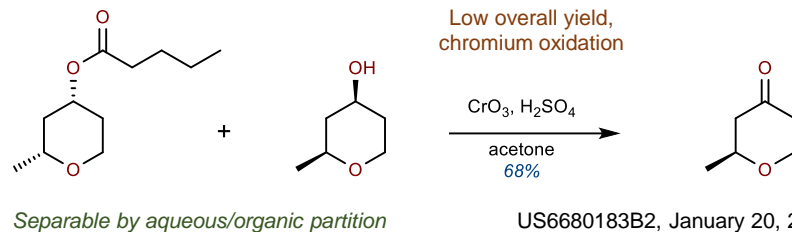
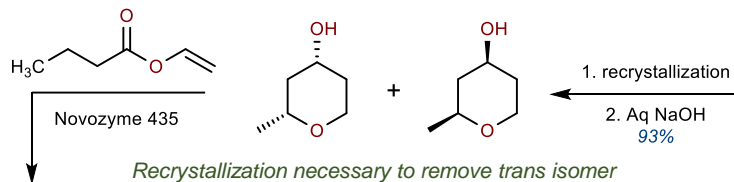
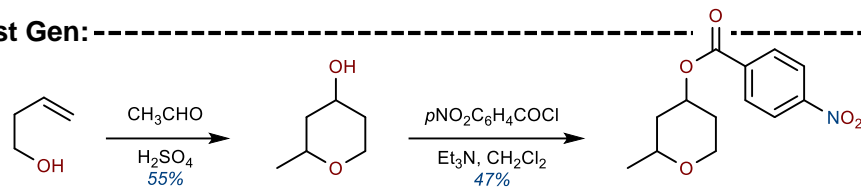


J. Med. Chem. **1993**, 36 (2), 295–296. <https://doi.org/10.1021/jm00054a016>.

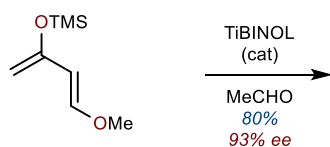


J. Am. Chem. Soc. **1982**, 104 (17), 4666–4671. <https://doi.org/10.1021/ja00381a025>.

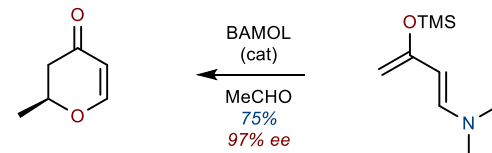
First Gen:



Published Diels-Alder Approaches:

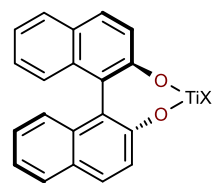


GB 2304339 A1, 1997.

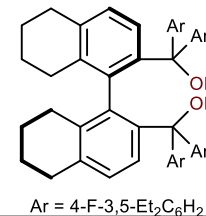


J. Am. Chem. Soc. **2005**, 127 (5), 1336–1337.
<https://doi.org/10.1021/ja044076x>.

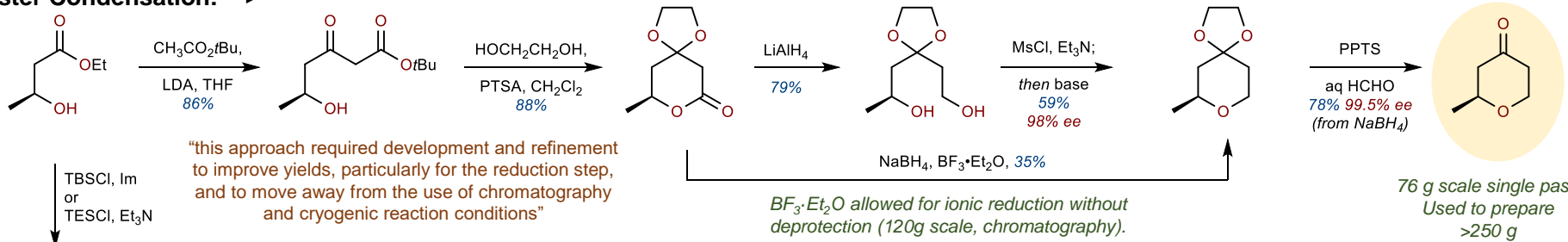
Ti BINOL:



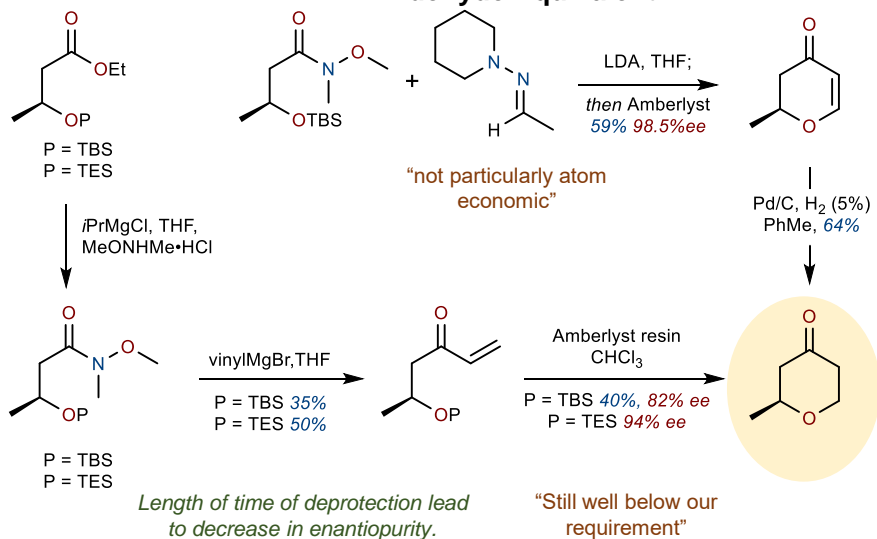
BIMOL:



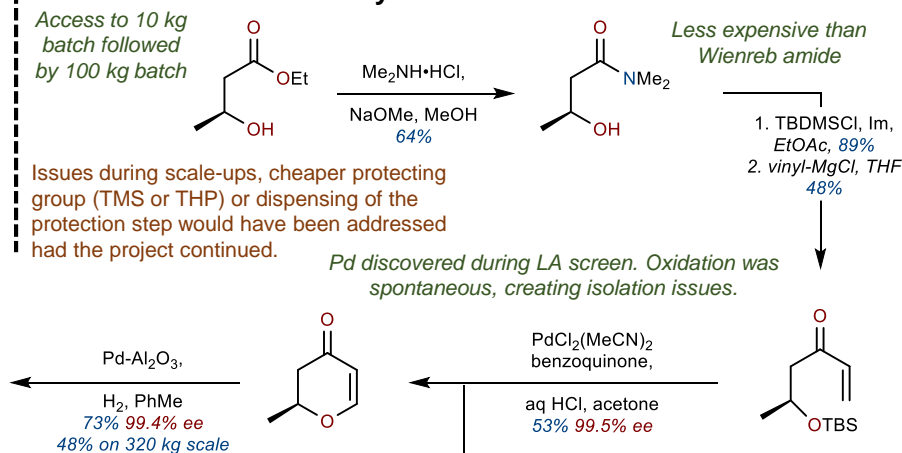
A. Ester Condensation: →



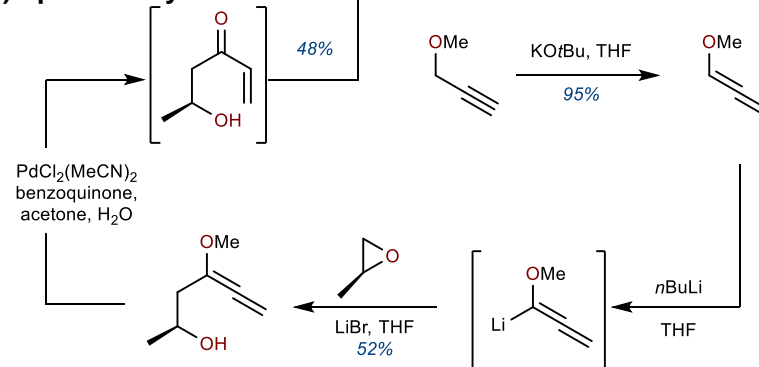
B. Aldehyde Equivalent: -



D. Oxy-Michael II: -



E. (S)-epichlorohydrin: -



--- Difficult to remove impurities: -

