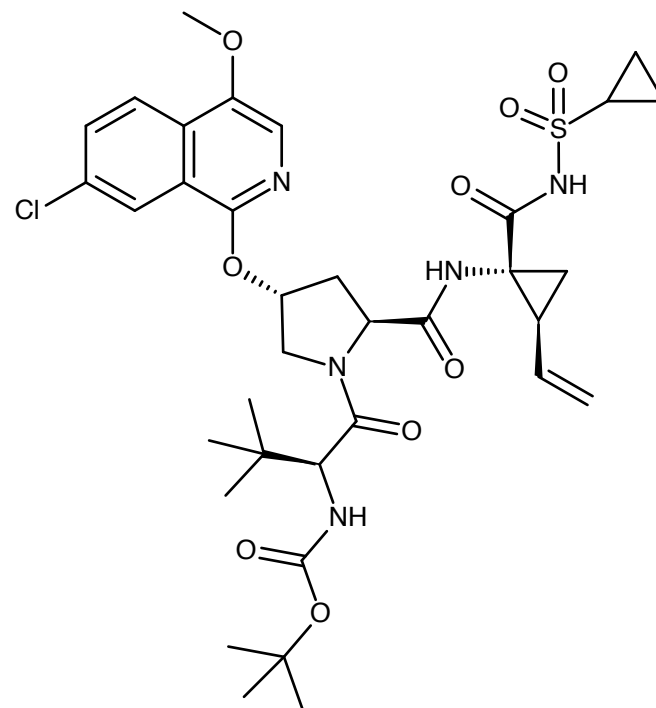


# Synthesis of Asunaprevir (Sunvepra)

from "Synthetic approaches to the 2014 new drugs"  
Flick, A. C.; Ding, H. X.; Leverett, C. A.; Kyne Jr. R. E.; Liu, K. K.-C.; Fink, S. J.; O'Donnell, C. J.  
*Bioorg. Med. Chem.* **2016**, 24 (9), 1937 – 1980

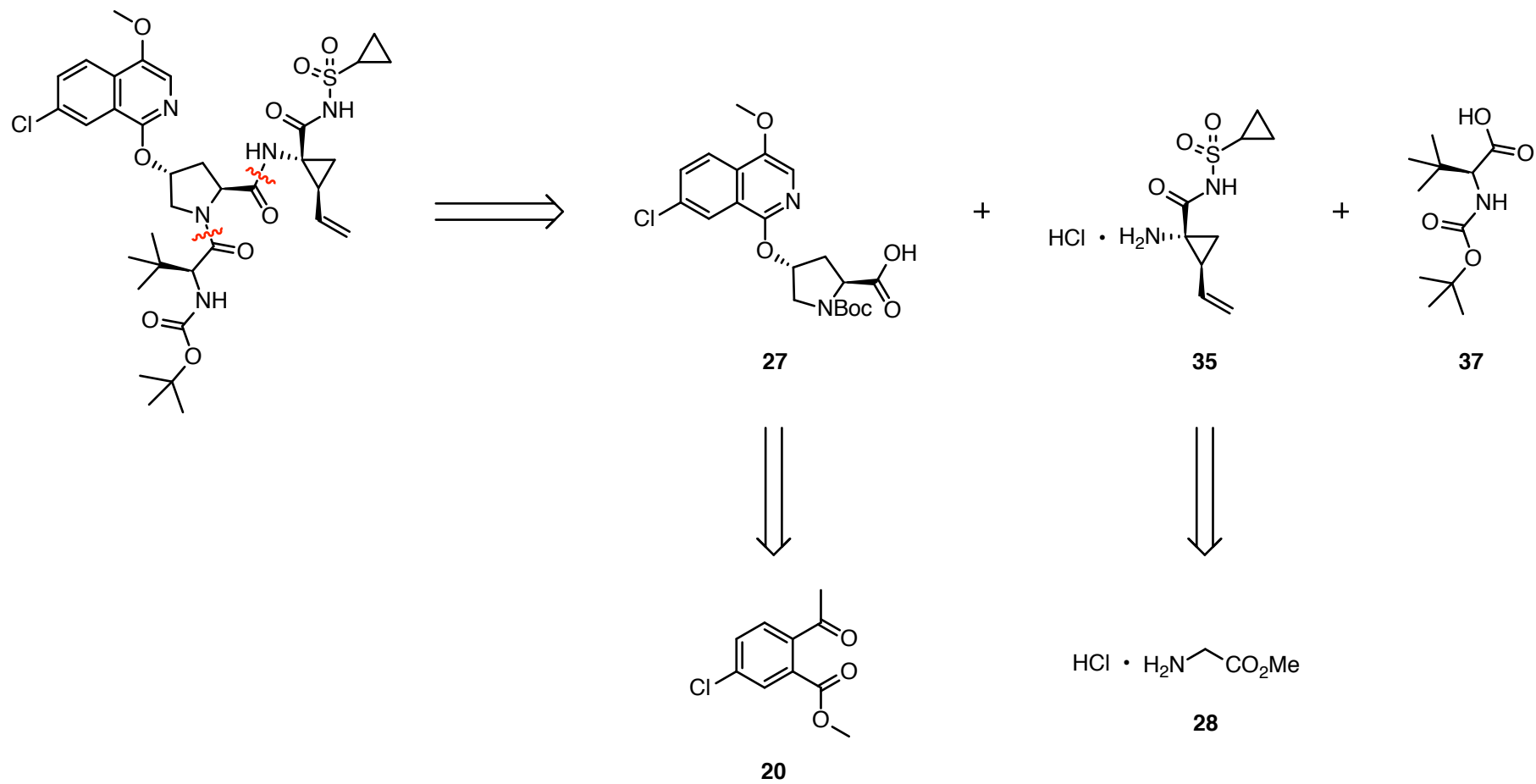
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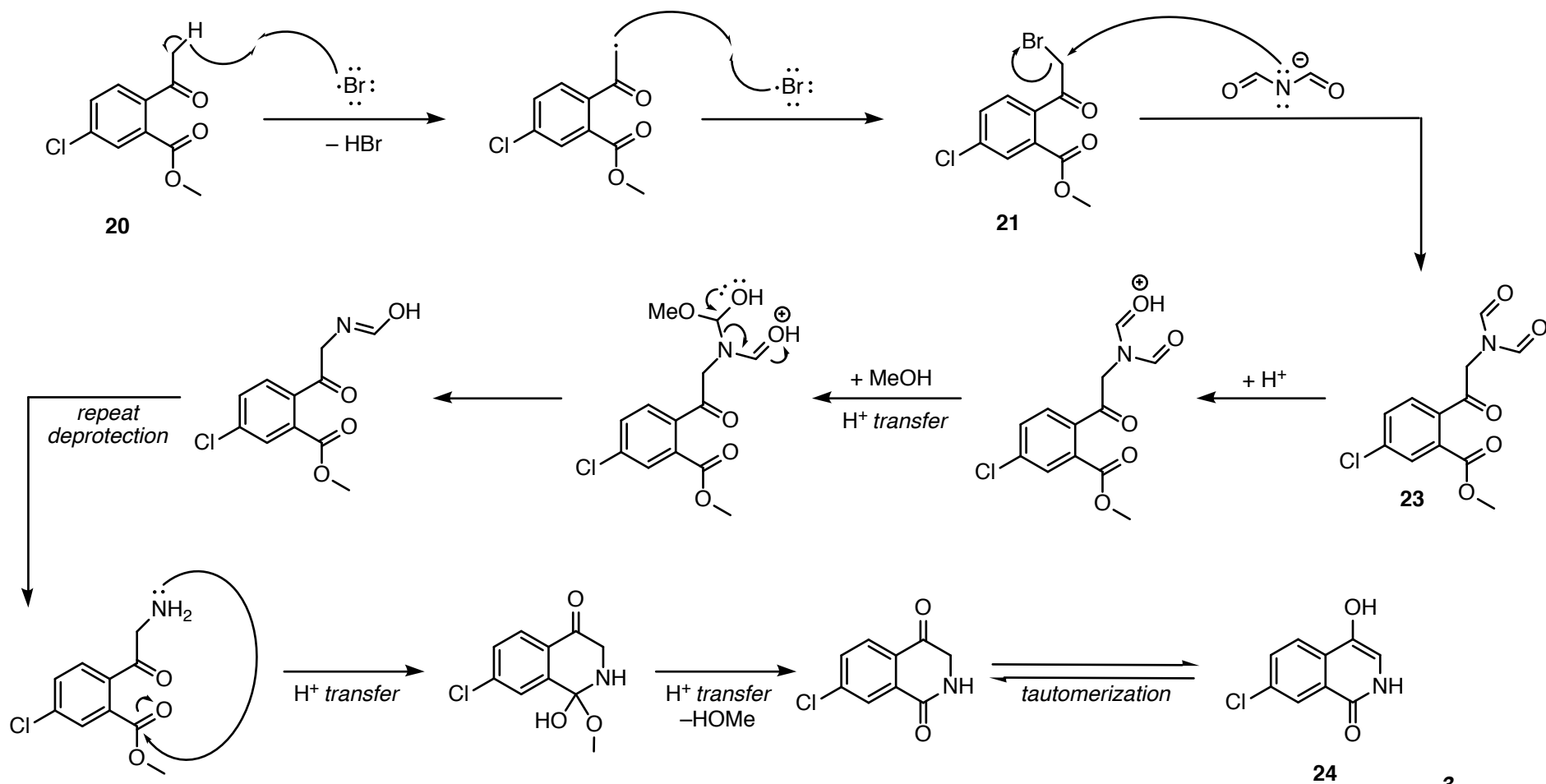
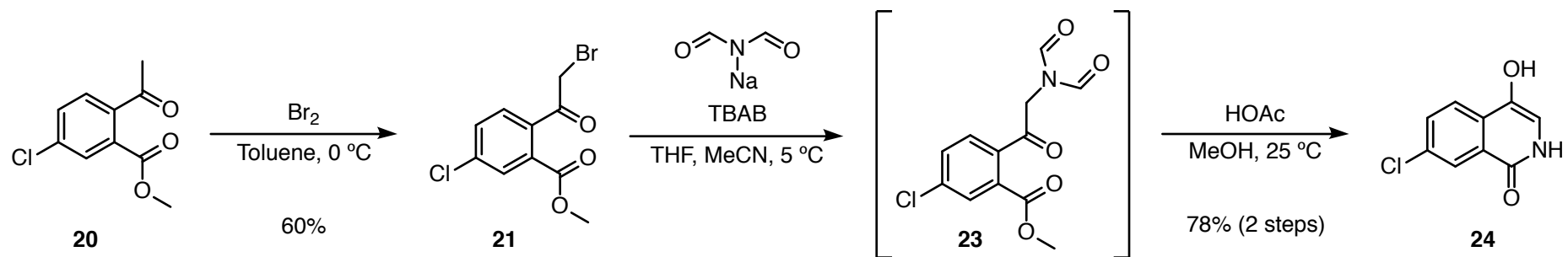
- When used in combination with Daclastivir, offers a unique option for the treatment of hepatitis C
- Though the manufacturing route has not been disclosed, this procedure is the likely scale route used by Bristol–Myers Squibb
- Convergent synthesis: 20 total steps, overall ~3% yield

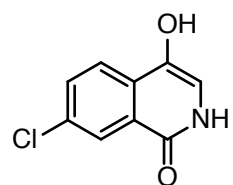


*Asunaprevir*

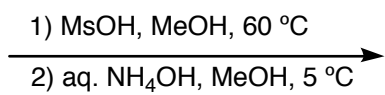
# Retrosynthetic Analysis



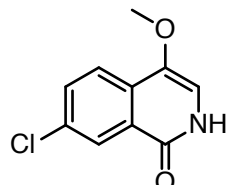




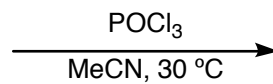
**24**



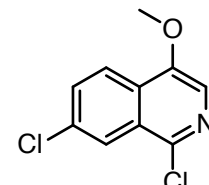
90% (2 steps)



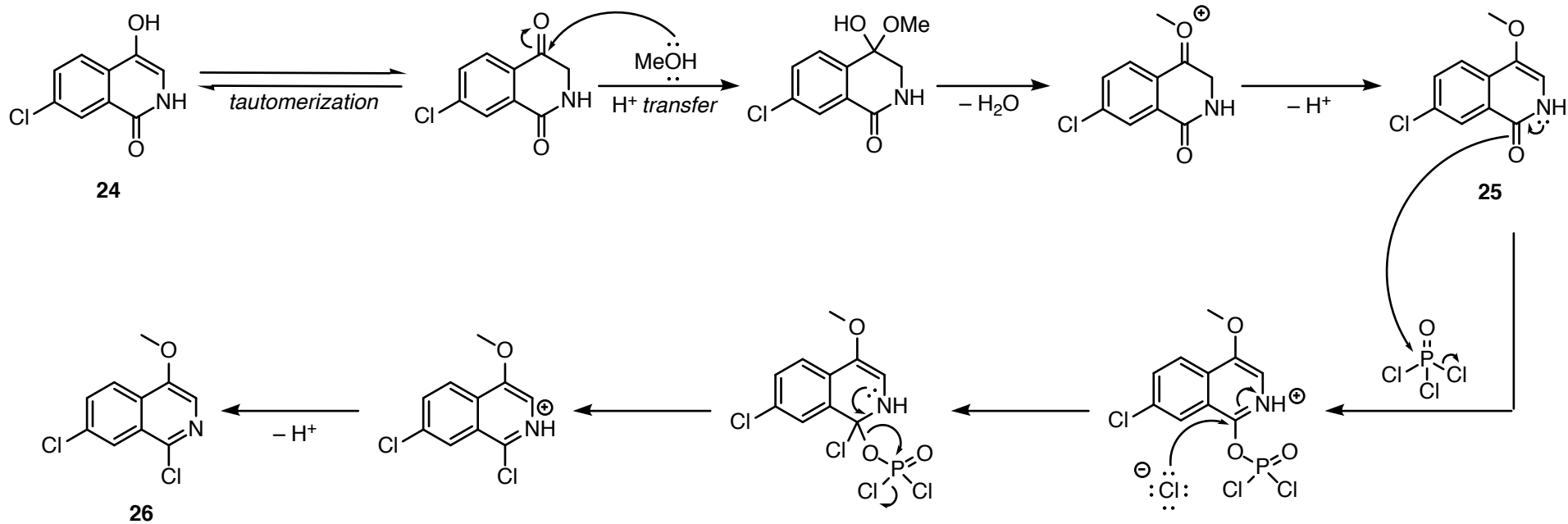
**25**

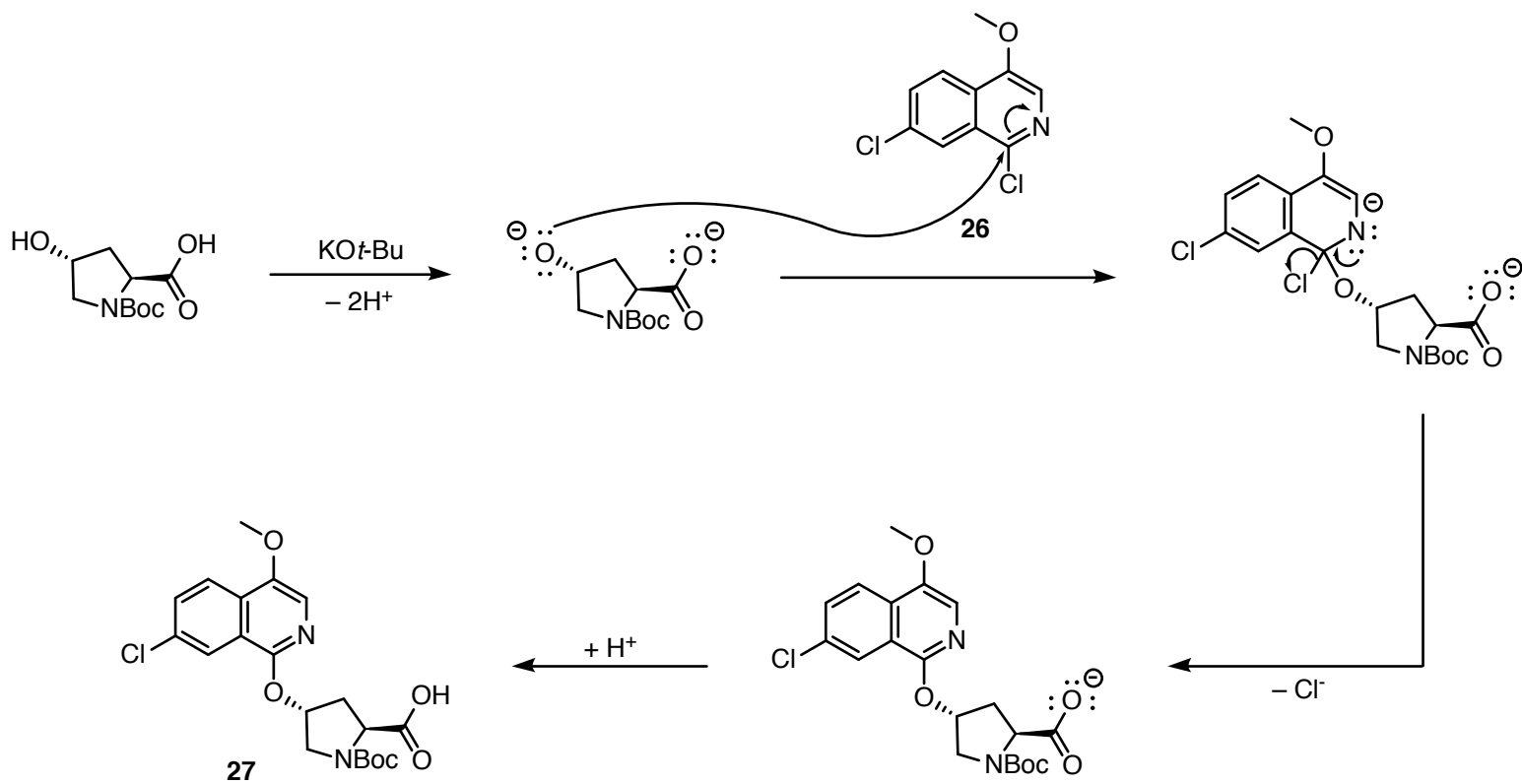
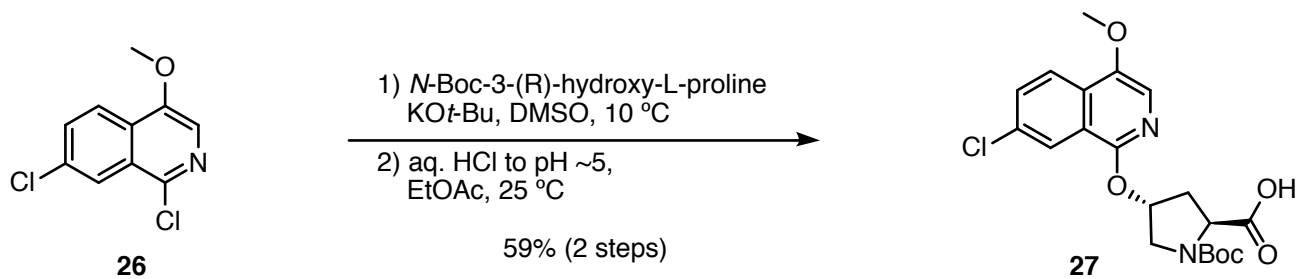


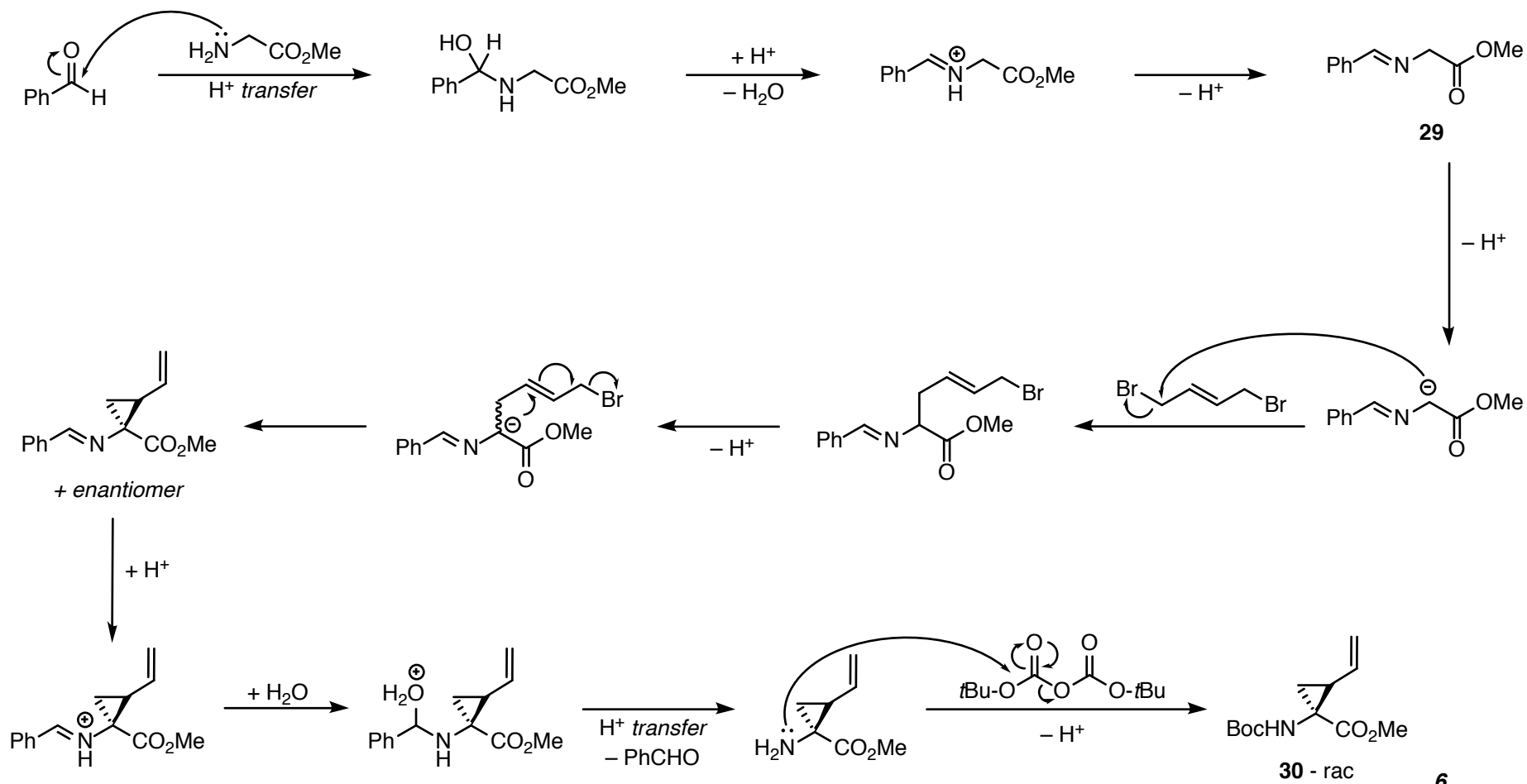
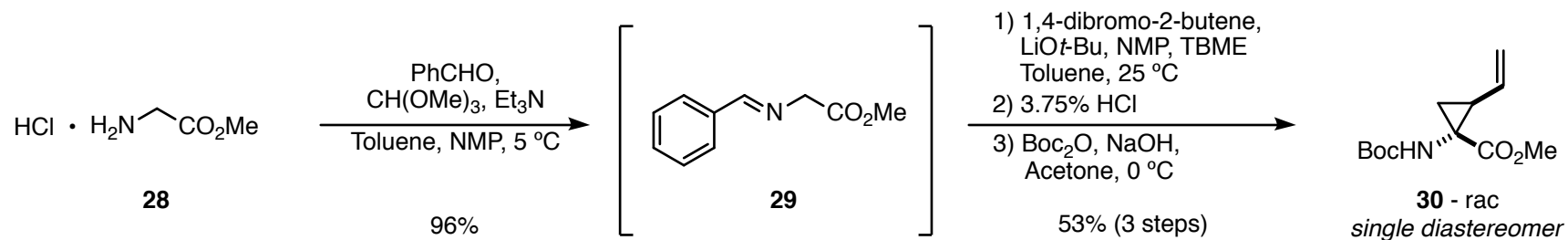
87%

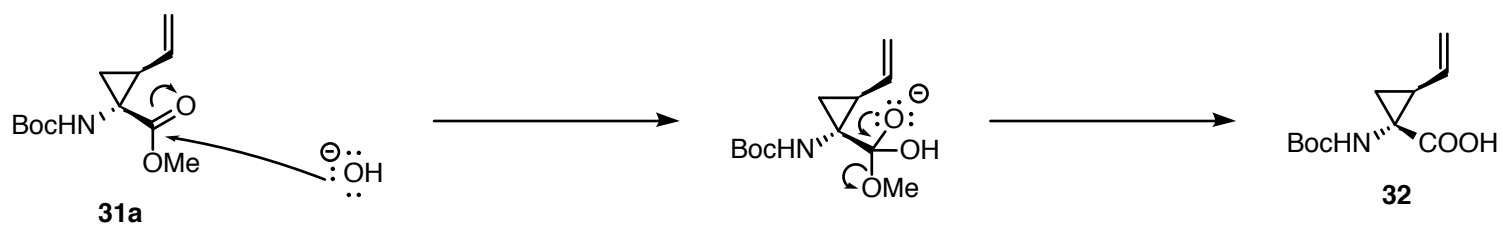
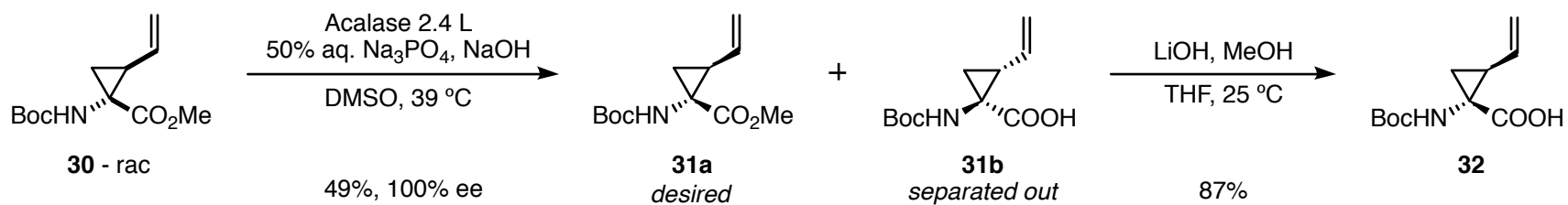


**26**









Acalase

