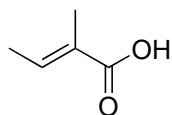
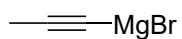


## Total Synthesis of Nesteretal A

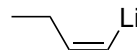
Kawamoto, Y.; Kitsukawa, H.; Kobayashi, T.; Ito, H. *Org. Lett.* **2021**, 23 (18), 7074–7078.



- 1) LAH
- 2)  $\text{PBr}_3$
- 3)  $\text{CuI}$ , 1
- 4) AD-mix-b
- 5) IBX
- 6) MOMCl, DIPEA
- 7)  $\text{Co}_2(\text{CO})_8$
- 8)  $\text{LaCl}_3 \cdot 2\text{LiCl}$ , 2
- 9) CAN
- 10)  $\text{Pd}(\text{OAc})_2$ ,  $\text{PPh}_3$
- 11)  $\text{CBr}_4$ ,  $\text{iPrOH}$
- 12)  $\text{Mo}(\text{CO})_6$ , TBHP
- 13)  $\text{H}_2\text{SO}_4$ ,  $\text{H}_2\text{O}$
- 14) IBX
- 15) PPTS,  $\text{CH}(\text{OMe})_3$ , MeOH
- 16)  $\text{OsO}_4$ , NMO
- 17) IBX
- 18)  $\text{H}_2\text{SO}_4$ ;

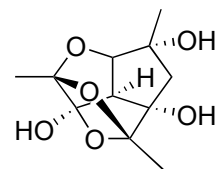


1

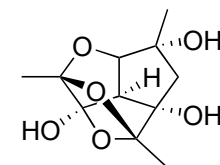


2

4) Name of the reaction?  
Sharpless asymmetric dihydroxylation



**Nesteretal A**



**Nesteretal A**