cyclopropane derivatives

Q 0021 19 - 090 Highly Stereoselective Nucleophilic Addition to Cyclopropyl Carbonyls: The Facial Selectivity in the Cyclopropyl Ketones is Opposite to That in the Corresponding Aldehyde. — Nucleophilic addition of Grignard reagents (II) to the cyclopropylcarbaldehyde (I) proceeds highly stereoselectively. In contrast, the stereoselectivity of hydride reduction of the corresponding ketones (V) is almost completely reversed using a nucleophilic or an electrophilic reducing agent. — (ONO, S.; SHUTO, S.; MATSUDA, A.; Tetrahedron Lett. 37 (1996) 2, 221-224; Fac. Pharm. Sci., Hokkaido Univ., Kita, Sapporo 060, Japan; EN)

IVb 
$$\frac{\text{NoBH}_4}{\text{MeOH. 25°C}}$$
 IIIb IVb  $\frac{\text{L-Selectride}}{\text{THF, -78°C}}$  IIIb IIIb  $\frac{\text{NoBH}_4}{\text{THF, -78°C}}$  IIIb  $\frac{\text{NoBH}_4}{\text{THF, -78°C}}$  IIIb