

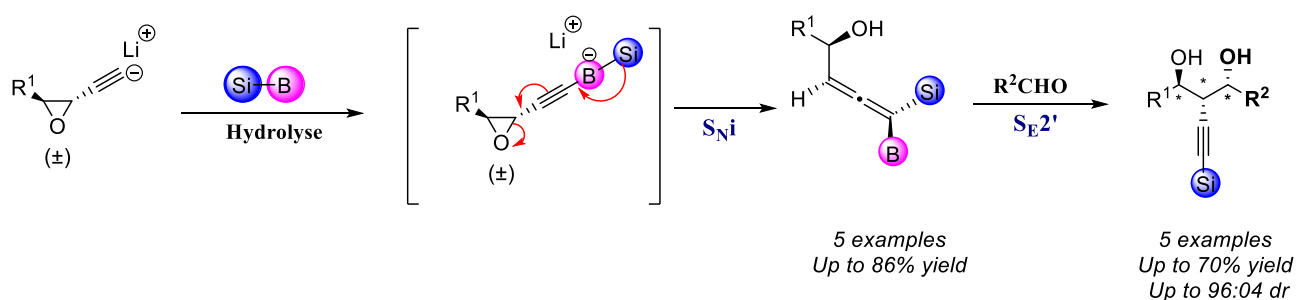


Stereoselective synthesis and reactivity of 4-hydroxy-1-boryl-1-allenylsilanes

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Allenylboranes are important building blocks in organic synthesis that allow stereoselective preparation of homopropargylic alcohols and amines¹ and thus are used in asymmetric synthesis of many natural and/or biologically interesting compounds.² Among the reliable procedures for their preparation, the S_Ni-type reactions between acetylenic electrophiles and boron reagents have earned increasing attention of chemists.³ In this communication, we will present a method for the straightforward stereoselective synthesis of highly functionalized 4-hydroxy-1-boryl-1-allenylsilanes from lithiated acetylenic epoxides and silylborane reagents through transmetallation and subsequent S_Ni process. The reactivity of these compounds towards electrophiles, such as aldehydes, through S_E'2 will also be discussed.



References :

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