T. MIURA,* Y. NISHIDA, M. MURAKAMI* (KYOTO UNIVERSITY, JAPAN)
Construction of Homoallylic Alcohols from Terminal Alkynes and Aldehydes with Installation of *syn*-Stereochemistry
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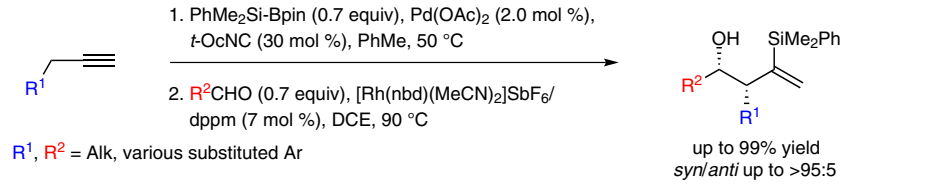
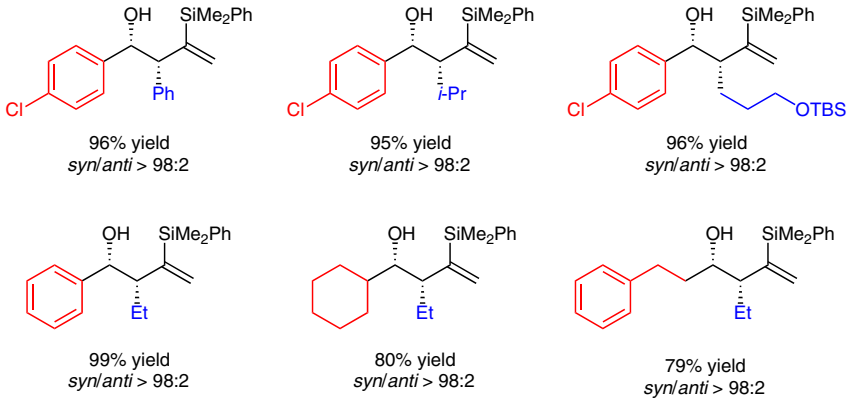
Stereoselective Synthesis of *syn*-Homoallylic Alcohols



R^1, R^2 = Alk, various substituted Ar

up to 99% yield
syn/*anti* up to >95:5

Selected examples:



Significance: The authors established a new synthetic method for the synthesis of *syn*-homoallylic alcohols from terminal alkynes and aldehydes. As this transformation utilizes easily accessible starting materials, this practical method should find many applications.

Comment: A cationic rhodium(I) catalyst turns 2-silyl-1-alkenylboronates, which can be easily prepared from a terminal alkyne, into the corresponding allylboronate, that directly undergoes nucleophilic addition to an aldehyde to afford the corresponding *syn*-homoallylic alcohol in excellent stereoselectivity.

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