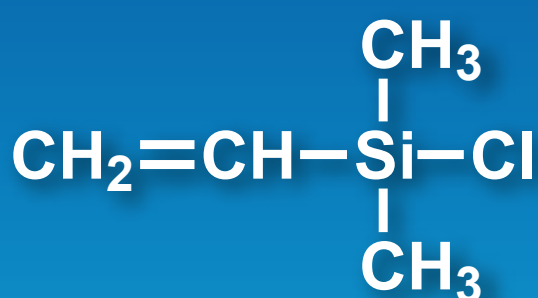


# Chlorodimethylvinylsilane: Key Component of Directing Group for Regioselective Hydrosilylation

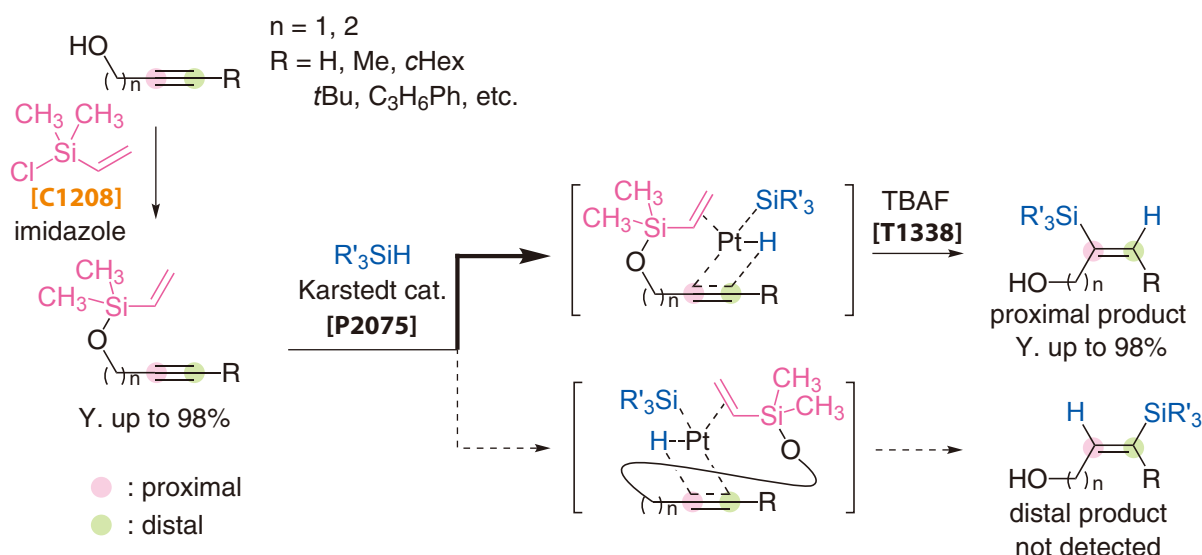


[C1208]

## Advantages

- Easy Formation of DMVS-Ether with Propargyl and Homopropargyl Alcohols
- Efficient Regiocontrol of Hydrosilylation of Unsymmetric Alkyne Moiety of the DMVS-Ether

## Regioselective Hydrosilylation of Unsymmetric Alkynes

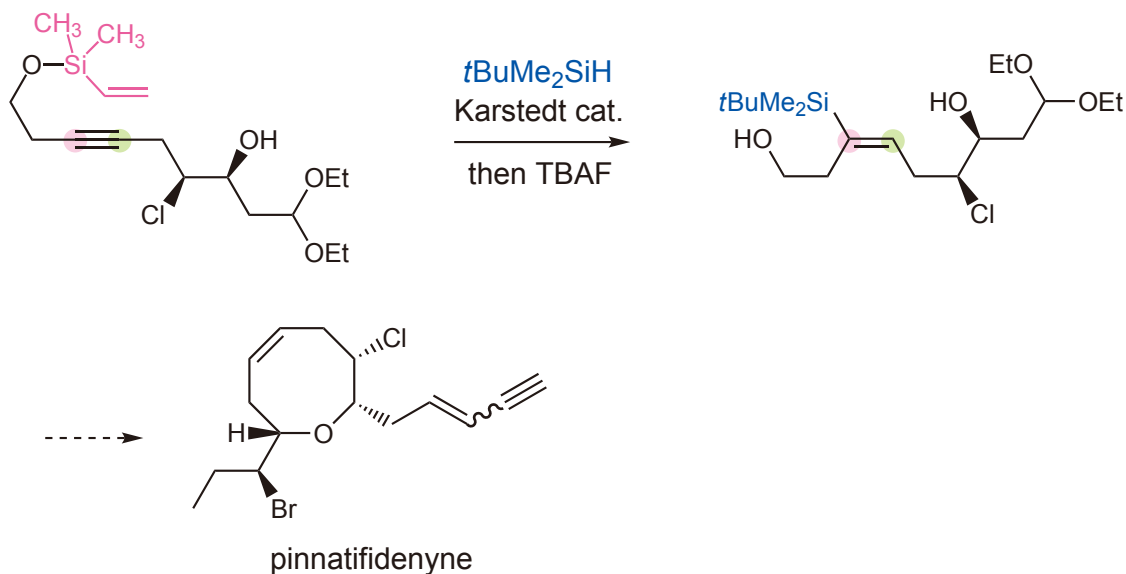


Chlorodimethylvinylsilane is key component for the regioselective hydrosilylation of unsymmetric alkynes. Hydrosilylation is a well-established reaction that efficiently provides *E*-silylalkenes from a variety of alkynes. The difficulty of regiocontrol in hydrosilylation, however, has prevented its application to unsymmetric alkyne system for obtaining a mixture of regioisomers. To this end, Tomooka *et al.* have developed regioselective hydrosilylation using the dimethylvinylsilyl (DMVS) group as a directing group. The requisite alkyne having DMVS group was prepared from propargylic or homopropargylic alcohols by reaction with DMVS-Cl in the presence of imidazole. Their hydrosilylation proceeded with proximal selectivity. After the reaction, DMVS group can be removed by the treatment with TBAF.



# Chlorodimethylvinylsilane: Key Component of Directing Group for Regioselective Hydrosilylation

## Application to the Total Synthesis of Natural Product



S. A. Snyder, A. P. Brucks, D. S. Treitler, I. Moga, *J. Am. Chem. Soc.* **2012**, 134, 17714.

## C1208 Chlorodimethylvinylsilane

25mL / 100mL

### Related Products

**P2075** Karstedt Catalyst

**T1338** Tetrabutylammonium Fluoride (ca. 1 mol/L in Tetrahydrofuran)

**B3565** *tert*-Butyldimethylsilane

1g / 5g

25mL / 100mL / 500mL

5g

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