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Palladium-Catalyzed Anti-Markovnikov Hydroalkylation of Homoallylic Alcohols Bearing β-Fluorines

**Palladium-Catalyzed Anti-Markovnikov Hydroalkylation of Homoallylic Alcohols**

**Significance:** Lin and Qing report a mild and convenient protocol for the anti-Markovnikov hydroalkylation of β,β-difluorinated homoallylic alcohols. The palladium-catalyzed reaction with alkylzinc reagents furnishes the products in good to excellent yields.

**Comment:** The reported protocol affords a wide range of synthetically useful gem-difluorinated compounds with good functional-group compatibility. Moreover, the results show that the transposition of CH₂ into CF₂ at the allylic position of homoallylic alcohols can modify the electronic and steric environment of the alkene.

**Selected examples:**

- ![Example 1](image1)
- ![Example 2](image2)
- ![Example 3](image3)
- ![Example 4](image4)
- ![Example 5](image5)

**Key words:** anti-Markovnikov hydroalkylation, homoallylic alcohols, zinc

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