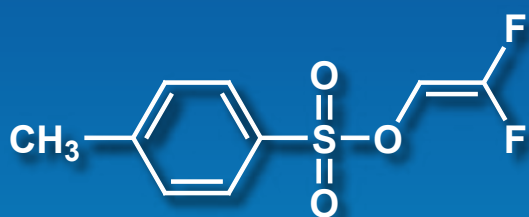


New

CHEMISTRY

TGI

Reagent for the Introduction of Fluorine-Containing Groups such as *gem*-Fluorovinyl Group



2,2-Difluorovinyl Tosylate

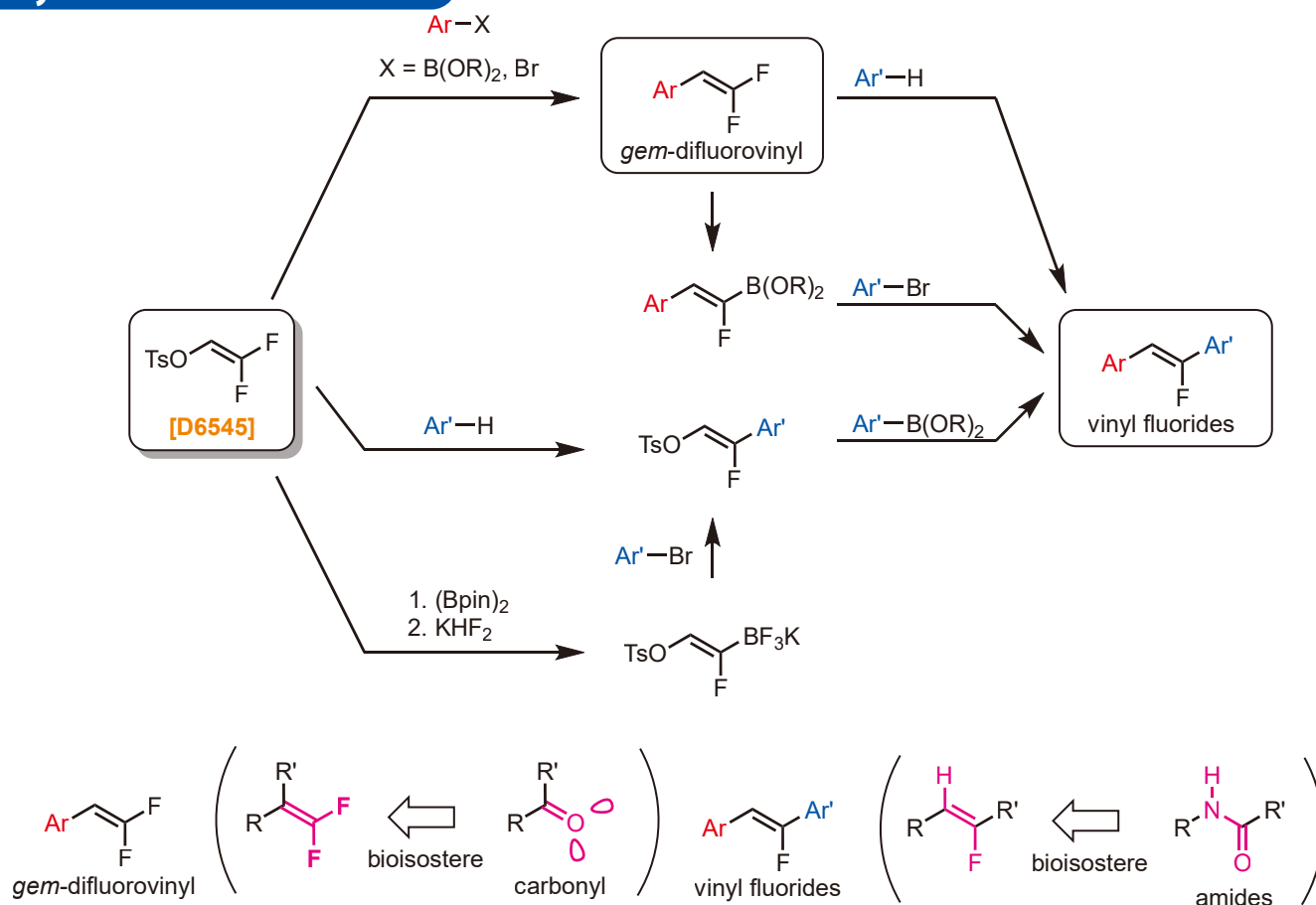
1g / 5g

[D6545]

Advantages

- Enables the synthesis of various fluorinated compounds, (e.g. *gem*-difluorovinyl group, difluoromethylene, and fluorovinyl groups).
- Allows for the selective control of the conversion of the tosyl (Ts) group and the fluorine group, depending on the reaction conditions.
- Demonstrates potential for application in radiolabeling with radioactive fluorine (^{18}F).

Synthesis of Bioisosteres

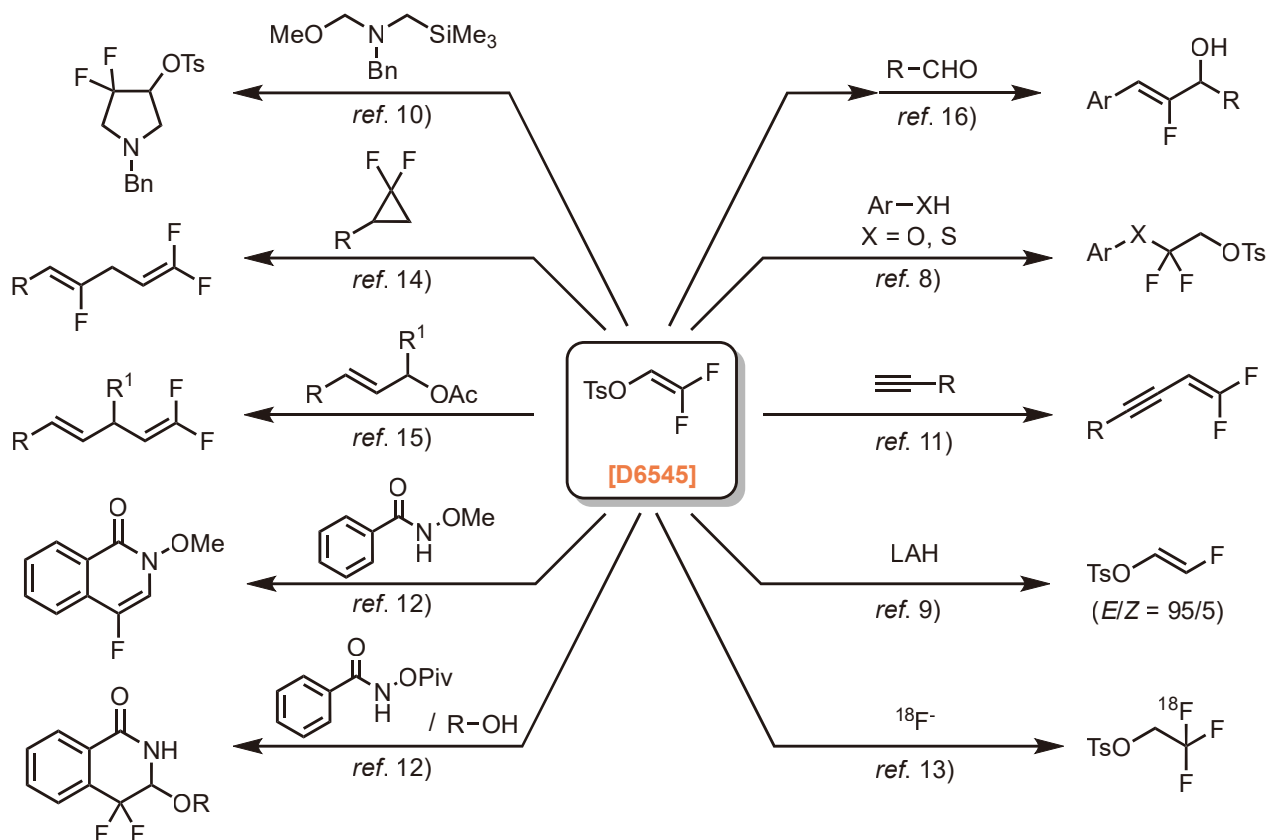


The *gem*-difluorovinyl group is recognized as a bioisostere of the carbonyl group, while fluorovinyl and monofluorovinyl groups are recognized as bioisosteres of the amide group.^{1,2)}

Studies on the synthesis of these bioisosteres using **D6545** have been actively conducted.³⁻⁷⁾

Reagent for the Introduction of Fluorine-Containing Groups such as *gem*-Fluorovinyl Group

Applications



Owing to its unique structure and reactivity, **D6545** has been widely studied for the synthesis of compounds bearing fluorine-containing functional groups.⁸⁻¹⁶⁾

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