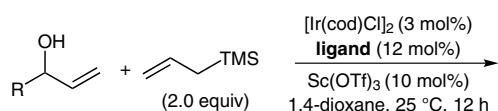
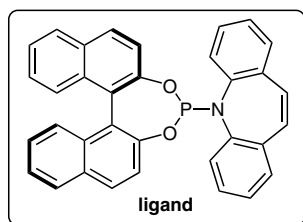


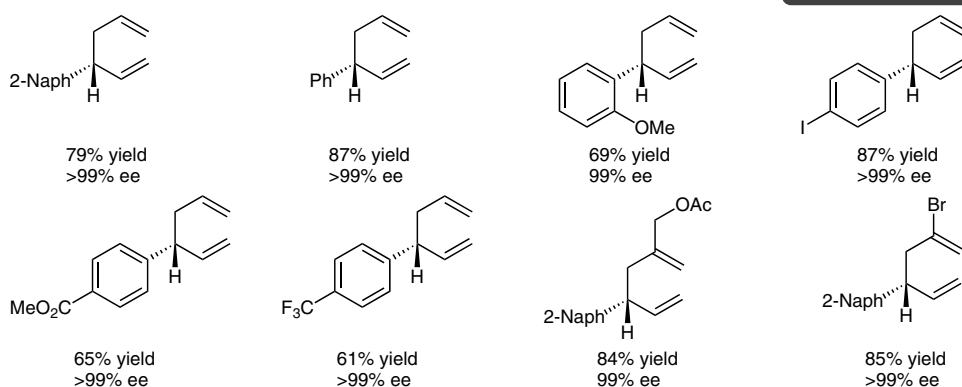
Enantioselective Allyl–Allylsilane Cross-Coupling Catalyzed by Iridium



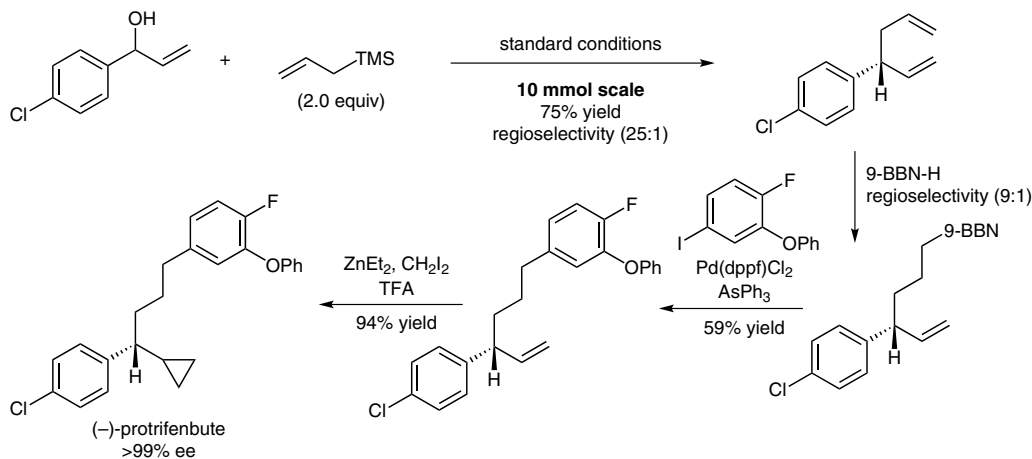
branched/linear > 25:1



Selected examples:



Synthesis of (–)-protrifenbut:



Significance: An iridium-catalyzed cross-coupling of allylic alcohols with allylsilanes is reported. A series of chiral 1,5-dienes were prepared in good yields (up to 95%) with excellent regio- (up to >25:1) and enantioselectivities (up to >99% ee).

Comment: This allyl–allylsilane cross-coupling proceeds with excellent regio- and enantioselectivity under operationally simple conditions. The utility of this reaction is demonstrated in the enantioselective synthesis of the pyrethroid insecticide protrifenbut.