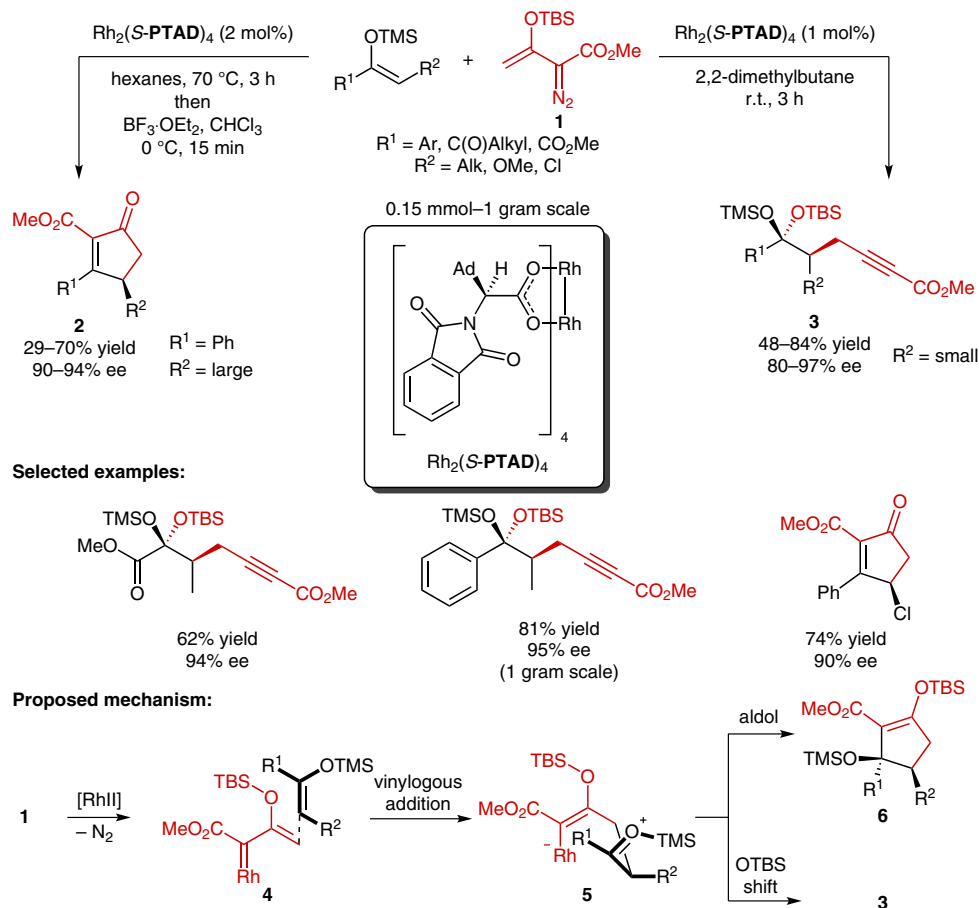


A. G. SMITH, H. M. L. DAVIES* (EMORY UNIVERSITY, ATLANTA, USA)
Rhodium-Catalyzed Enantioselective Vinylogous Addition of Enol Ethers to Vinyl-diazoacetates
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Rhodium-Catalyzed Asymmetric Vinylogous Addition to Vinyl-diazoacetates



Significance: A rhodium-catalyzed asymmetric vinylogous addition of silyl enol ethers to siloxy-vinyl-diazoacetates is reported. Depending on the sterics of the substituents on the substrate, this method can access cyclopentenones **2** or alkynoates **3** with high yield and excellent enantioselectivity.

Comment: The use of (*Z*)-silyl enol ethers is critical in achieving the observed enantioselectivity. In the proposed mechanism, vinylogous adduct **5** can undergo a stereoselective 1,4-silyoxy shift to form **3**. Bulkier R¹ groups favor the aldol reaction to form formal [3+2] adduct **6**, which in one pot, in acid, can afford **2**.

SYNFACTS Contributors: Mark Lautens, Lei Zhang
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