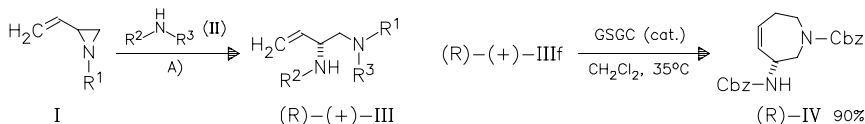


Enantioselective syntheses


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48- 023

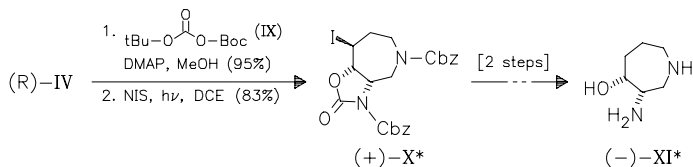
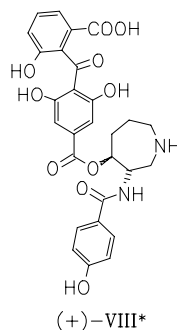
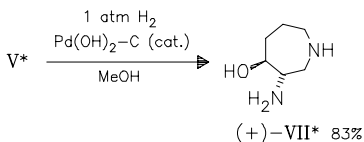
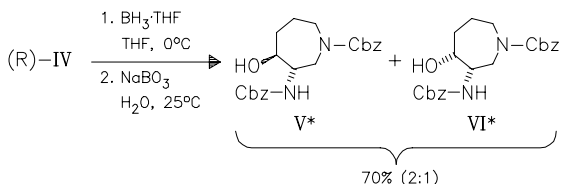
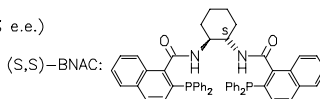
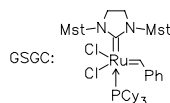
Dynamic Kinetic Asymmetric Allylic Amination and Acyl Migration of Vinyl Aziridines with Imido Carboxylates. — Palladium-catalyzed reaction of vinylaziridines (I) with diacylamines (II) in the presence of a bidentate ligand (BNAC) provides access towards chiral vicinal diamines (III). The reaction proceeds with excellent regioselectivity and is accompanied by N-acyl migration. This step depends on the electronic and steric properties of the acyl residues. The amination—acyl migration product (III_f) is transformed to azepine (VII), a key precursor of balanol (VIII), and its epimer (XI). — (TROST*, B. M.; FANDRICK, D. R.; BRODMANN, T.; STILES, D. T.; *Angew. Chem., Int. Ed.* 46 (2007) 32, 6123-6125; Dep. Chem., Stanford Univ., Stanford, CA 94305, USA; Eng.) — Mischke

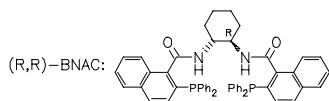
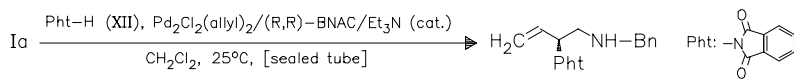


- a R¹: –Bn; R²: –Boc; R³: –Bz 95% (89% e.e.)
 b R¹: –Bn; R²: –Eoc; R³: –Bz 90% (89% e.e.)
 c R¹: –Bn; R²: –Cbz; R³: –Bz 75% (90% e.e.)
 d R¹: –Bn; R²: –Boc; R³: –Eoc 71% (94% e.e.)

- e R¹: –(CH₂)₂–CH=CH₂; R²: –Boc; R³:  97% (86% e.e.)
 f R¹: –(CH₂)₂–CH=CH₂; R², R³: –Cbz 68% (88% e.e.)

Eoc: –CO–O–Et

A): Pd₂Cl₂(allyl)₂/(S,S)-BNAC (cat.), CH₂Cl₂, 35°C, [sealed tube]



$(-)\text{-XIII}^*$ 60% (77% e.e.)

