Category

Synthesis of Natural Products and Potential Drugs

Key words

stephadiamine

α-tertiary amines

cascade reaction

Tollens reaction

Curtius rearrangement

N. HARTRAMPF, N. WINTER, G. PUPO, B. M. STOLTZ, D. TRAUNER* (NEW YORK UNIVERSITY AND CALIFORNIA INSTITUTE OF TECHNOLOGY, PASADENA, USA; LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN, GERMANY; UNIVERSITY OF OXFORD, UK)

Total Synthesis of the Norhasubanan Alkaloid Stephadiamine

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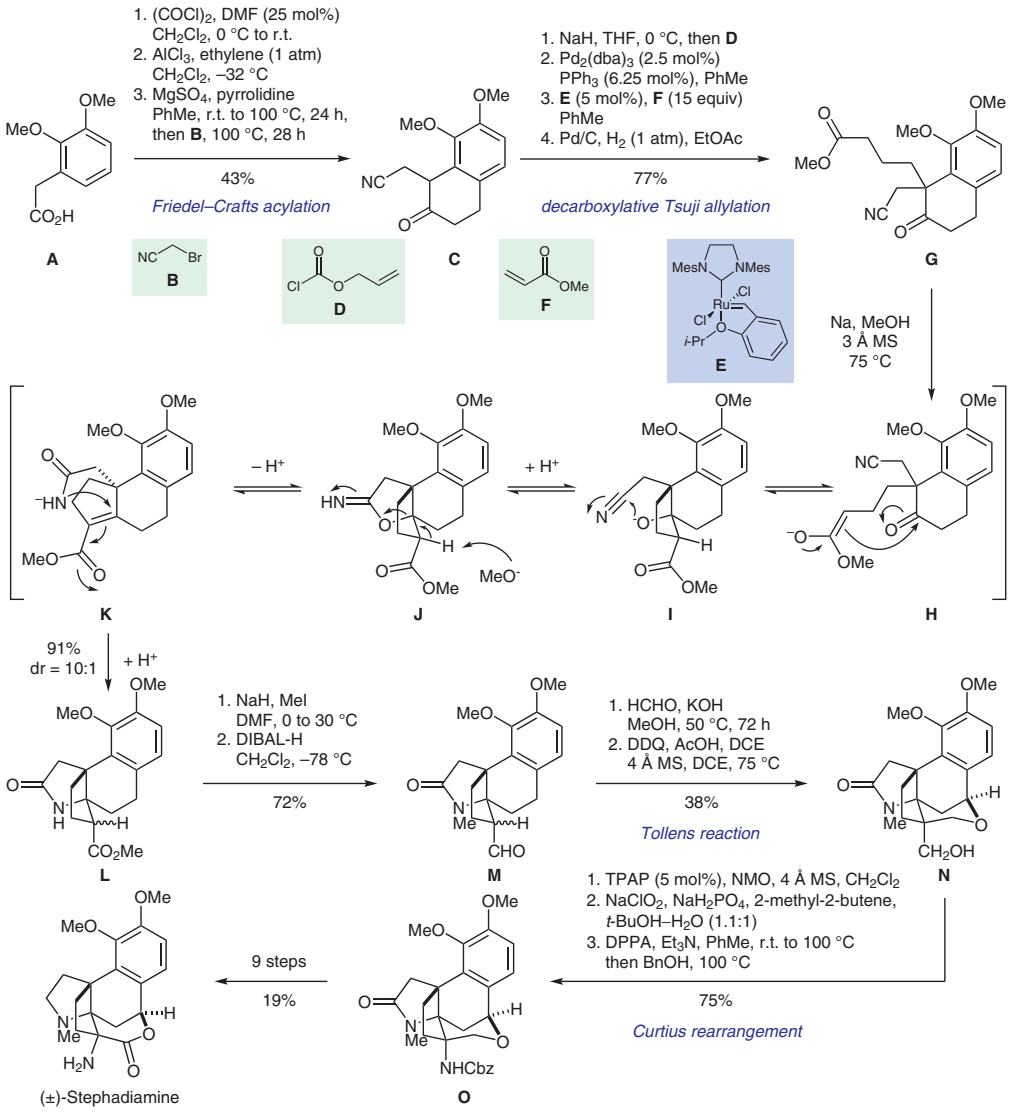
Total Synthesis of (±)-Stephadiamine



Significance: The norhasubanan alkaloid stephadiamine was isolated from *Stephania japonica* in 1984. The authors disclose the first total synthesis of this structurally intriguing natural product in 26 steps and 1.3% overall yield.

Comment: The authors reported a novel cascade reaction that installed the congested aza[4.3.3.]-propellane core in excellent yield and good diastereoselectivity. The second α-tertiary amine was introduced by a Tollens reaction followed by a Curtius rearrangement.

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