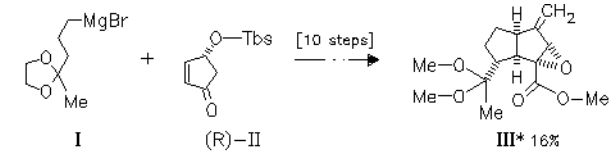
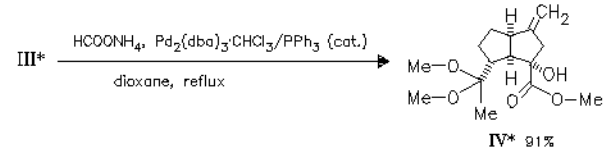
terpenes
U 0200
21 - 201

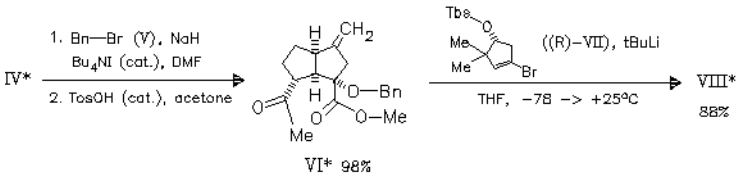
Studies Directed to the Synthesis of the Unusual Cardiotoxic Agent Kalmanol. Enantioselective Construction of the Advanced Tetracyclic 7- Oxy-5,6-dideoxy Congener. — The key steps in the synthesis of the title compound (1.6% overall yield for 25 steps) are the enantioselective formation of the tricyclic lactone (VIII), followed by the sequential reaction with the Tebbe reagent (IX) and Claisen rearrangement to yield (X) with the targeted tetracyclic title framework. The size of the etherified hydroxy group in (VI) (preferably larger than methoxy) is responsible for a 100% facial selectivity in the ring closure reaction to give (VIII). — (BORRELLY, S.; PAQUETTE, L. A.; J. Am. Chem. Soc. 118 (1996) 4, 727-740; Evans Chem. Lab., Ohio State Univ., Columbus, OH 43210, USA; EN)



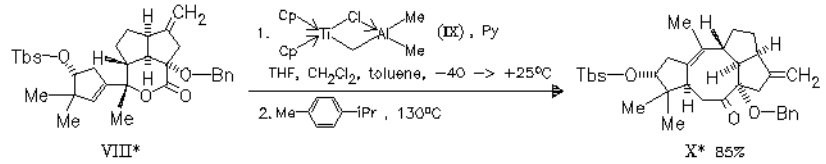
I (R)–II III* 16%



IV* 91%



VI* 98%



VIII* X* 85%

V