Nozaki-Hiyama-Kishi reaction

asymmetric crotylation

ionic hydrogenation

chromium



K. L. JACKSON, J. A. HENDERSON, H. MOTOYOSHI, A. J. PHILLIPS\* (UNIVERSITY OF COLORADO, BOULDER, USA)

A Total Synthesis of Norhalichondrin B Angew. Chem. Int. Ed. 2009, 48, 2346-2350.

## Synthesis of Norhalichondrin B

Significance: Norhalichondrin B is a marine polyether with potent cytotoxicity. Key to this synthetic approach are the Nozaki-Hiyama-Kishi reactions and the tandem Achmatowicz oxidation-ionic hydrogenation which form the pyranopyran systems. Comment: The Nozaki-Hiyama-Kishi reactions were run in the presence of chiral ligand I where R was either methyl or naphthyl. The Achmatowicz oxidation-hydrogenation was highly diastereoselective (dr > 20:1).

SYNFACTS Contributors: Philip Kocienski, Stewart Eccles Synfacts 2009, 10, 1059-1059 Published online: 22.09.2009

DOI: 10.1055/s-0029-1217866; Reg-No.: K11709SF