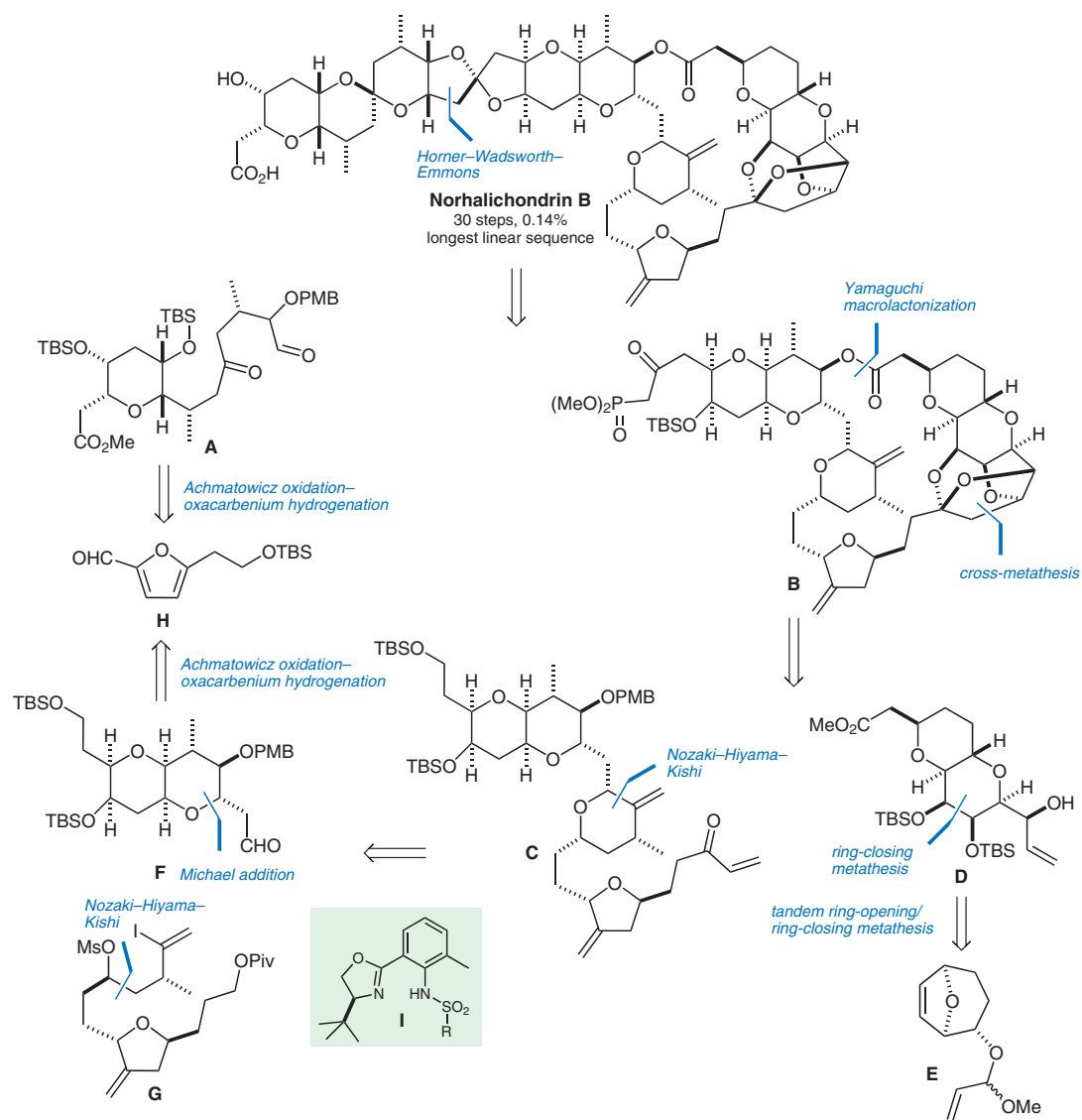


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A Total Synthesis of Norhalichondrin B

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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).

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Category

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Key words

norhalichondrin B

Achmatowicz oxidation

Nozaki-Hiyama-Kishi reaction

asymmetric crotylation

ionic hydrogenation

chromium

SYNFACTS
of the month