

(±)-panacene

marine natural
products

bromoallene

Williamson ether
synthesisDieckmann
condensation

bromoetherification

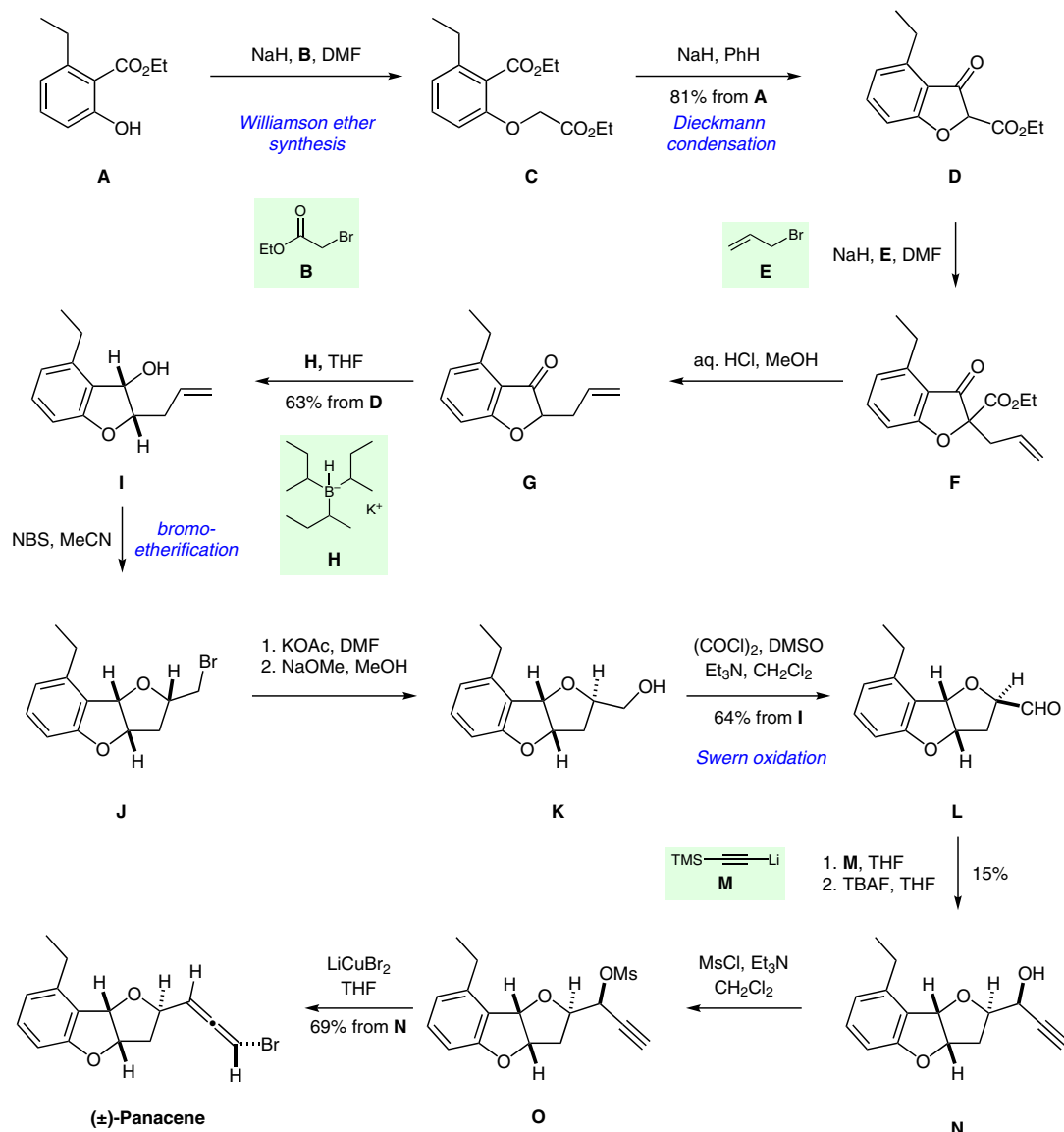
Synfact
Classic

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Total Synthesis of (±)-Panacene

J. Am. Chem. Soc. **1982**, *104*, 4011–4012, DOI: 10.1021/ja00378a042.

Synthesis of (±)-Panacene



Significance: The marine natural product panacene was first isolated in 1977 from *Aplysia brasili-ana* and possesses antifeedant properties. In 1982, Feldman and co-workers reported the first total synthesis, establishing the relative configuration of the bromoallene.

Comment: Benzofuran **D** was accessed by means of Dieckmann condensation and further transformed to alcohol **I**. Treatment with NBS led to cyclization affording bromide **J** which was elaborated to aldehyde **L**. Subjecting propargylic mesylate **O** to LiCuBr₂ furnished the natural product.

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