B. CHENG, D. TRAUNER* (LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN, GERMANY) A Highly Convergent and Biomimetic Total Synthesis of Portentol
J. Am. Chem. Soc. 2015, 137, 13800-13803.

## Synthesis of Portentol



Significance: Cheng and Trauner report the asymmetric total synthesis of the polyketide portentol, isolated in 1967 from lichen Roccella Portentosa. The synthesis relies on a cascade sequence, mimicking the hypothetical biosynthesis.

Comment: Fragment C was synthesized by means of an Evans aldol reaction. Oxidation of the primary alcohol, followed by aldol reaction with ketone $\mathbf{G}$ and deprotection, gave lactone $\mathbf{H}$, which underwent oxidation, oxonium ion formation, and aldol reaction upon treatment with DMSO and TFAA.

Synthesis of Natural Products and Potential Drugs

## Key words

## biomimetic

synthesis
Evans aldol reaction
polyketide
portentol


