

## Synthesis of Portentol

### Key words

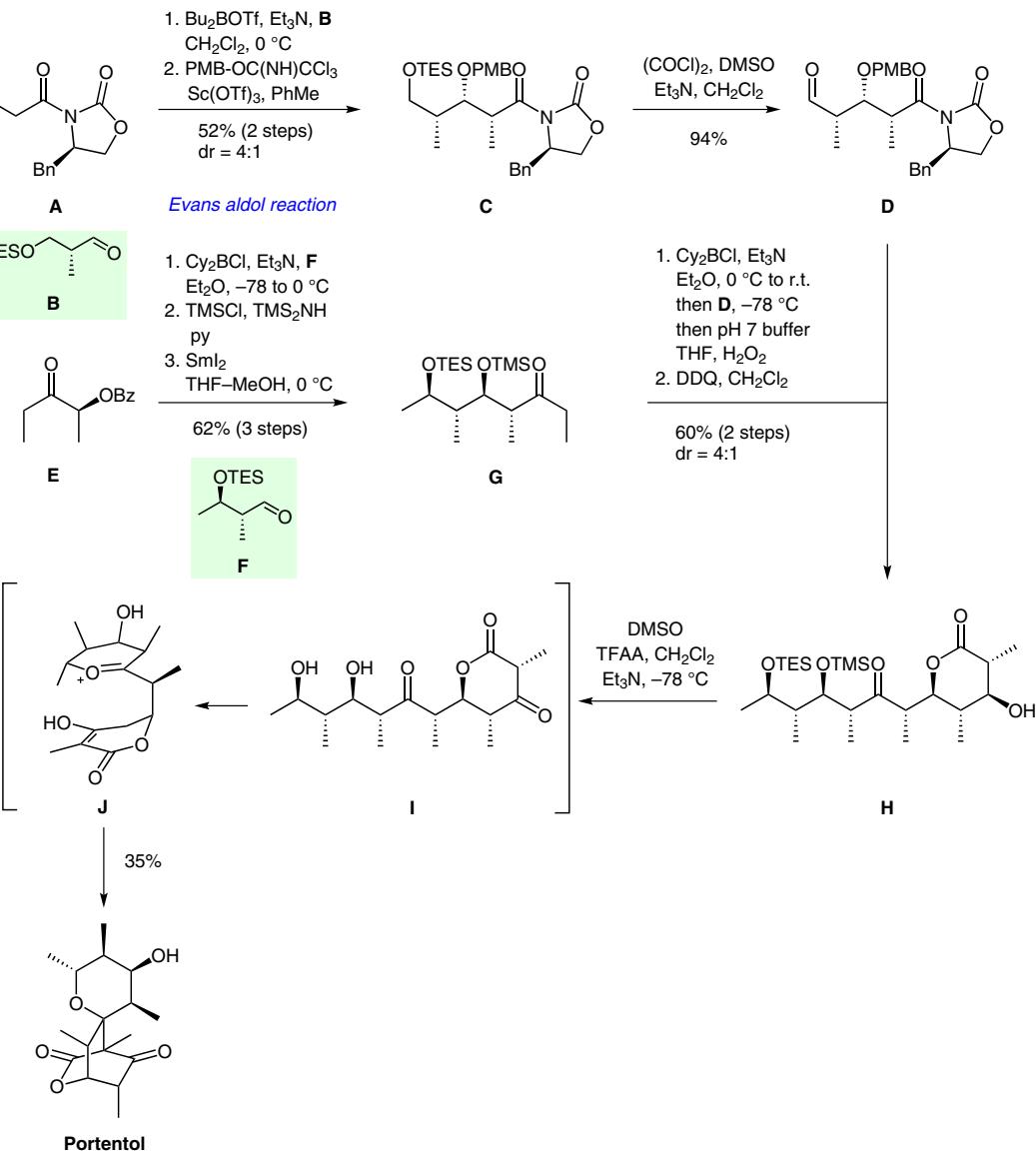
biomimetic synthesis

Evans aldol reaction

polyketide

portentol

**Synfact**  
*of the month*



**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 G and deprotection, gave lactone H, which underwent oxidation, oxonium ion formation, and aldol reaction upon treatment with DMSO and TFAA.