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Total Synthesis of Aplysiasecosterol A
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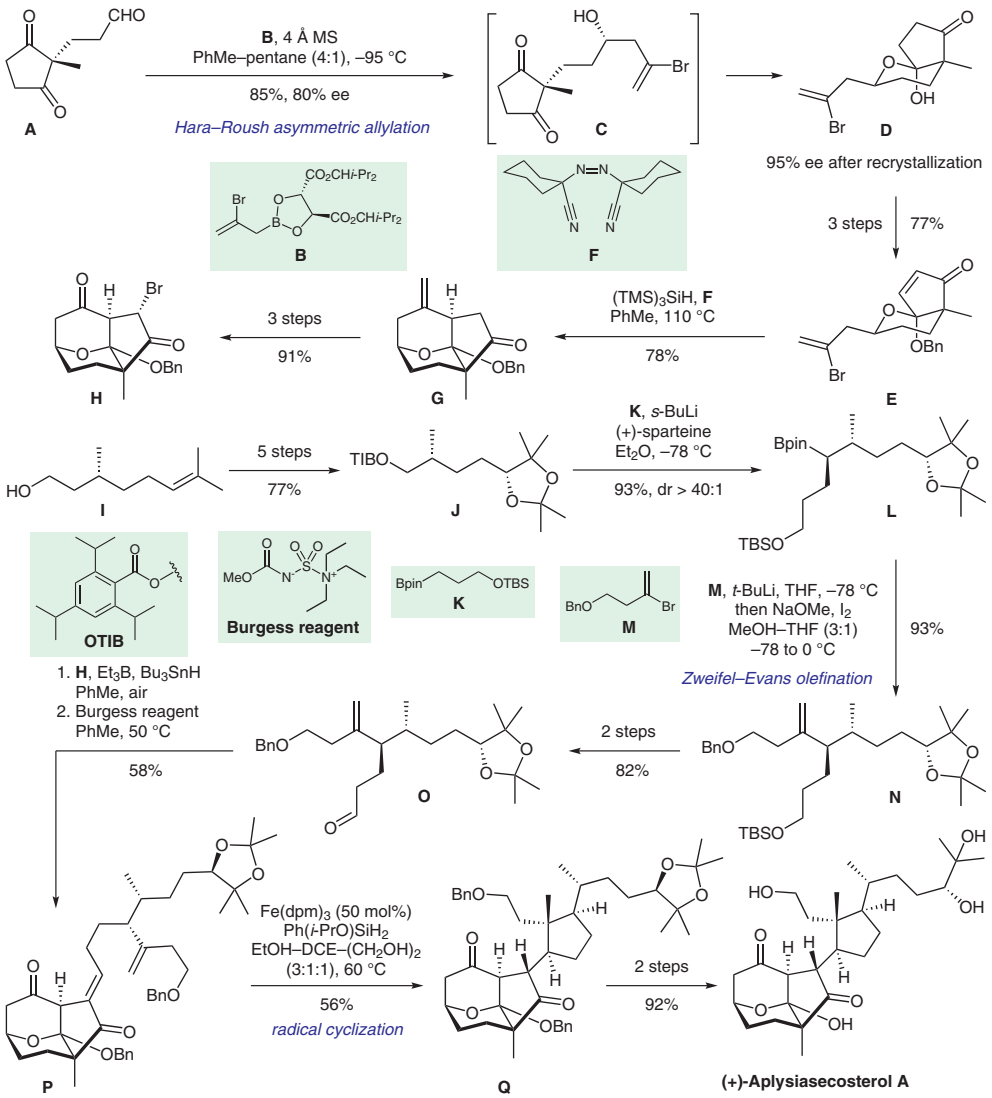
Asymmetric Total Synthesis of (+)-Aplysiasecosterol A



Significance: The first total synthesis of (+)-aplysiasecosterol A is reported by Li and co-workers in 14 steps (longest linear sequence). Key features include an iron-mediated HAT radical cyclization, an asymmetric allylation, and a Zweifel–Evans olefination.

Comment: Recognition of hidden symmetry in the core of the target structure allowed the clever application of a desymmetrization strategy starting from achiral dione **A**. Advanced intermediate **P** was assembled from bromide **H** and aldehyde **O**. Radical cyclization and deprotection led to the natural product.

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