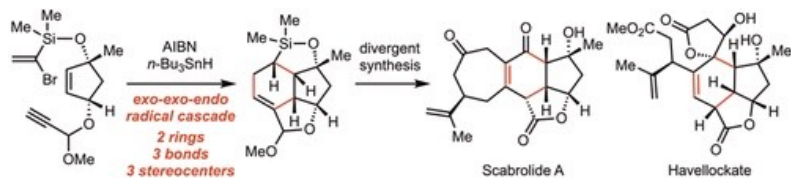


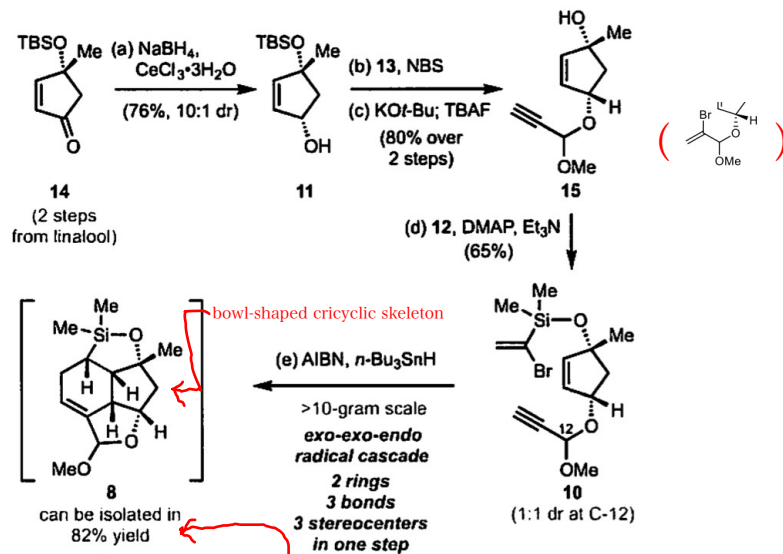
Divergent Synthesis of Scabrolide A and Havellockate via an exo-exo-endo Radical Cascade

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Cite this: J. Am. Chem. Soc. 2024, 146, 21, 14422–14426



Scheme 2. Concise Synthesis of Common Intermediate 17^a

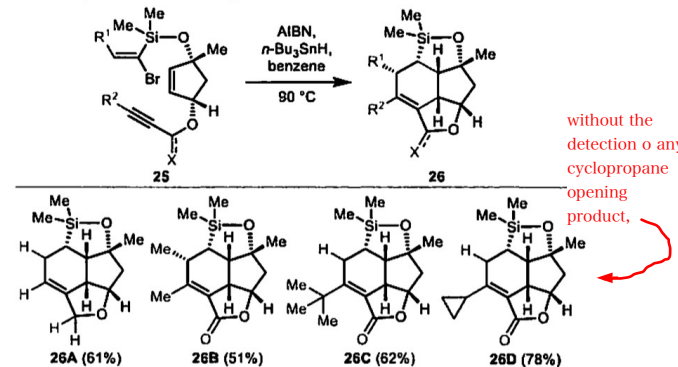


^aFrom 16, the two diastereomers were carried forward separately. For detailed reagents and conditions, see Supporting Information.

Inspired by the cis dioxygen substitution at C-8 and C-10, together with the all-cis stereochemistry at the bridgehead atoms,

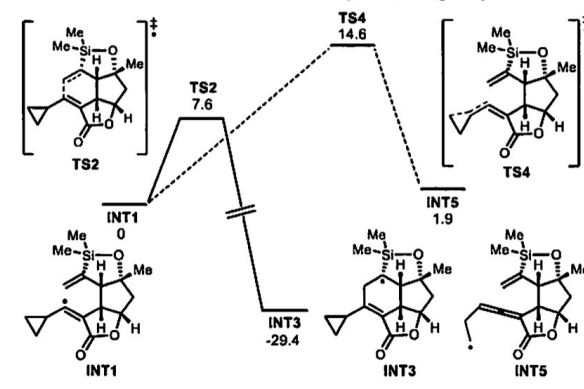
Scheme 4. Further Investigations on the Remarkable Radical Cascade

A The impact of substitution pattern on the radical cascade.

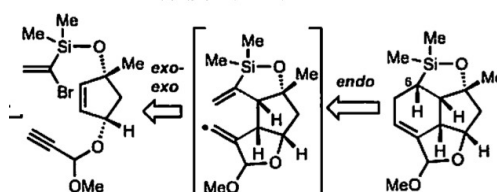


without the detection of any cyclopropane opening product.

B DFT calculation reveals the final 6-endo cyclization is greatly facilitated.



radical cascade

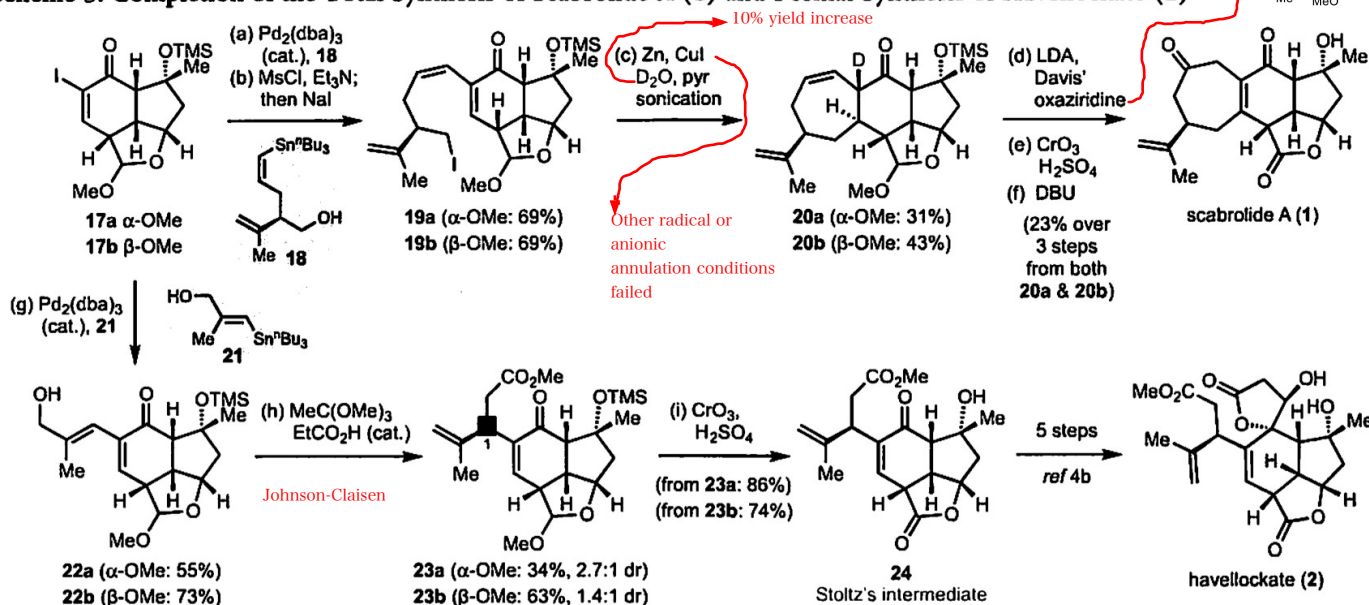


the terminating 6-endo radical addition is unusual in the literature,

the rigid tricyclic skeleton brings the two reacting sites close in space

"proximity-promoted reactions"

Scheme 3. Completion of the Total Synthesis of Scabrolide A (1) and Formal Synthesis of Havellockate (2)^a



^aThe two diastereomers were carried forward separately. For detailed reagents and conditions, see Supporting Information.