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SYNTHESIS OF HEPTA-1,3,6-TRIEN-5-OLS FOR POTENTIAL 8PI ELECTROCYCLIZATIONS

Hepta-1,3,6-trien-5-ols have the potential to act as electrocyclization precursors in anionic 7 carbon/8 pi conrotatory transformations. A concise synthesis of these trienol substrates is discussed. The sequence of Vilsmeier Haack type reaction, 1,2-vinyl addition, and a Suzuki-Miyaura cross-coupling allows for multiple points of elaboration and alkenyl stereocontrol. Finally, the alcohol can be converted to groups such as silyl ethers or carbamates to probe the impact on carbolithiation.

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