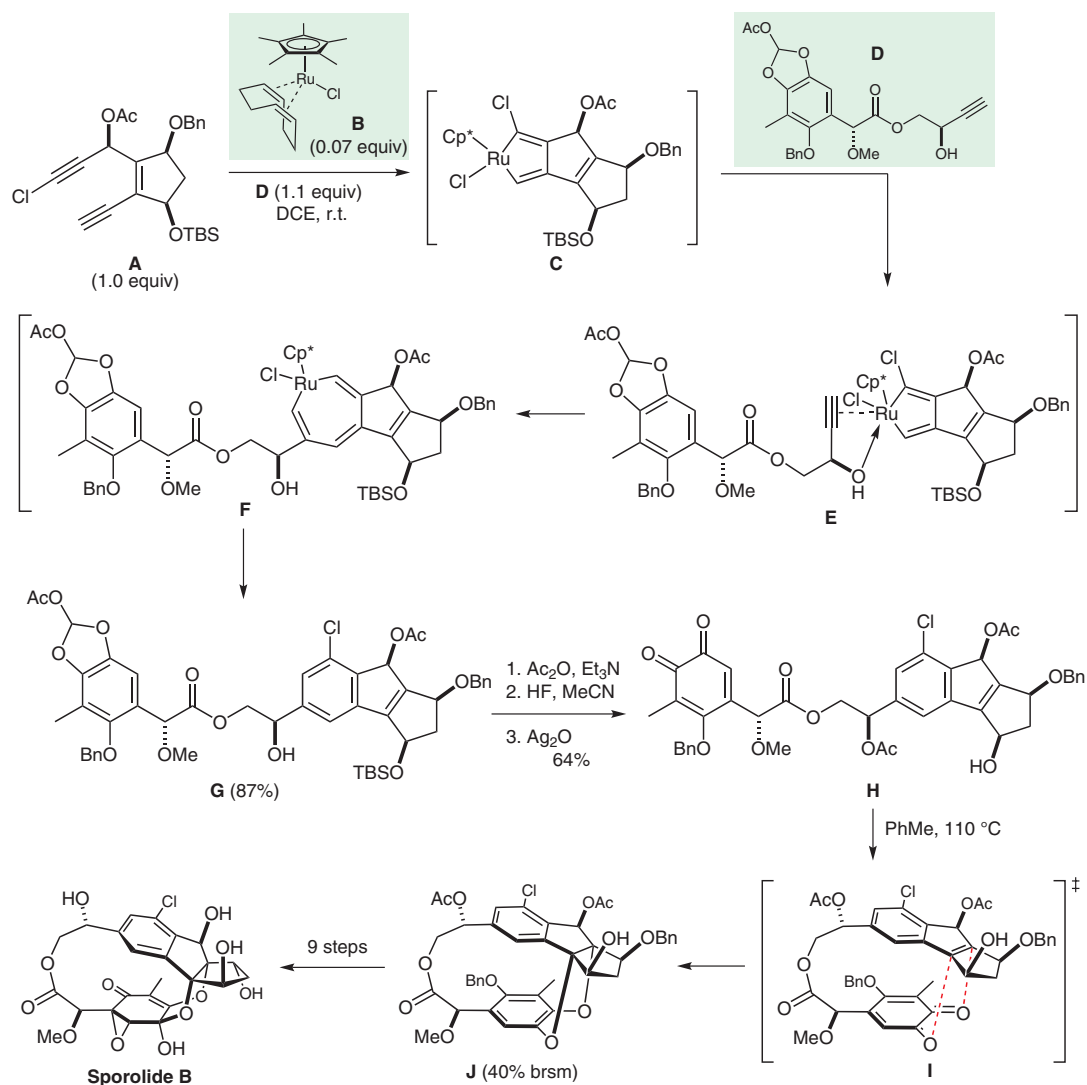


Synthesis of Sporolide B



Significance: Sporolide B is a marine metabolite with no apparent biological activity. The Scripps synthesis uses a ruthenium-catalyzed [2+2+2] cycloaddition to generate the chlorinated arene ring in **G** and an intramolecular Diels-Alder reaction of the *ortho*-quinone **H**.

Comment: The excellent diastereoselectivity in the Diels-Alder reaction is due to the steric bias arising from the two oxygen substituents in the dienophile. However, the regioselectivity of the reaction is harder to explain.