Total Synthesis of (±)-Hippolachnin A

Significance: Hippolachnin A is a polyketide isolated from a marine sponge showing potent antifungal activity against the opportunistic fungus C. neoformans. The Trauner group reports a concise route to this synthetic target, which is attractive both in terms of bioactivity and a unique molecular scaffold.

Comment: Known compound A is accessible through a photochemical route. Few synthetic manipulations yield D, which undergoes an ylide cycloaddition as a way to install the two exo-positioned ethyl groups. Tin-catalyzed O-alkylation of H followed by desulfation delivers (±)-hippolachnin A.