

Spivey Group Problem Session – Total Synthesis of (+)-Ambuic Acid

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(+)-Ambuic acid is a chiral cyclohexenone epoxide which was originally isolated from rainforest endophytic fungi and exhibits antifungal activity. A total synthesis of (+)-ambuic acid was recently reported and is outlined in the scheme below. Please provide reagents and conditions where indicated, mechanisms for all steps and indicate any named reactions.

