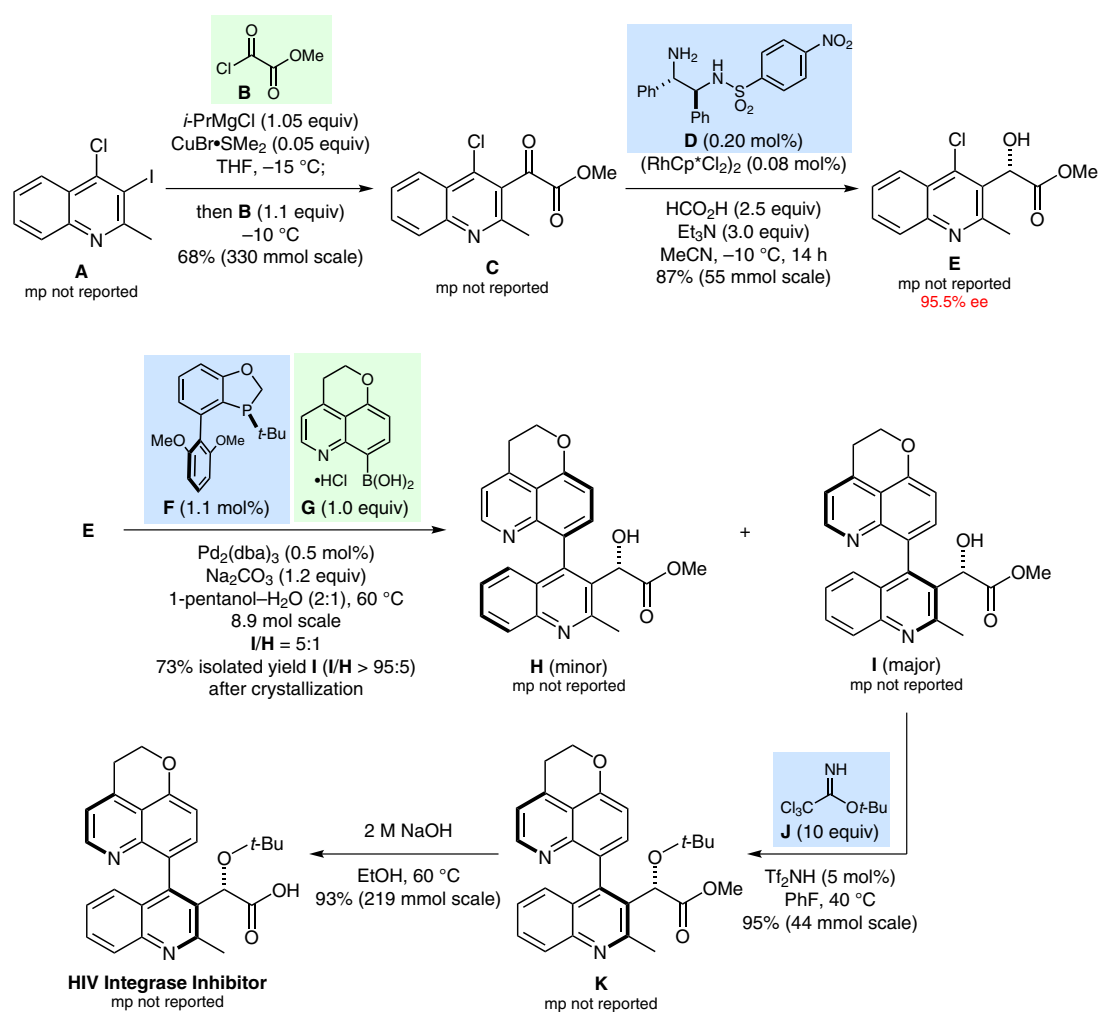


Synthesis of an Atropisomeric HIV Integrase Inhibitor



Significance: The target molecule is an atropisomeric integrase inhibitor that is of interest for the treatment of HIV. Noteworthy steps in the synthesis depicted include (1) a copper(I)-catalyzed acylation of quinoline **A**, (2) an asymmetric transfer hydrogenation of the α -keto ester **C** mediated by the ligand **D**, and (3) a ligand-controlled asymmetric Suzuki–Miyaura reaction mediated by the ligand **F**.

Comment: The installation of the *tert*-butyl ether group on the bis(quinoline) scaffold of **I** was challenging, because intermediate **I** contains two basic nitrogen atoms and the *tert*-butyl ether is buried within a very sterically crowded environment. Best results were obtained using the trichloroacetimidate **J** together with bis(trifluoromethane)-sulfonimide.